PRACTICAL GUIDE TO PROJECT PLANNING

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Ricardo Viana Vargas

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Dedication

To my father, Jairo, the best example of character, dedication, and love.

I'll never forget you.

Contents

Acknowledgments

This work is the result of the cooperation of many people. I would like to express my gratitude to

- Auerbach Publications, for the trust and interest in my work
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- All my clients, for believing in and always supporting my work
- My relatives, team members, friends, and students, who provided the entire foundation for this book

Introduction

This book was born out of a market need that I began noticing when I first started working in project management. Everybody was interested in seeing examples of project documents to discuss and analyze the models and best practices used in the PMI standards, published in the PMBOK Guide.

It is my intention in this book to present, in a direct and practical way, the example of a project that can be analyzed in regard to all management aspects, including the management of scope, time, costs, quality, HR, communication, risks, procurement, and integration.

The example reviewed in this book covers implementation of a project management office (PMO) within a company division, including all the steps, beginning with the diagnosis up to the results achieved. All project documents are presented and discussed in the book, and are available on the attached CD, thus allowing readers to track and develop their own projects at the same time they are reading the book.

I look forward to wide appreciation for this book and hope that it may enhance the efforts of those already engaged in projects, allowing even beginners to achieve a full understanding of the environments related to their work.

Good reading and enduring success.

Ricardo Viana Vargas, M.Sc., IPMA-B, PMP

About the Author

A specialist in planning, management, and control of projects, Ricardo Viana Vargas has been responsible over the past ten years for more than 30 major projects in Brazil and Latin America, coordinating a team of more than 500 project management specialists in areas such as telecom, IT, finance, and energy, with a portfolio of more than $5 billion. He is a partner of Macrosolutions, a consulting company specializing in project management, portfolio management, and risk management.

Ricardo Vargas is the author of eight books and a DVD. He has been published in Brazil and in the United States, with more than 75,000 books sold. In 2005, Vargas received the PMI Distinguished Award and also the PMI Product of the Year Award for his PMDome Workshop, considered the best training solution for project management.

A PMI-certified Project Management Professional (PMP) and International Project Management Association certified as IPMA Level B, Vargas has a bachelor's degree in chemical engineering and a master's degree in production engineering from Federal University of Minas Gerais (UFMG). He has also a master's degree in project management from George Washington University. He was the first professional worldwide to be a Microsoft Certified Office User Specialist in MS Project 2002 and is an acknowledged reviser of the most important reference in the world concerning project management, the PMBOK Guide®, being a member of the project team for updating the guide. Vargas was also the chair of the Translation Verification Committee for the PMBOK Guide translation to Brazilian Portuguese.

He has been a professor in many M.B.A. and other graduate courses in Brazilian and American schools, presenting several technical papers in his specialty area in Brazil, the United States, Europe, and Asia.

He was elected a member of the board of directors of the Project Management Institute (PMI), the most important worldwide organization focused on project management, for the 2007–2009 term. He is the first South American citizen and resident to have this position. He is also a member of the Association for Advancement of Cost Engineering (AACE), the American Management Association (AMA), the International Project Management Association (IPMA), the Institute for Global Ethics (IGE), and the Professional Risk Management International Association (PRMIA). He can be reached at ricardo.vargas@macrosolutions.com.br or www.macrosolutions.com.br

Part I

Basic Project Management Concepts

1.1 What Is a Project?

A project is a nonrepetitive enterprise, characterized by a clear and logical sequence of events, with a beginning, middle, and end, focused on the accomplishment of a clear and defined objective on deadline, with costs, resources, and quality parameters specified.
The following can be mentioned as project examples:

- Building a new industrial plant
- Writing a book
- Restructuring a sector or department of a company
- Preparing a marketing and publicity plan
- Launching a new product or service
- Developing a new software
- Building a house
- Undertaking a trip

Projects can be implemented in practically all areas of human activity, including administrative, strategic, and operational works, as well as in personal life.

The following can be mentioned as the main areas for the application of project management techniques:

- Engineering and civil construction
- Development of computer programs
- Military strategy
- Business administration
- Marketing and publicity
- Research and development
- Plant and capital equipment maintenance

1.2 Project Characteristics

The main project characteristics are *temporariness*, *individuality* of the product or service to be developed by the project, complexity, and uncertainty.

> **Temporariness** means that all projects present a defined start and end; they are events with a limited duration, established in their purpose. The life cycle of the project is characterized by its temporariness, beginning with an initial strategic work process and continuing through the execution work that precedes its completion.

The **individuality** of the product or service turned out by a project means the accomplishing of something not done before. As the outcome of each project is unique, its constituent parts have to be worked in a progressive way to ensure that the product or service are developed according to specifications.

Based on these two main characteristics, the others can be described as follows:

- **Nonrepetitive enterprise** — A project is an event that is not part of the company's routine. It is something new for the people who work on it.
- **Clear and logical sequence of events —** Projects are characterized by logically linked activities so as to allow accurate tracking and control during their execution.
- **Beginning, middle, and end** — Every project follows a certain life cycle, which means it has a temporary nature. Many times, the completion of one project coincides with the beginning of another. However, a project without completion is not a project, but a routine activity.
- **Clear and defined objective** — Every project has well-defined targets and results to be achieved on its completion.
- **Conducted by people —** The fundamental core of any project consists of people. Without them, the project does not exist, even when modern management control tools are available.
- **Projects use resources** — Every project uses resources specifically allocated to certain works.
- **Predefined parameters** — Every project requires the establishment of rates for time, costs, personnel, material, and equipment involved, as well as the desired quality of the project. It is impossible to establish such parameters with total accuracy, in advance. All of them will be clearly identified and quantified in the project plan. However, the initial parameters will act as reference points for the project and its evaluation.

1.3 Project Management Benefits

Among the main benefits of project management, the following can be mentioned:

- Avoids surprises during the execution works
- Allows the development of competitive advantages and new techniques, because the entire methodology is structured
- Anticipates problematic situations that may be found, so preventive and corrective actions can be taken before such situations become actual issues
- Adapts the work to the consumer market and to the client
- Makes the budget available before the expenditures start
- Expedites decisions, as the information is structured and made available
- Increases management control on all phases to be implemented, thanks to previous detailing
- Facilitates and guides project framework reviews arising from changes in the market or in the competitive environment, thus enhancing the project's adaptation capabilities
- Optimizes the allocation of necessary people, capital equipment, and material
- Documents and expedites future project budgets

1.4 Causes of Project Failure

Another important aspect of project management is the appropriate identification of the causes of project failure. A project fails mainly because of the following reasons:

- Targets and objectives are poorly defined or are not understood by the lower ranks.
- There is little acknowledgment of the project's complexity.

- The project includes many activities with not enough time to accomplish them.
- Financial estimates are poor and incomplete.
- The project is based on insufficient or inadequate data.
- The control system is inadequate.
- The project lacks a project manager or has too many, thus creating power circles parallel to those previously established.
- There is excessive dependency on project management software.
- The project estimates are based on the intuitive experience, or gut feeling, of the people involved, with little importance given to the historical data of similar projects or statistical analyses.
- Training and development are inadequate.
- The project manager lacks leadership.
- No time is spent on revising and improving the estimates.
- The needs for personnel, equipment, and material have not been evaluated.
- Integration of the key elements of the project scope has failed.
- The client and project team have different, often opposite expectations.
- The key areas of the project are unknown.
- Nobody has checked whether the people involved in the activities have the necessary knowledge to perform them.
- People are not working to the same standards, or work standards have not been established.

1.5 Project Life Cycle

All projects can be split into certain development phases. An understanding of these phases allows better control of the total resources spent to achieve the established targets. This set of phases is known as the life cycle. The life cycle allows the evaluation of a series of similarities that can be found in all projects, regardless of context, applicability, or area of activity.

Knowledge of the life-cycle phases provides several benefits for any type of project. Among them, the following can be mentioned:

- A correct life-cycle review determines what has, or has not, been executed for the project.
- The life cycle helps evaluate project development until a certain point in time.
- It allows the determination of exact project status at a certain point in time.

In a life cycle review, several questions can be considered, particularly the following:

- Whether the project characteristics are prone to changes on completion of each project phase
- Whether the uncertainty regarding time and costs has a decreasing trend on completion of each phase

The project's life cycle description can be generic, represented by a single chart, or detailed, including several charts, flowcharts and tables, specific to each activity.

The main issue to be analyzed in the project's life cycle is the effort level. The effort applied to the project starts practically at zero level and grows until it reaches a peak, and, soon after this point, reduces steeply until it reaches zero again, which means the project has been completed. The effort is understood as the number of people involved in the project, the application of work and funds on the project, the concerns, problems, overtime, etc. The position of the chart's maximum rate may vary from project to project.

1.6 The Project Life-Cycle Phases

The project life-cycle phases (Figure 1.1) depend significantly on the project nature. A project is developed from an idea and progresses toward a plan, which in turn is performed and completed. Each project phase is characterized by the handoff, or completion, of a certain work. Every handoff must be tangible and easy to identify — for example, a report prepared, a schedule established, or a set of activities completed. Generically, the project life cycle can be split into typical phases, as depicted in Figure 1.2 and described in the following text:

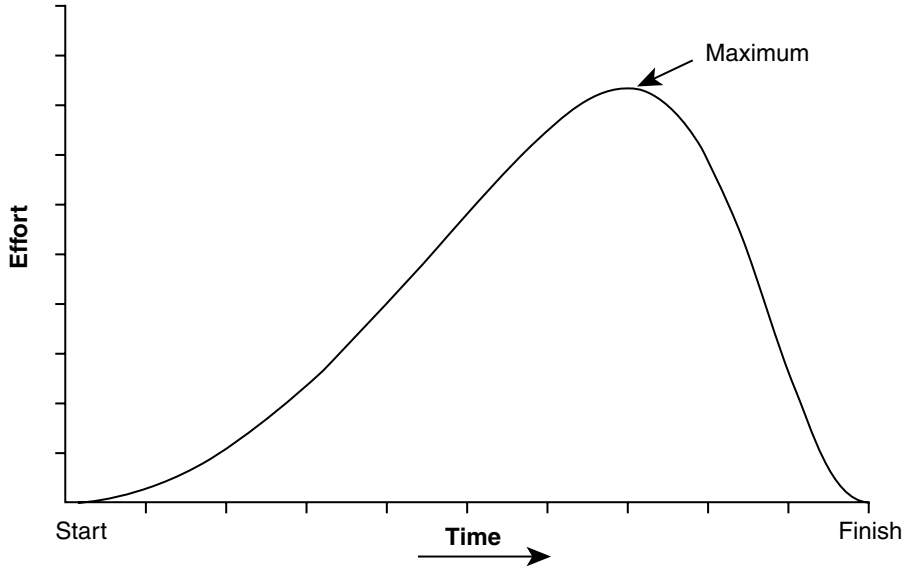

Figure 1.1 Effort variation over time during the project.

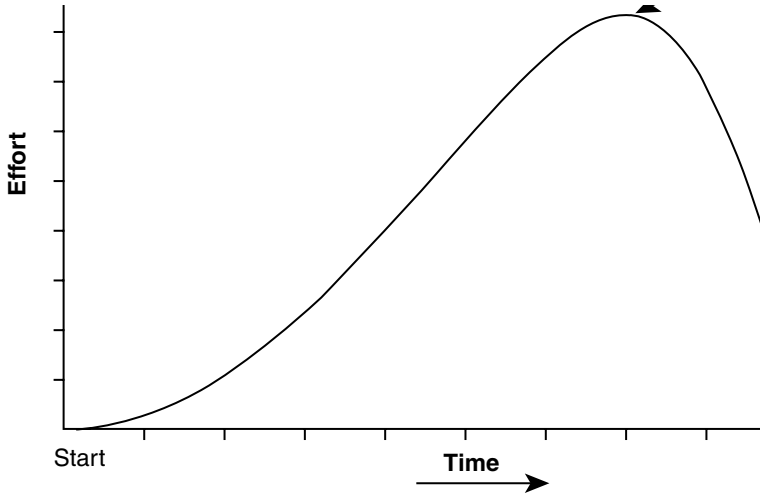

Figure 1.2 The project life cycle split into typical phases.

Initiating phase — A certain need is identified and transformed into a structured issue to be solved. In this phase, the project's mission and purpose are defined, and the best strategies are identified and selected.

Planning phase — Everything that will be performed by the project is detailed, with schedules, interdependencies among activities, allocation of the resources involved, cost reviews, etc., so, at the end of this phase, the project will be sufficiently detailed to be executed without difficulties and obstacles. In this phase, the auxiliary communication, quality, risk, procurement, and human resources plans are also developed.

Executing phase — Everything planned is carried out. Any error in the previous phases will be evident during this phase. A large part of the project's estimate and effort is consumed in this phase.

Monitoring and controlling phase — Parallel to the operational planning and project executing, is tracking and controlling everything being carried out by the project, so as to propose corrective and preventive actions in the least time possible after the detection of an abnormality. The purpose of control is to compare the present project status with that foreseen by planning and to take corrective actions in case of deviation.

Closing phase — Execution of work is evaluated through internal or external (third parties) auditing, the books and project documents are closed, and all the failures during the project are discussed and analyzed to prevent similar errors from occurring in new projects (learning).

The following are usually defined for each phase:

- The technical work that must be performed
- Who must be involved

A direct view of the previously mentioned chart (Figure 1.2) does not suggest the interdependency of the project phases or their overlapping during execution. Actually, during the development of the project, practically all phases are carried out almost simultaneously within a dynamic action cycle.

Part II

Project Planning Using the PMBOK® Guide 3rd Edition

2.1 Introduction

The PMBOK® Guide, 3rd edition, is a denomination that represents the totality of knowledge within the project management area. As in any other profession — law, medicine, or accounting — the body of knowledge is based on the contribution of professionals and students who apply such knowledge in their daily activities, improving upon it. The guide includes knowledge already proved through widely used traditional practices, as well as knowledge about more innovative and advanced practices that have had more limited application, including material published or not.

Additionally, the PMBOK Guide also aims at providing a common terminology, within the profession and the practices, for the oral and written language about project management.

The PMBOK Guide covers 44 processes divided into 9 knowledge areas, creating a continuous process flow, as described in Figure 2.1.

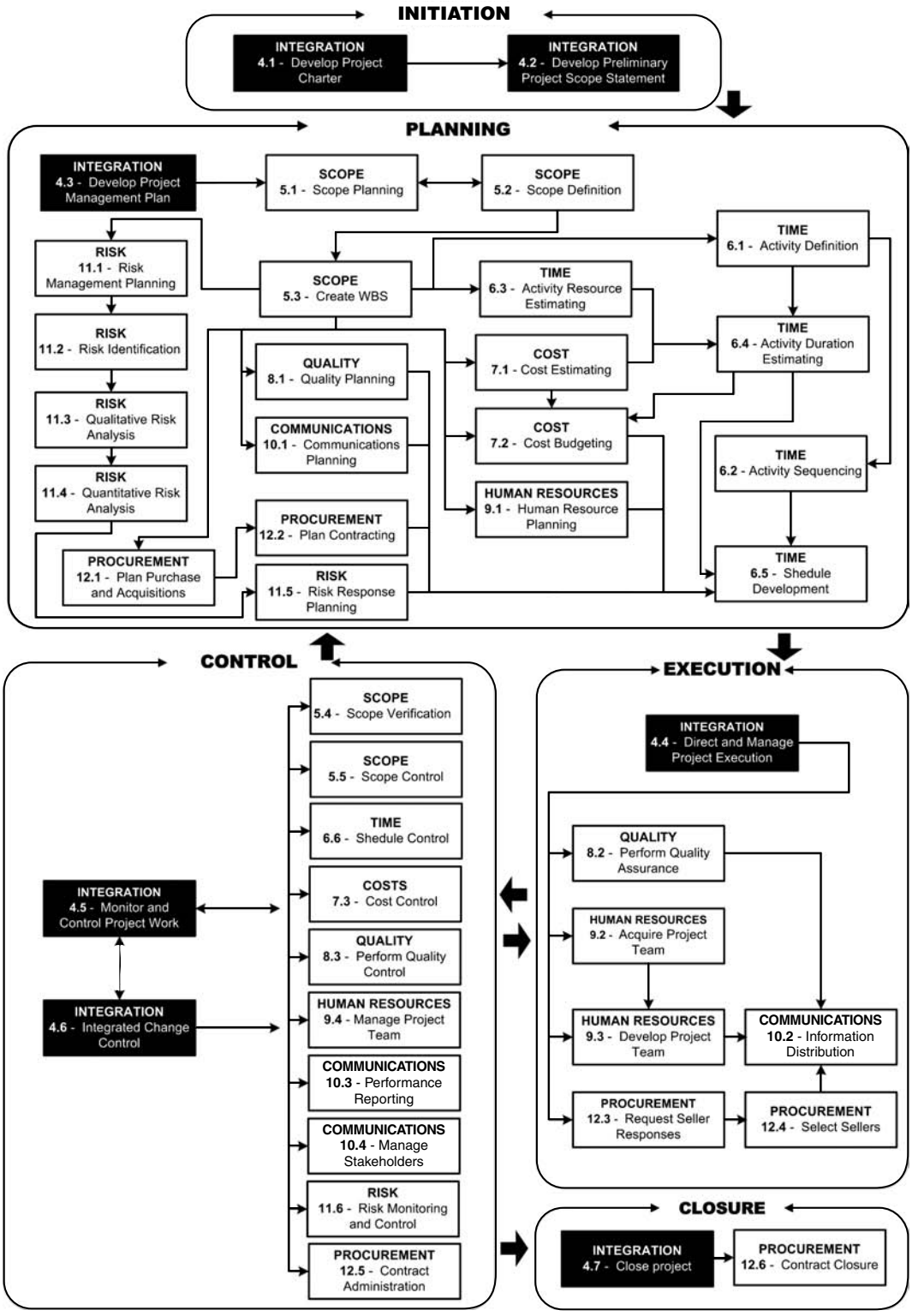

Figure 2.1 Schematic representation of 44 processes, subdivided into project phases, according to the PMBOK Guide, 3rd edition.

2.2 Breaking down the PMBOK Guide through MINDMAPS®

Mindmaps are considered a world standard for the creation, management, and communication of ideas. Mindmaps support the organization of ideas and knowledge by means of an intuitive and friendly visualization, besides presenting high visual versatility. Mindmaps stem from a central idea, where all map branches represent a breakdown of the main idea into related ideas, based on a visual thought template.

Visual thought is a concept based on research of how the human brain works, where the stimulus of the visual and tangible senses is sought, so as to improve creativity and understanding of the parts belonging to a unified whole, thus reducing the time for development and understanding of ideas.

As is well known, the PMBOK Guide, 3rd edition, is divided into 9 areas and 44 processes, as shown in the mindmaps depicted in Figure 2.2 and Figure 2.3. In each of the next chapters, the mindmaps of each area will be presented in detail.

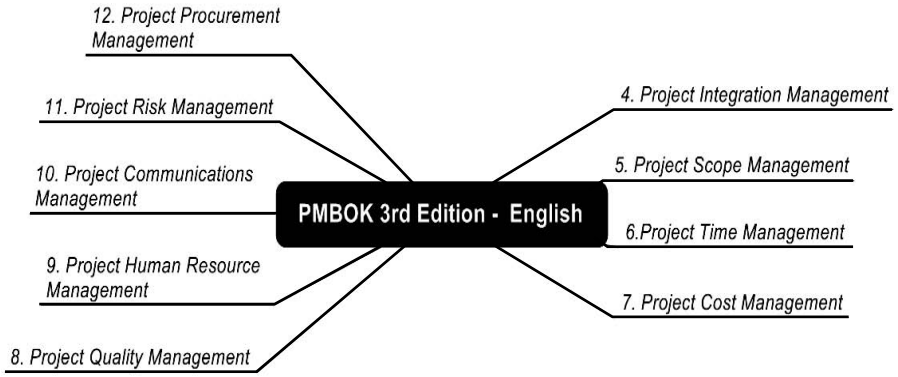

Figure 2.2 Mindmap of the nine project management areas according to the PMBOK Guide, 3rd edition.

In Figure 2.2, the nine PMBOK Guide knowledge areas within the entire Project Management Institute (PMI) knowledge framework are presented. The numbering of the areas starts at 4, corresponding to the guide chapter numbers — integration discussed in Chapter 4, and so on, successively.

When each of these areas is broken down in detail, it results in a map of 44 processes grouped according to their knowledge areas, as shown in Figure 2.3.

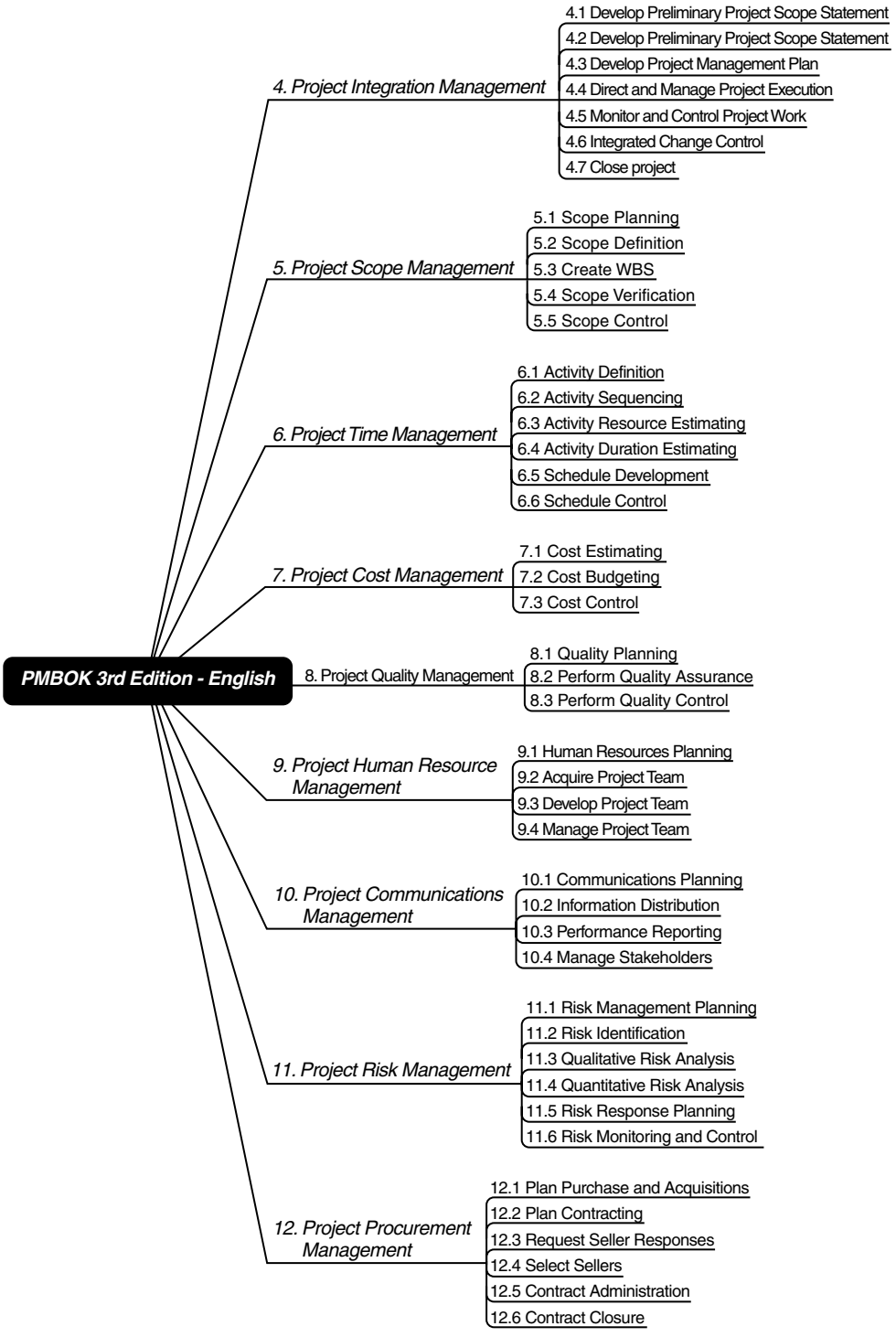

Figure 2.3 Mindmap of the 44 processes according to the PMBOK Guide, 3rd edition.

2.3 Project Management Areas

The project management areas describe project management in terms of the processes that compose it. These processes can be organized into nine integrated and interrelated groups, as shown in Figure 2.4.

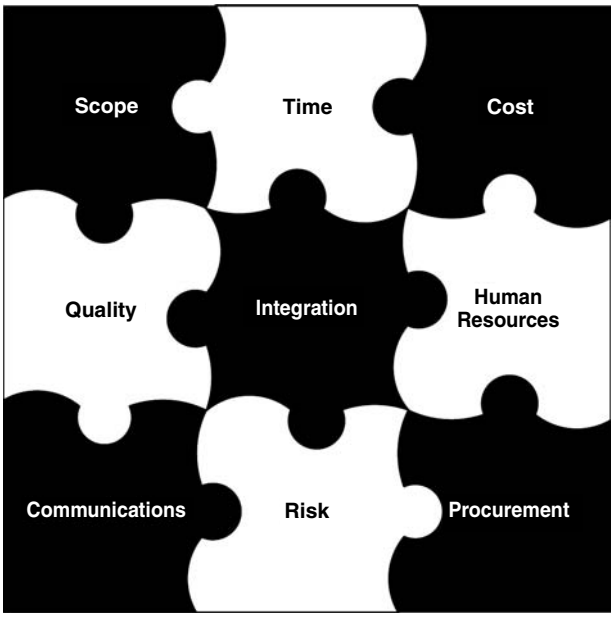

Figure 2.4 Integrated processes in project management.

Each of these processes has a specific detailing and its own coverage, but is integrated at every point in time with the other processes, together forming a single and organized whole. The areas and the processes they comprise are as follows:

Integration management — The processes required to ensure that all project elements are adequately integrated, thus guaranteeing that the whole is always benefited.
Scope management — The processes required to ensure that the project includes all the work required, and only the work required, to complete it successfully.
Time management — The processes required to ensure the completion of the project according to the appointed timeline. It is one of the most visible areas of project management.
Cost management — The processes required to ensure that the project is completed within its allotted budget.
Quality management — The processes required to ensure that the project's products or services will be in compliance with the client's requirements or contractual obligations.
Human resources management — The processes required to make a more effective use of the personnel involved with the project.
Communication management — The processes required to ensure that the project information is adequately gathered and disclosed.
Risk management — Planning, identifying, qualifying, quantifying, answering, and monitoring project risks.
Procurement management — The processes required to purchase goods and services outside the promoting organization.

2.4 Integration Management

The project's integration process consists in ensuring that all the other areas are integrated into a single whole. Its purpose is to structure the entire project so as to guarantee that the needs of the parties involved are fulfilled by the project. See Figure 2.5. The PMBOK Guide subdivides integration management into seven processes (Figure 2.6):

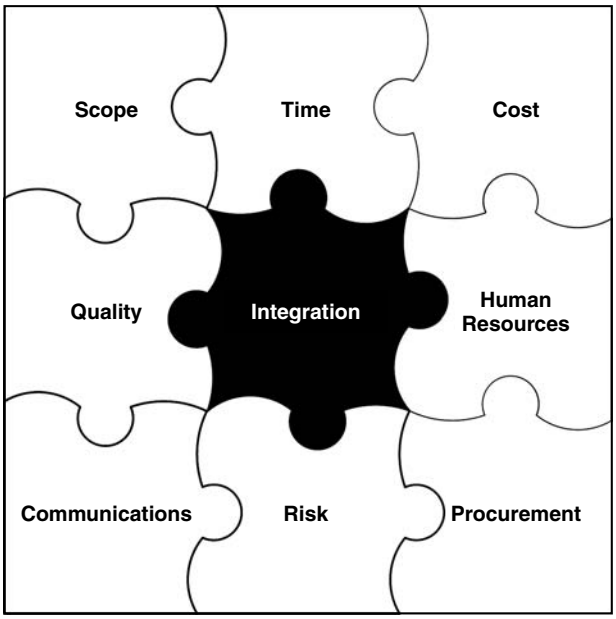

Figure 2.5 Integration management as the central area of project management.

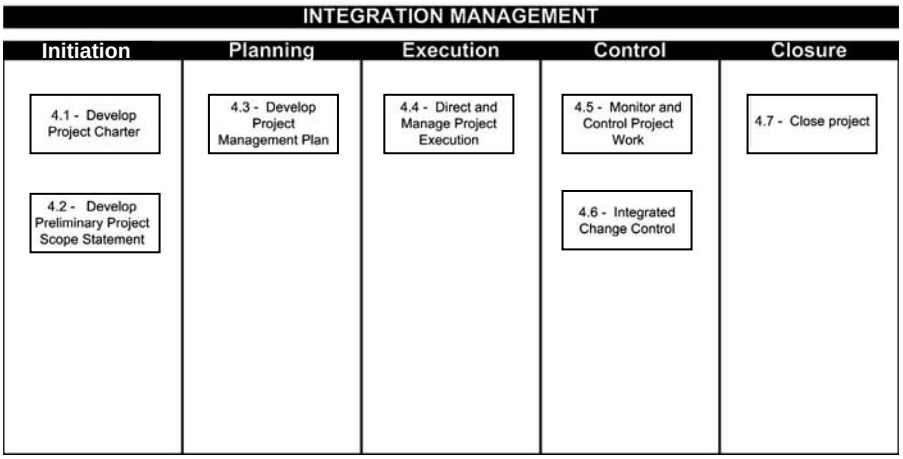

Figure 2.6 Integration management processes distributed among project phases.

- Develop project charter.
- Develop preliminary project scope statement.
- Develop project management plan.
- Direct and manage project execution.
- Monitor and control project work.
- Establish integrated change control.

- Close project.

The integration management processes are broken down according to the mindmap in Figure 2.7.

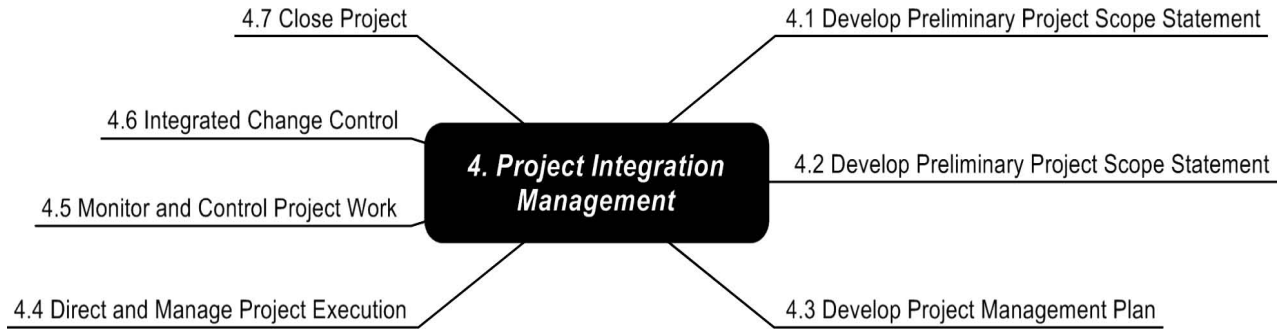

Figure 2.7 Integration management mindmap.

Develop project charter — Development of a project charter that formally authorizes a project or one phase of a project. See Figure 2.8.

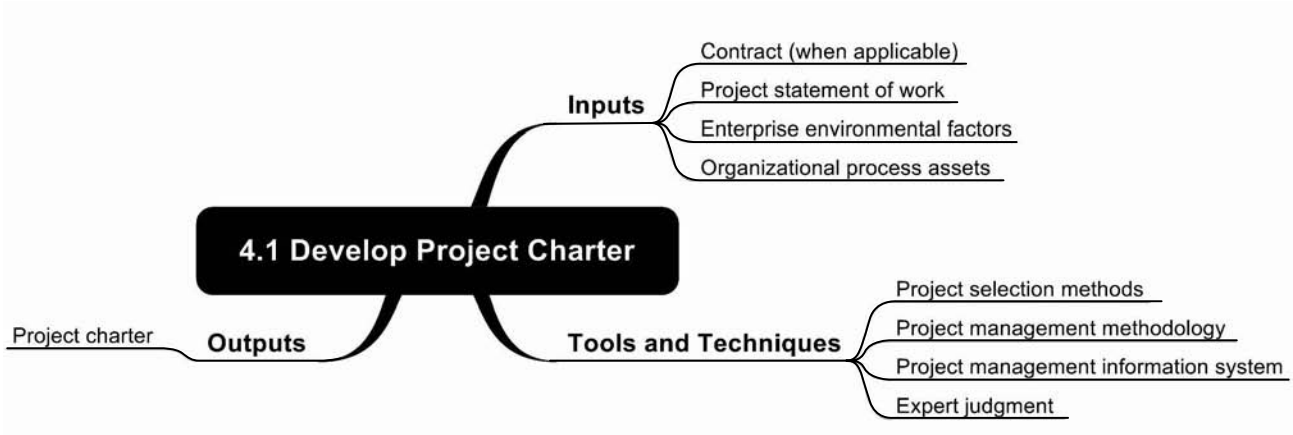

Figure 2.8 Process mindmap: development of project charter.

Develop preliminary project scope statement — Development of the preliminary project scope statement that provides a high-level description of the scope. See Figure 2.9.

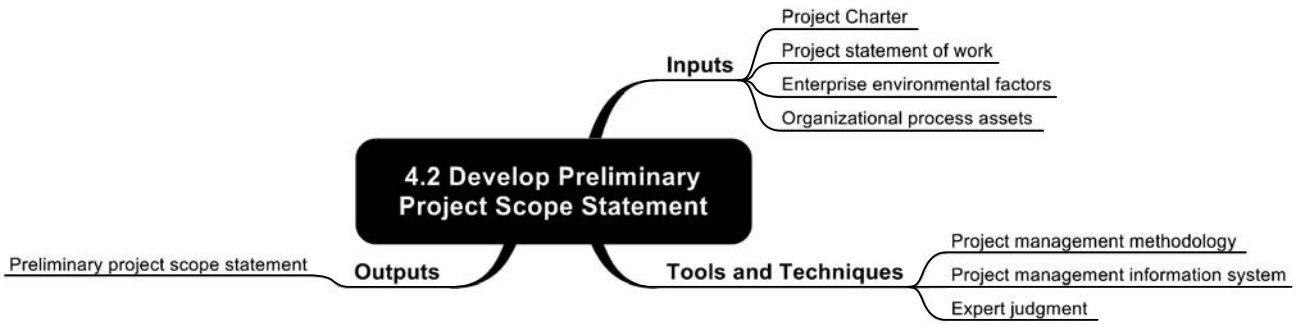

Figure 2.9 Process mindmap: development of preliminary project scope statement.

Develop project management plan — Documentation of the actions necessary to define, prepare, integrate, and mesh all the auxiliary plans into a project management plan. See Figure 2.10.

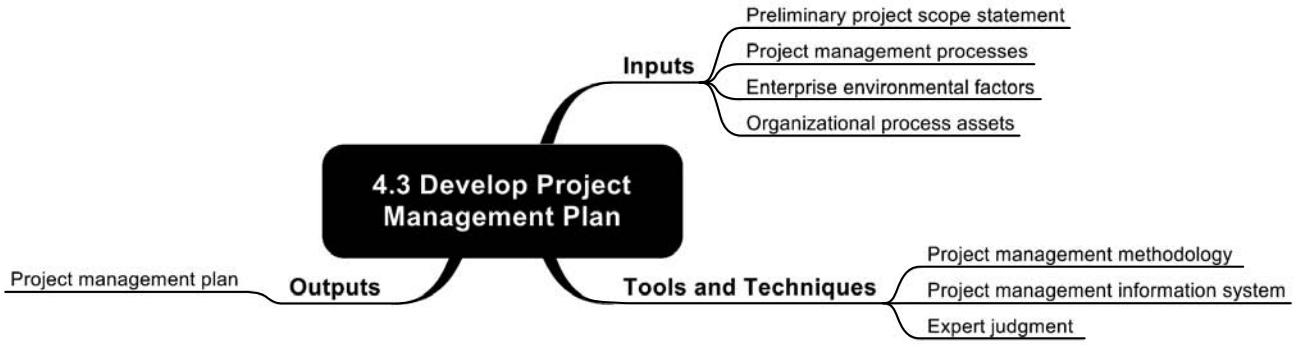

Figure 2.10 Process mindmap: development of project management plan.

Direct and manage project execution — Execution of the work defined in the project management plan to meet the project requirements specified in the project scope statement. See Figure 2.11.

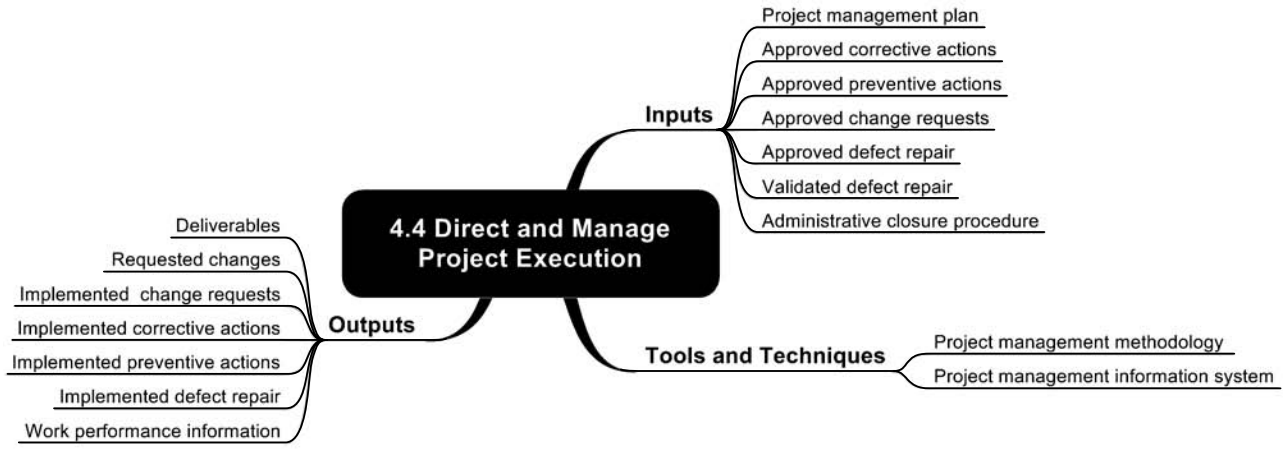

Figure 2.11 Process mindmap: direction and management of project execution.

Monitor and control project work — Monitoring and control of the processes used to start, plan, execute, and close a project to meet the performance objectives defined in the project management plan. See Figure 2.12.

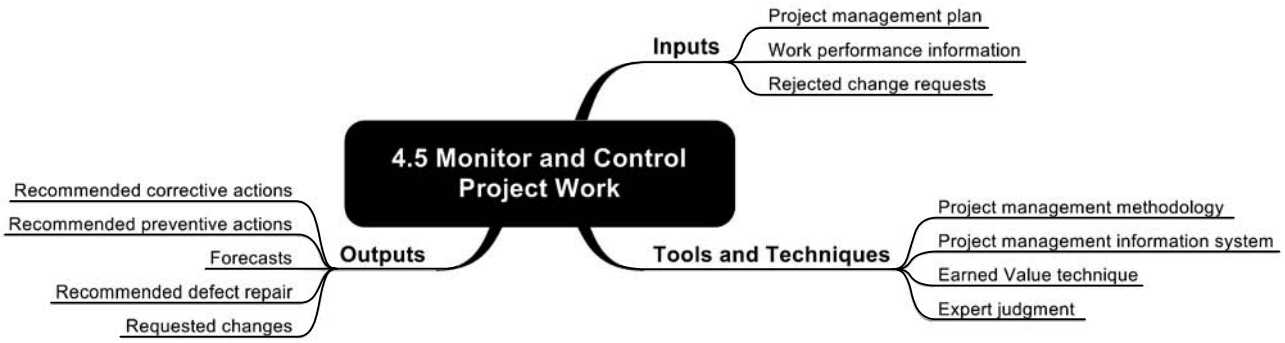

Figure 2.12 Process mindmap: monitoring and control of project work.

Establish integrated change control — Review of all change, change approval, and change control requests regarding the products and assets of organizational processes. See Figure 2.13.

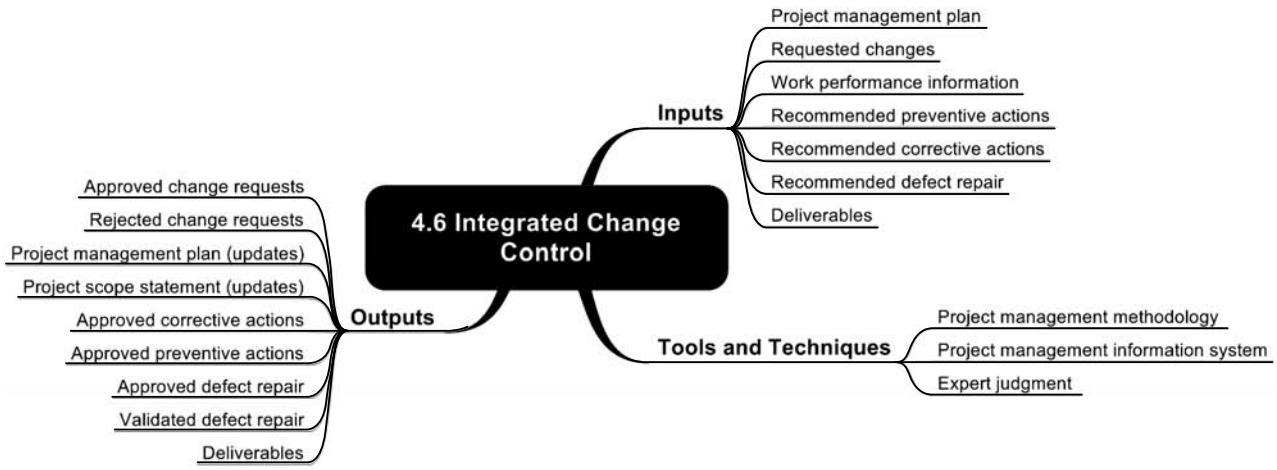

Figure 2.13 Process mindmap: integrated change control.

Close project — Closing of all activities in all project management process groups to formally close the project or one of its phases. See Figure 2.14.

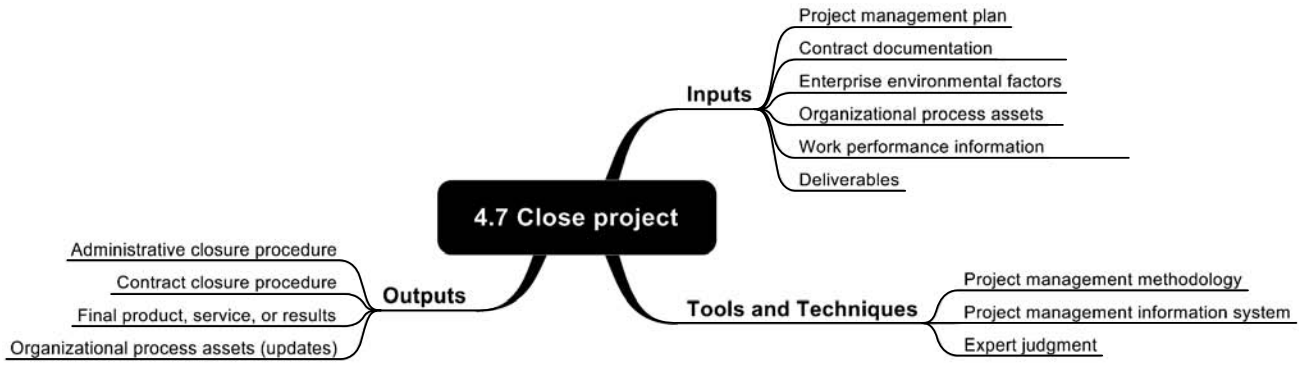

Figure 2.14 Process mindmap: close project.

2.5 Scope Management

Scope Management has the main purpose of defining and controlling the works to be performed by the project to ensure that the desired product or service is obtained by means of the least quantity of work possible, without losing of any initial assumptions established in the project charter.

The PMBOK Guide subdivides scope management into five processes, as follows (Figure 2.15):

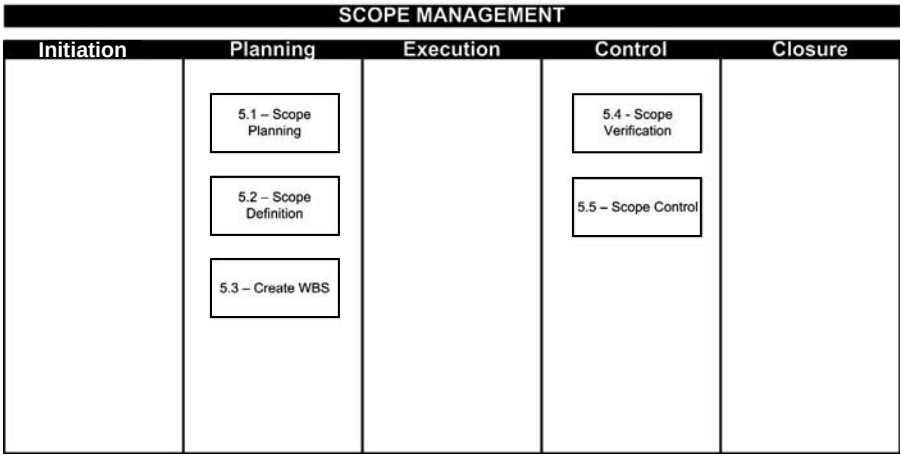

Figure 2.15 Scope management processes distributed among project phases.

- Scope planning
- Scope definition
- WBS creation
- Scope verification
- Scope control

The scope management processes are broken down according to the mindmap in Figure 2.16.

Figure 2.16 Scope management mindmap.

Scope planning — Creation of a project scope management plan, which documents how the project scope will be defined, verified, and controlled, and how the work breakdown structure (WBS) will be created and defined. See Figure 2.17.

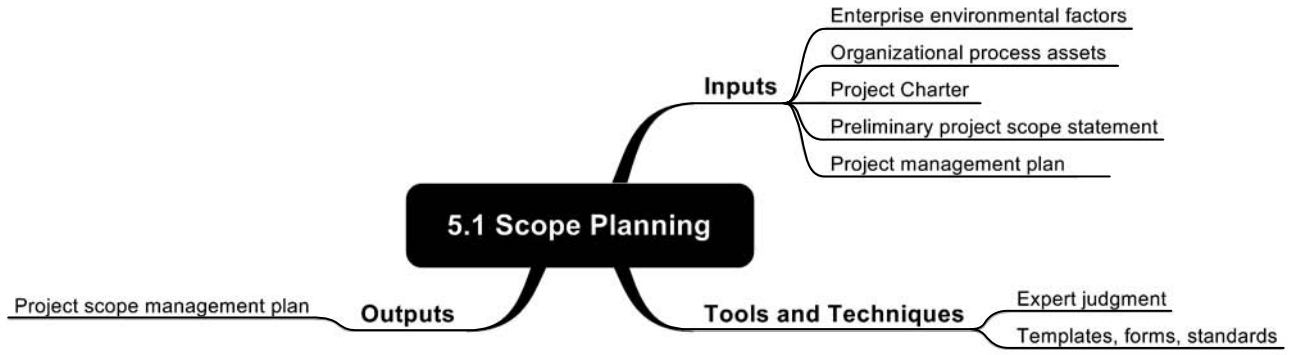

Figure 2.17 Process mindmap: scope planning.

Scope definition — Development of a detailed project scope statement as a base for future project decisions. See Figure 2.18.

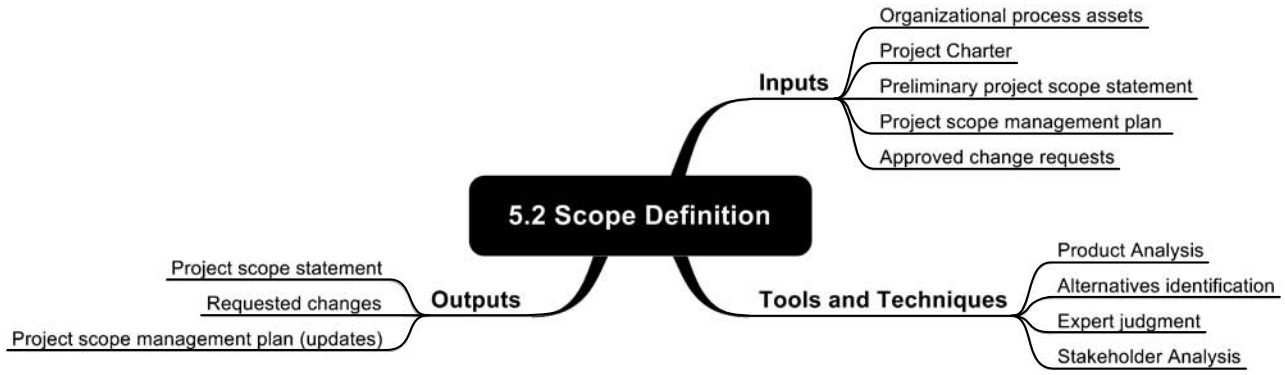

Figure 2.18 Process mindmap: scope definition.

WBS creation — Subdivision of the main project products and of the project work into smaller and more manageable components. See Figure 2.19.

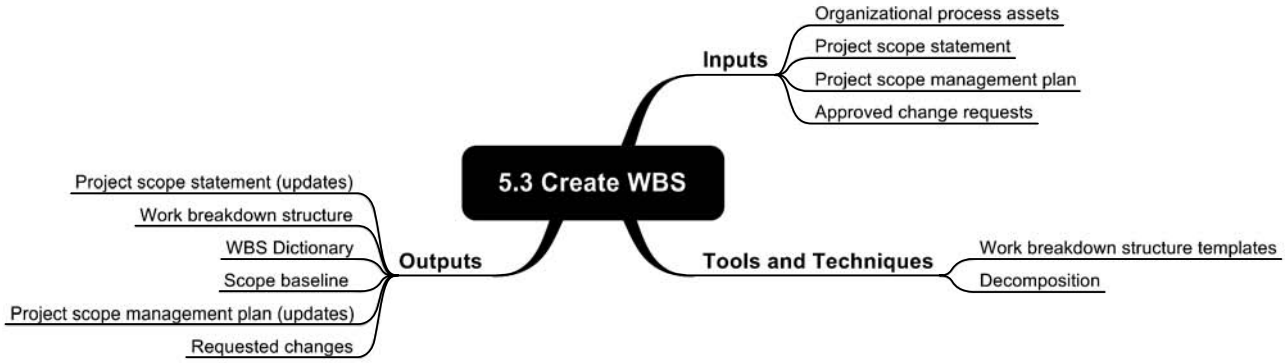

Figure 2.19 Process mindmap: WBS creation.

Scope verification — Formalization of the acceptance of products from the completed project. See Figure 2.20.

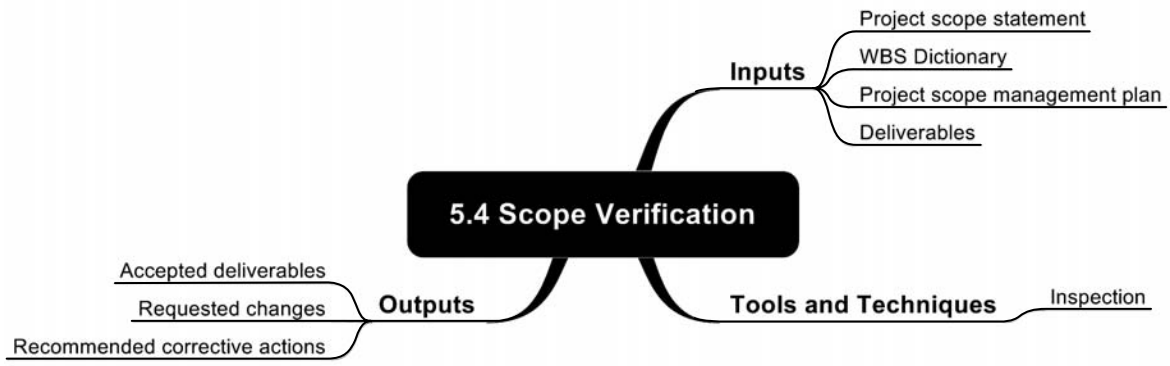

Figure 2.20 Process mindmap: scope verification.

Scope control — Control of the project scope changes. See Figure 2.21.

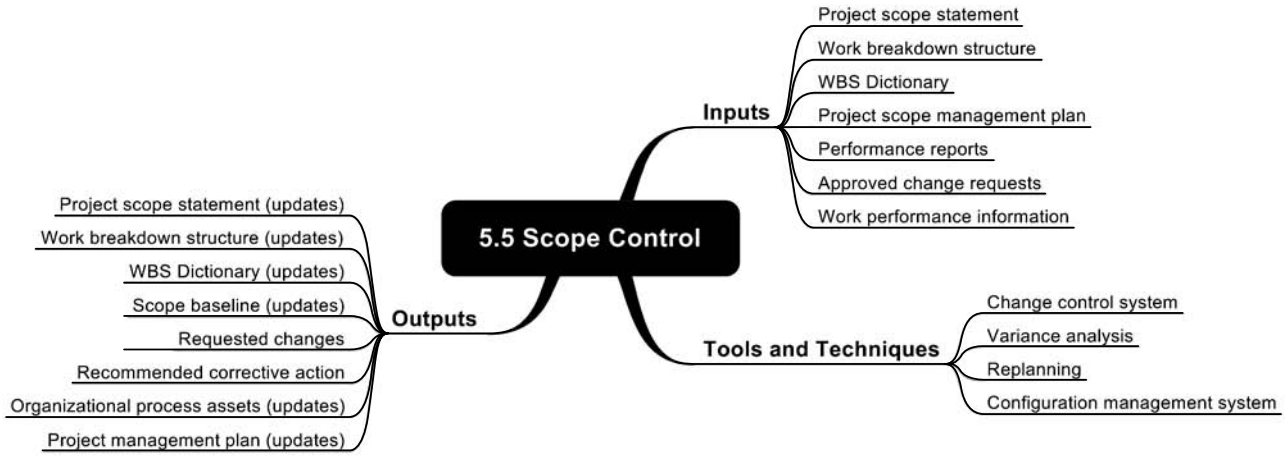

Figure 2.21 Process mindmap: scope control.

2.6 Time Management

Time management, together with cost management, is the most visible area of project management. The initial objective of most people involved in projects is to control time and prepare schedules, networks, etc.

The PMBOK Guide subdivides time management into six processes (see Figure 2.22):

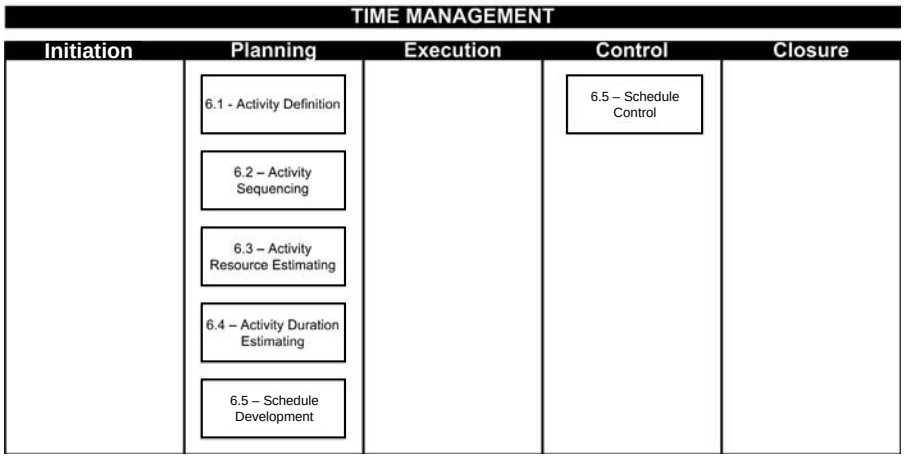

Figure 2.22 Time management processes distributed among project phases.

- Activity definition
- Activity sequencing
- Estimating activity resources
- Estimating activity duration
- Schedule development
- Schedule control

The time management processes are broken down according to the mindmap in Figure 2.23.

Figure 2.23 Time management mindmap.

Activity definition — Identification of the specific schedule activities that must be performed to produce the project products. See Figure 2.24.

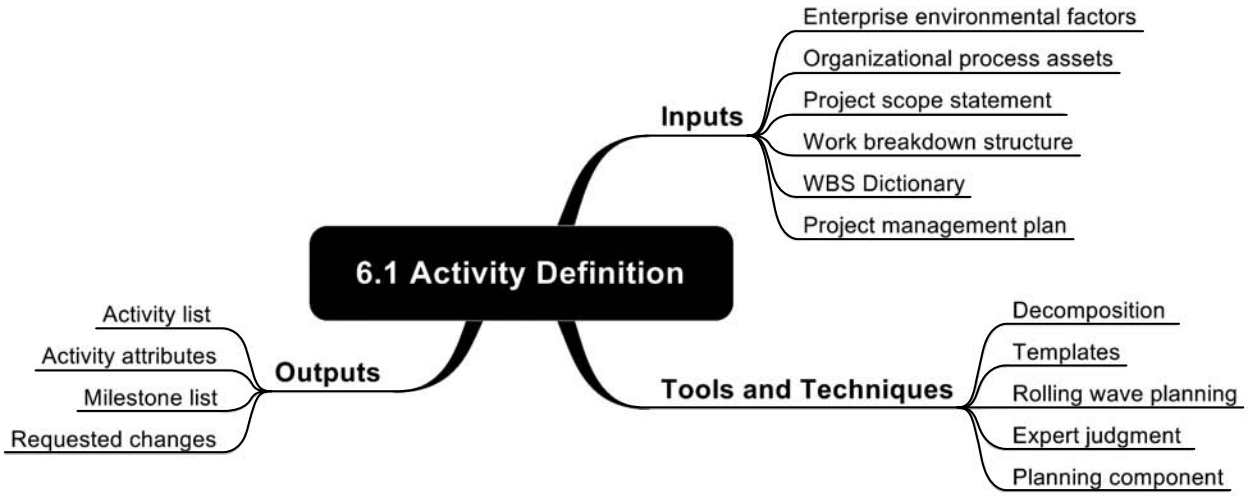

Figure 2.24 Process mindmap: activity definition.

Activity sequencing — Identification and documentation of the dependencies among the scheduled activities. See Figure 2.25.

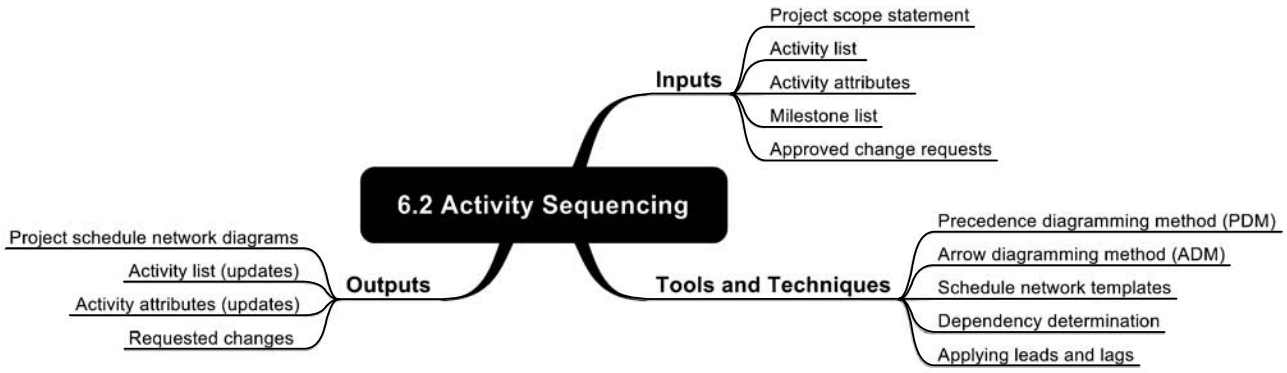

Figure 2.25 Process mindmap: activity sequencing.

Estimating activity resources — Estimating the type and quantity of resources necessary to perform each scheduled task. See Figure 2.26.

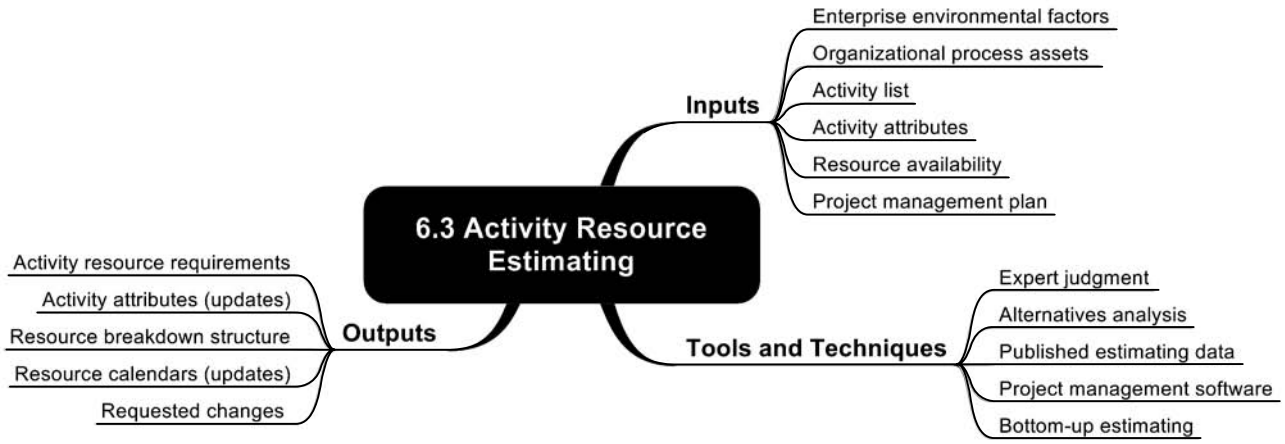

Figure 2.26 Process mindmap: estimating activity resources.

Estimating activity duration — Estimating the work periods that will be necessary to complete the individual scheduled tasks. See Figure 2.27.

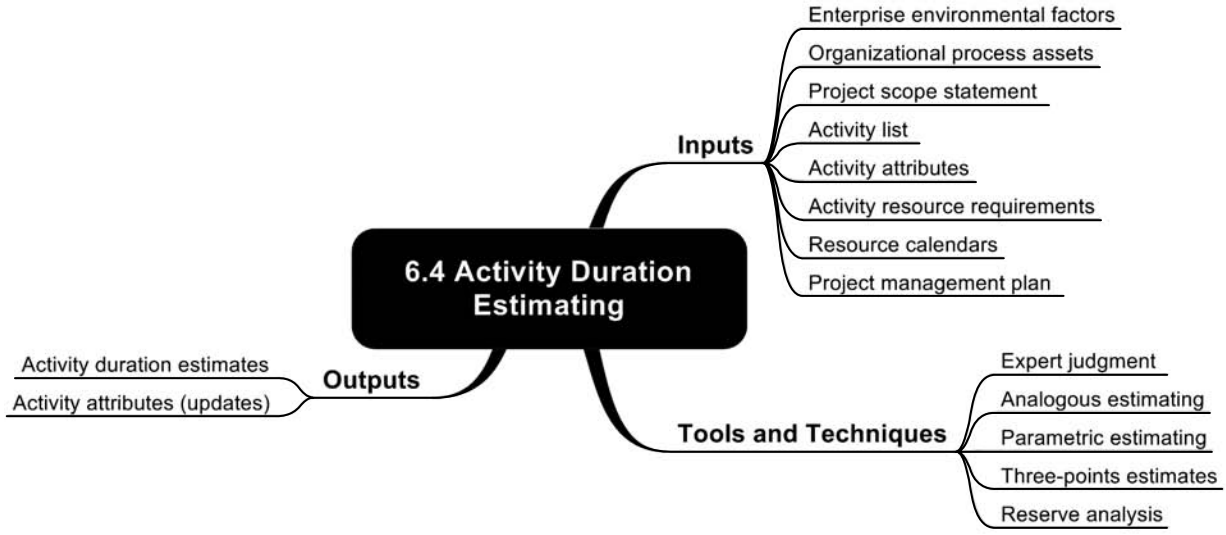

Figure 2.27 Process mindmap: estimating activity duration.

Schedule development — Analysis of the resources, schedule restrictions, duration, and sequence of activities required to create the project schedule. See Figure 2.28.

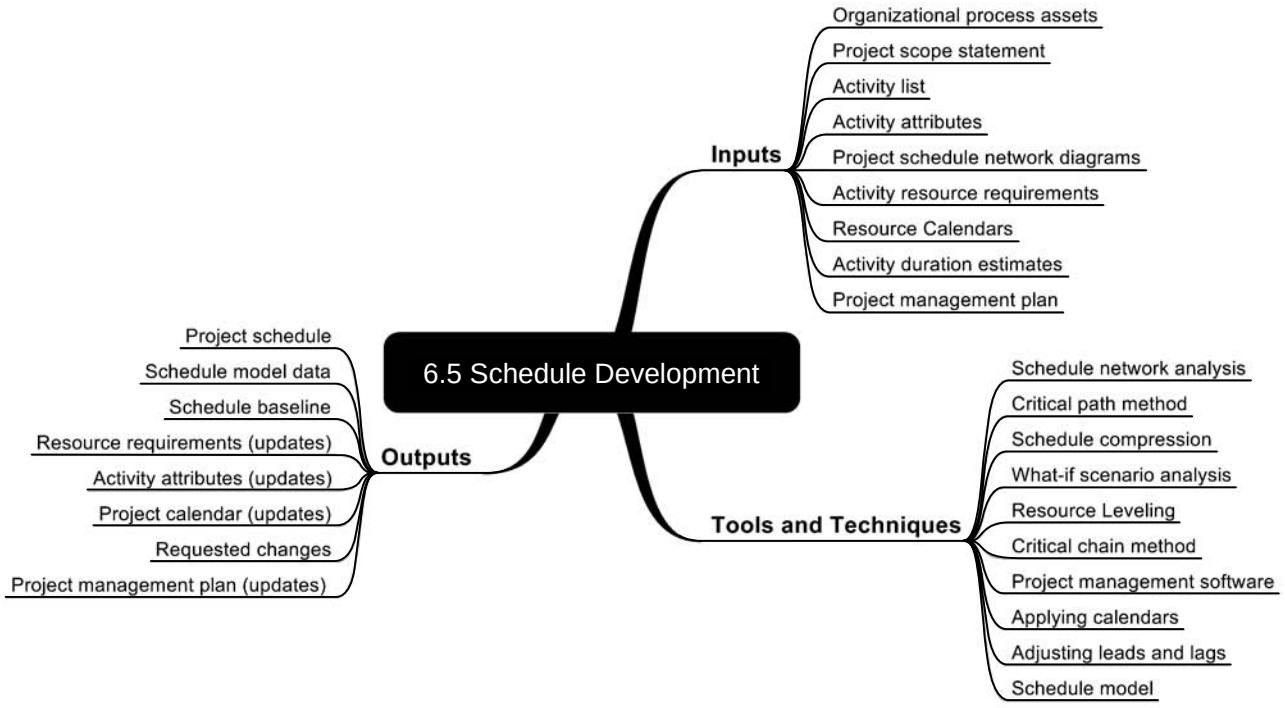

Figure 2.28 Process mindmap: schedule development.

Schedule control — Control of the project schedule changes. See Figure 2.29.

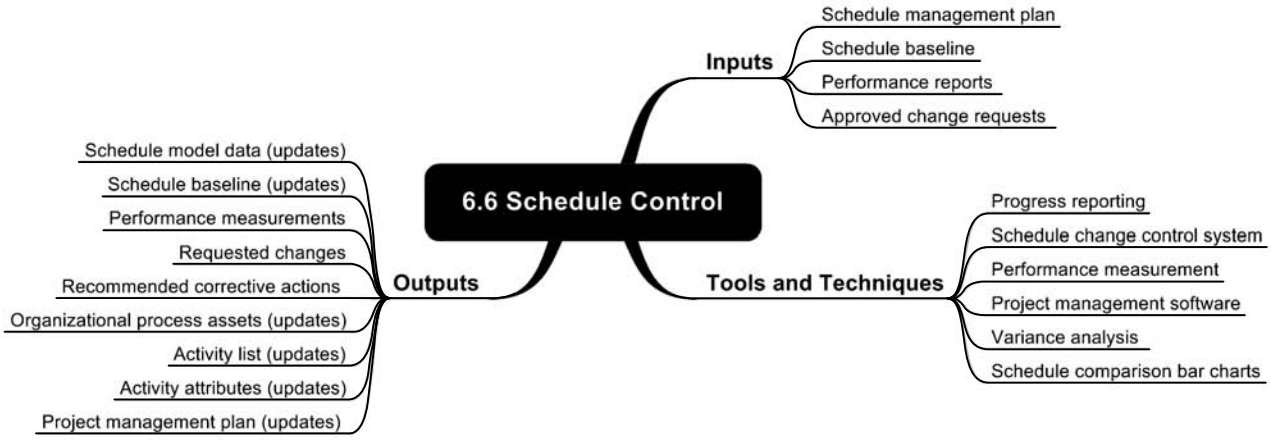

Figure 2.29 Process mindmap: schedule control.

2.7 Cost Management

The purpose of cost management is to ensure that the capital available will be enough to acquire all the resources required for the performance of project works. The PMBOK Guide subdivides cost management into three processes (see Figure 2.30):

- Cost estimating
- Cost budgeting
- Cost control

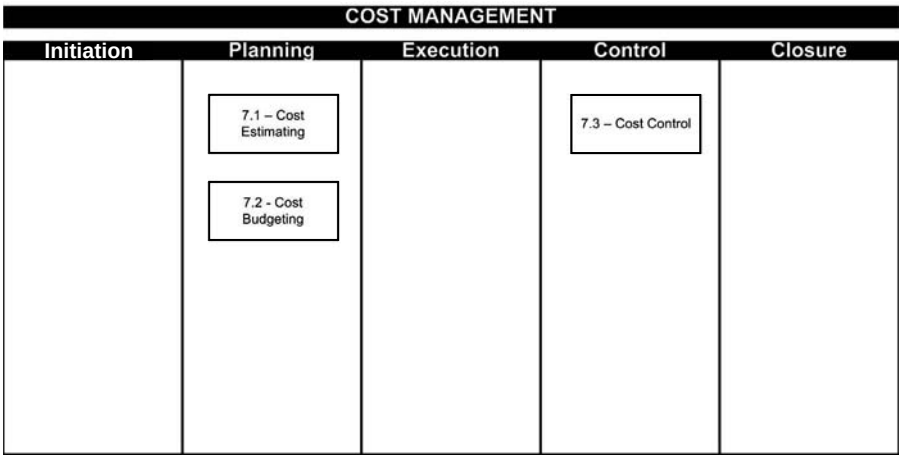

Figure 2.30 Cost management processes distributed among project phases.

The cost management processes are broken down according to the mindmap in Figure 2.31.

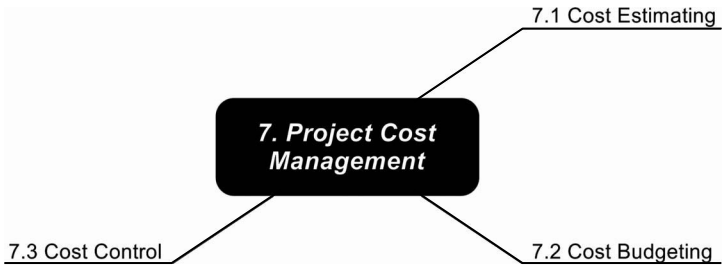

Figure 2.31 Cost management mindmap.

- **Cost estimating —** Estimating the cost of resources required to complete the project activities. See Figure 2.32.

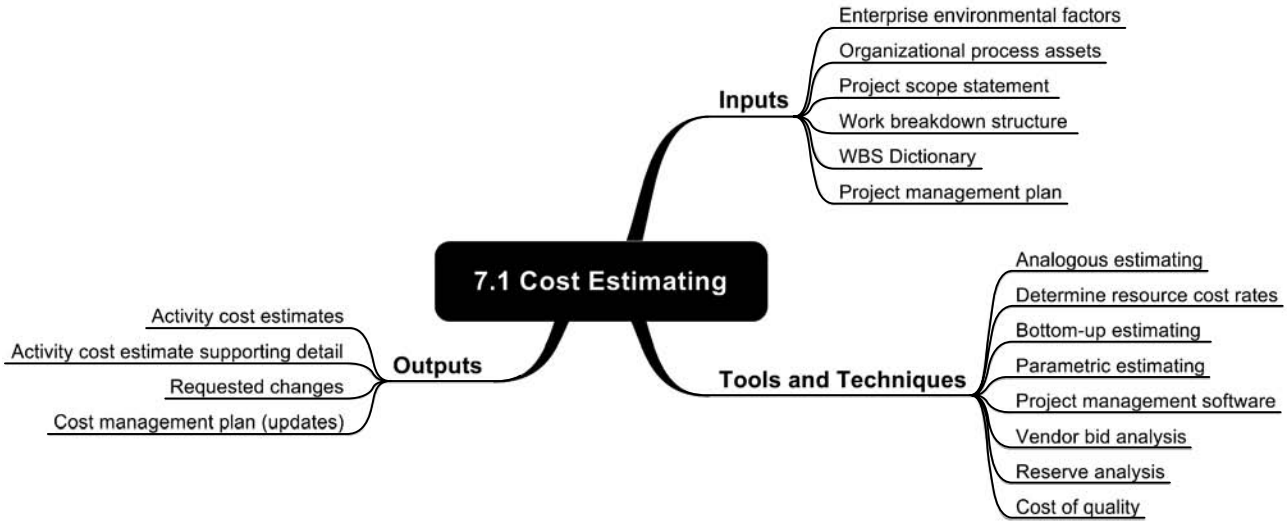

Figure 2.32 Process mindmap: cost estimating.

- **Cost budgeting —** Establish the project cost baseline based on the estimated costs of individual tasks. See Figure 2.33.

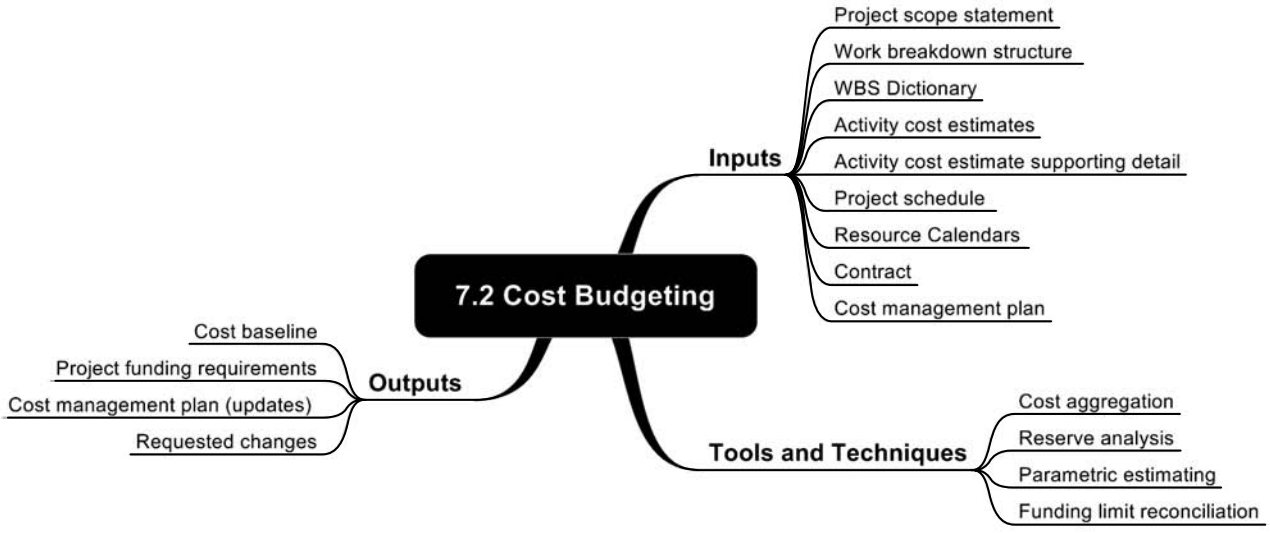

Figure 2.33 Process mindmap: cost budgeting.

- **Cost control** — The control of factors that create cost variances and control of the project budget changes. See Figure 2.34.

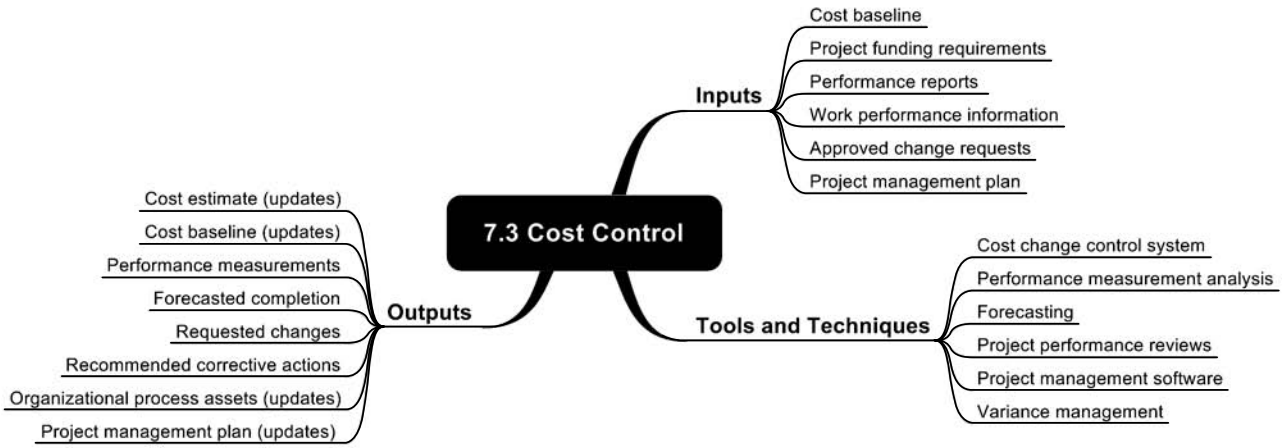

Figure 2.34 Process mindmap: cost control.

2.8 Quality Management

The most important objective of this area is to ensure that the project will be completed according to the desired quality, thus guaranteeing fulfillment of the needs of all people involved. The project manager is the first person responsible for project quality management; he or she must give equal priority for quality, cost, and time management. The PMBOK Guide subdivides quality management into three processes (Figure 2.35):

- Quality planning
- Quality assurance
- Quality control

Figure 2.35 Quality management processes distributed among project phases.

The quality management processes are broken down according to the mindmap in Figure 2.36.

Figure 2.36 Quality management mindmap.

- **Quality planning** — The identification of quality standards relevant to the project and determining how to fulfill them. See Figure 2.37.

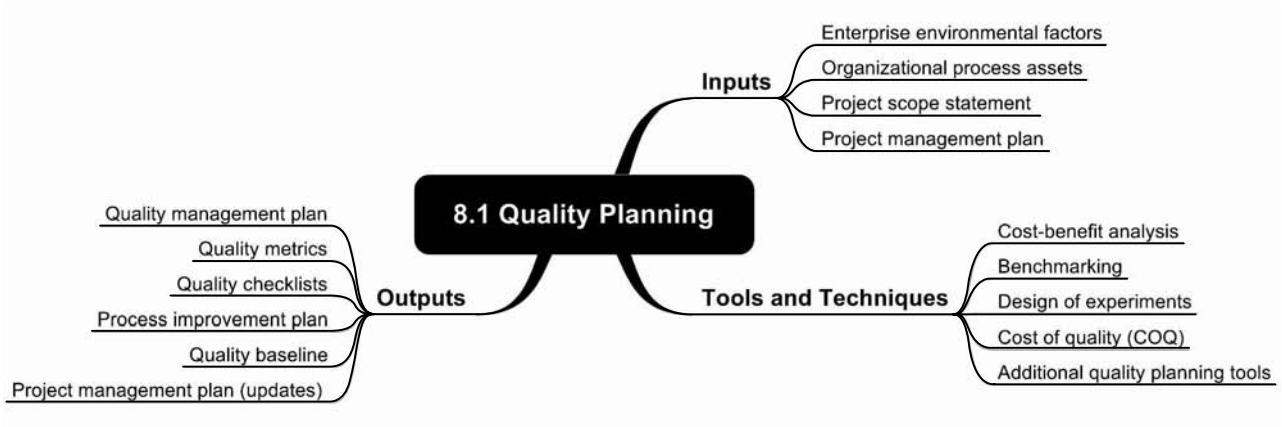

Figure 2.37 Process mindmap: quality planning.

- Q**uality assurance** — The application of planned and systematic quality activities required to ensure that the project employs all necessary processes to meet the requirements. See Figure 2.38.

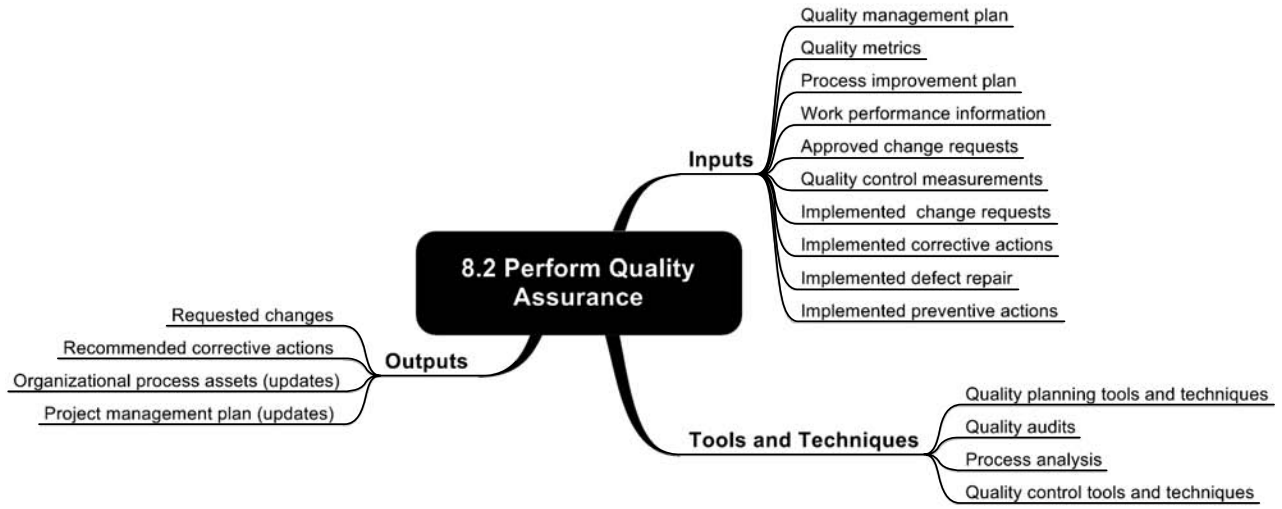

Figure 2.38 Process mindmap: quality assurance.

- Q**uality control** — Monitoring specific project results to determine whether they comply with the relevant quality standards and identifying ways to eliminate the causes of unsatisfactory performance. See Figure 2.39.

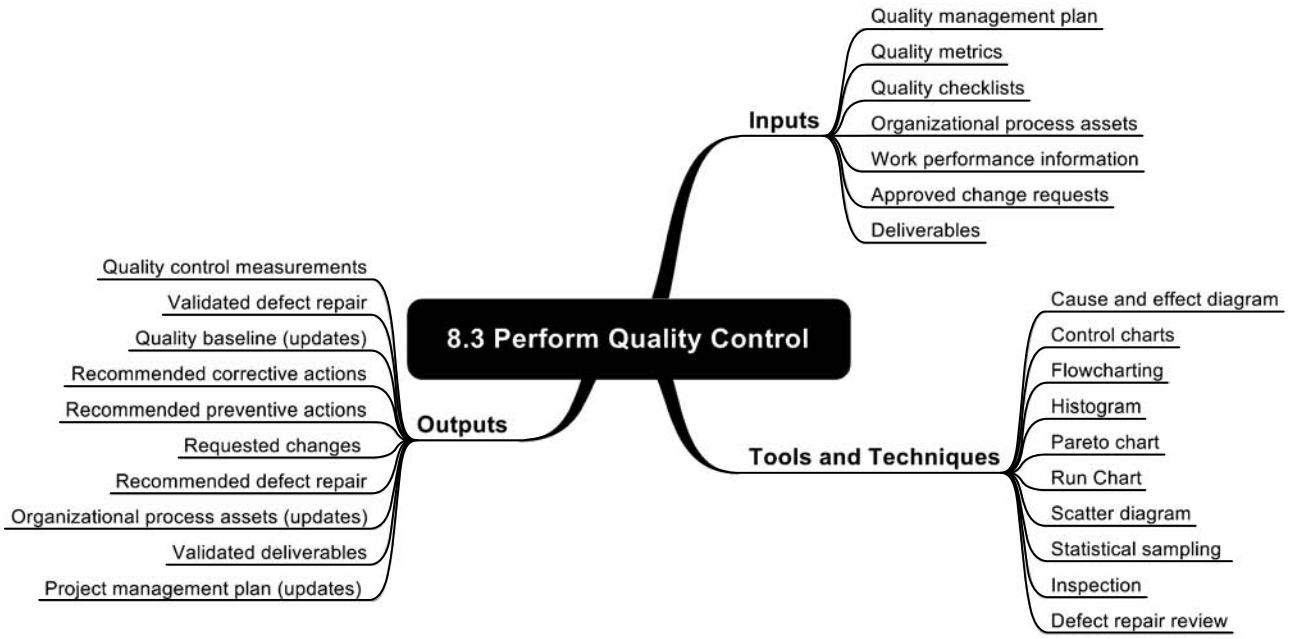

Figure 2.39 Process mindmap: quality control.

2.9 Human Resources Management

The core purpose of management of human resources is to make the best use of individuals involved in the project. As is well known, people are the central link of projects and the most important resource. They define the targets, make plans, organize the work, produce the results, and guide, coordinate, and control the project activities, using their technical and social skills.

As costs and cash flow vary significantly over the project life cycle, human resources are necessary at several levels of specialty and experience, depending on the nature of work to be performed, the maturity level of the project schedule, and the internal and external restrictions (see Figure 2.40).

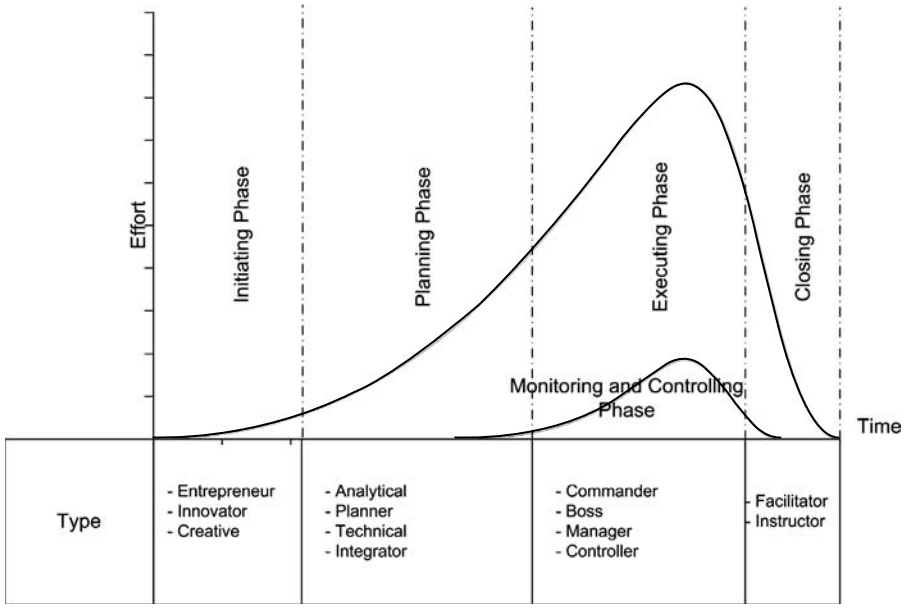

Figure 2.40 The types of professionals required during the project phases.

The PMBOK Guide subdivides time management into four processes (see Figure 2.41):

- Human resource planning
- Acquiring project team
- Developing project team
- Managing project team

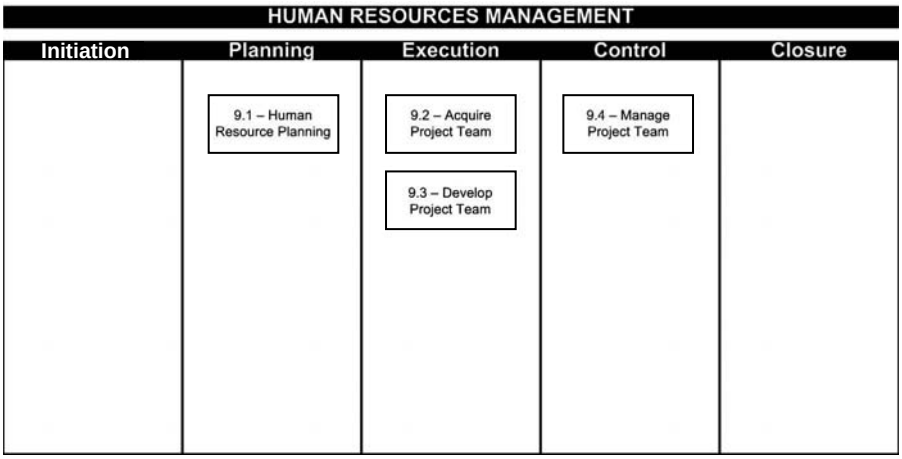

Figure 2.41 Human resource management processes distributed among project phases.

Human resource management processes are broken down according to the mindmap in Figure 2.42.

Figure 2.42 Human resource management mindmap.

Human resource planning — Identification and documentation of functions, responsibilities, and project hierarchical relations, in addition to the creation of the personnel management plan. See Figure 2.43.

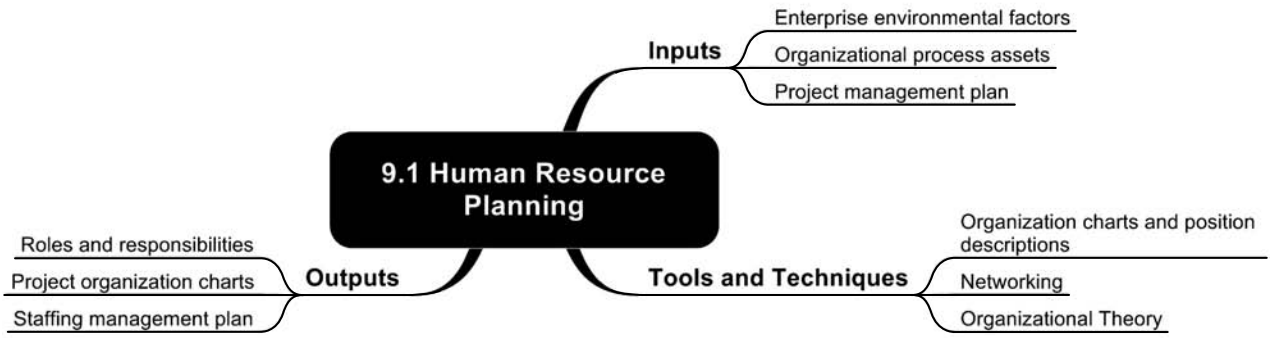

Figure 2.43 Process mindmap: human resource planning.

Acquiring project team — Acquiring of human resources required to complete the project. See Figure 2.44.

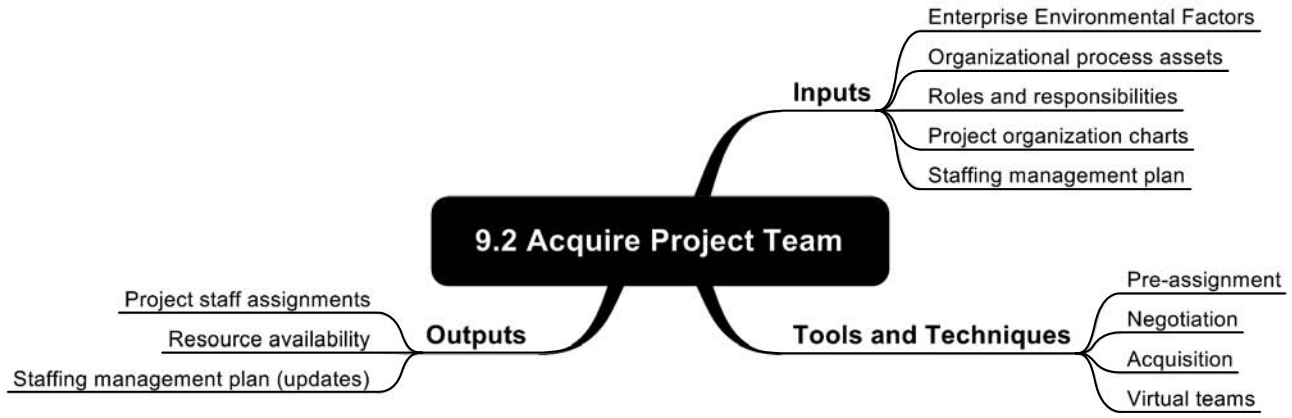

Figure 2.44 Process mindmap: acquiring project team.

Developing project team — Development of competencies and interaction of team members to improve project performance. See Figure 2.45.

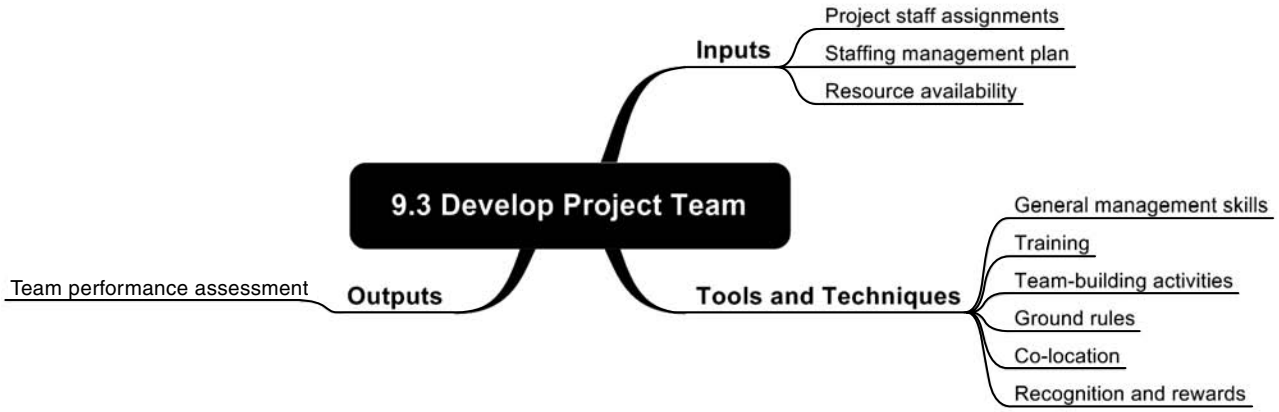

Figure 2.45 Process mindmap: developing project team.

Managing project team — Follow-up of team members' performance, furnishing of feedback, solution of issues, and coordination of changes to improve project performance. See Figure 2.46.

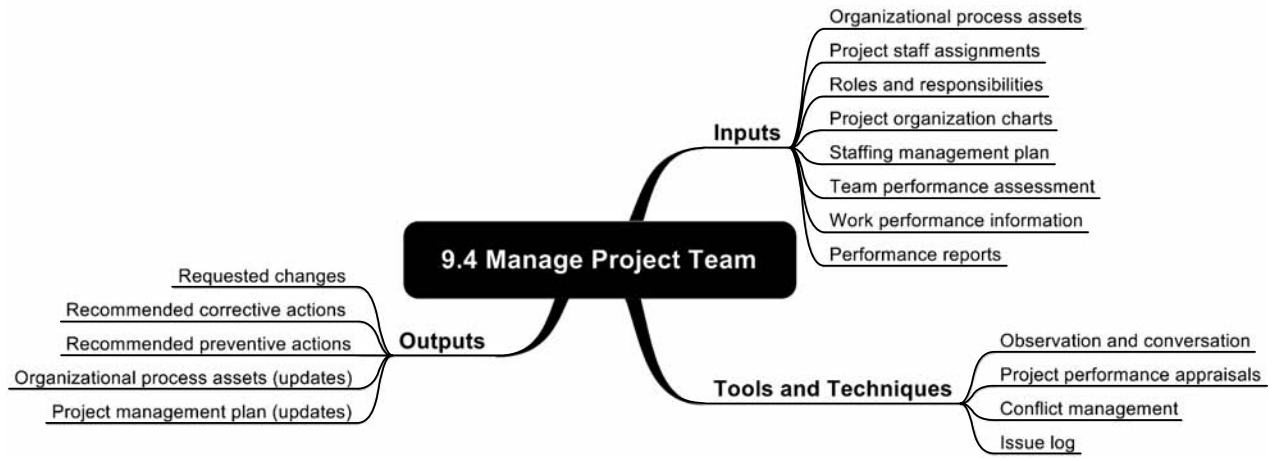

Figure 2.46 Process mindmap: managing project team.

2.10 Communication Management

An effective communication process is necessary to ensure that all the desired information reaches the correct people at the right time in an economically feasible way. The project manager uses communication to ensure that the project team is working in an integrated way to solve the project issues and take advantage of its opportunities.

The PMBOK Guide subdivides communication management into four processes (Figure 2.47):

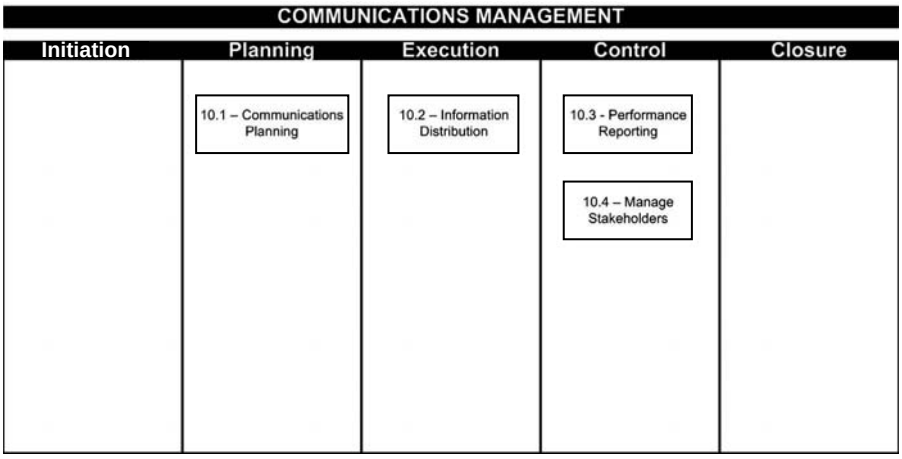

Figure 2.47 Communication management processes distributed among project phases.

- Communications planning
- Information distribution
- Performance reporting
- Managing stakeholders

The communication management processes are broken down according to the mindmap in Figure 2.48.

Figure 2.48 Communication management mindmap.

Communications planning — Determination of project stakeholders' information and communication needs. See Figure 2.49.

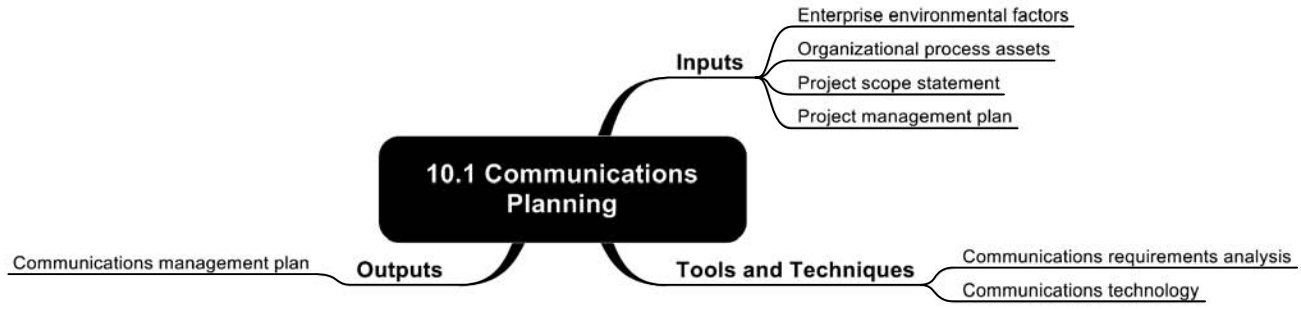

Figure 2.49 Process mindmap: communications planning.

Information distribution — Making necessary information available to project stakeholders at the required point in time. See Figure 2.50.

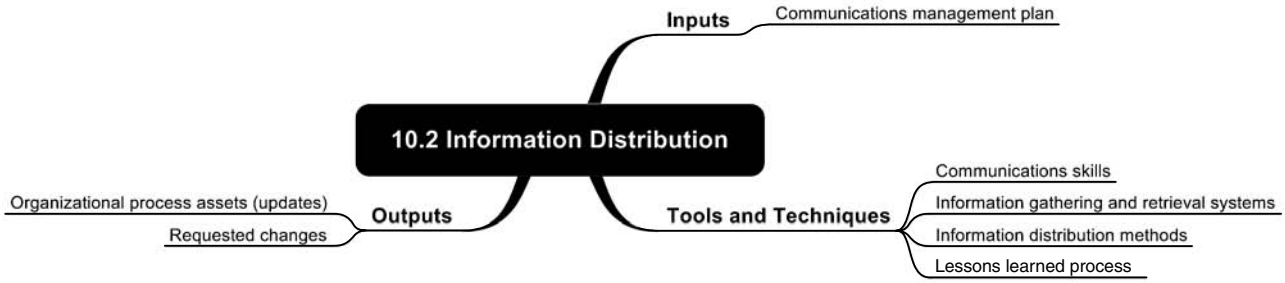

Figure 2.50 Process mindmap: information distribution.

Performance reporting — Gathering and distributing performance information, including the progress report, progress measurement, and forecast. See Figure 2.51.

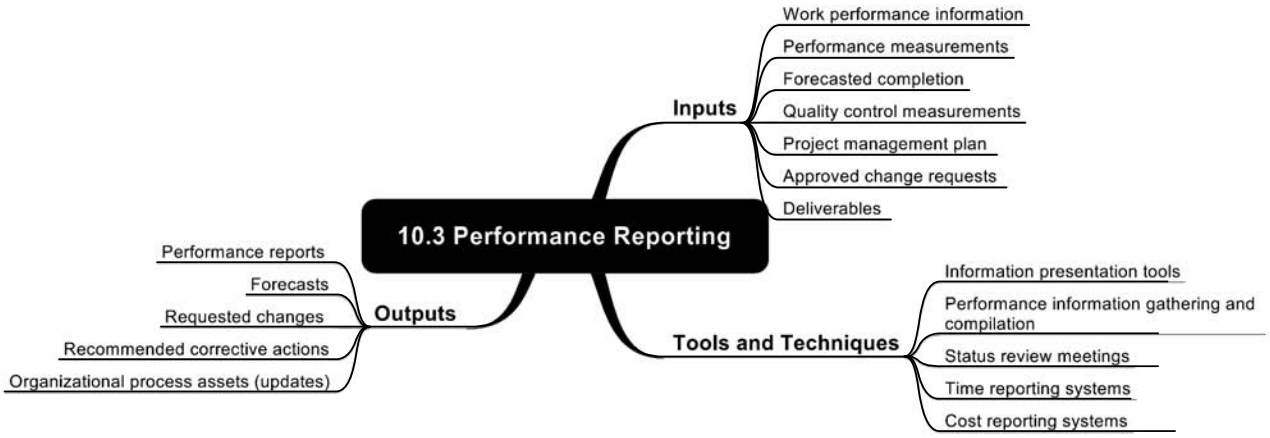

Figure 2.51 Process mindmap: performance reporting.

Managing stakeholders — Managing communications to meet project stakeholders' requirements and making use of these to solve problems. See Figure 2.52.

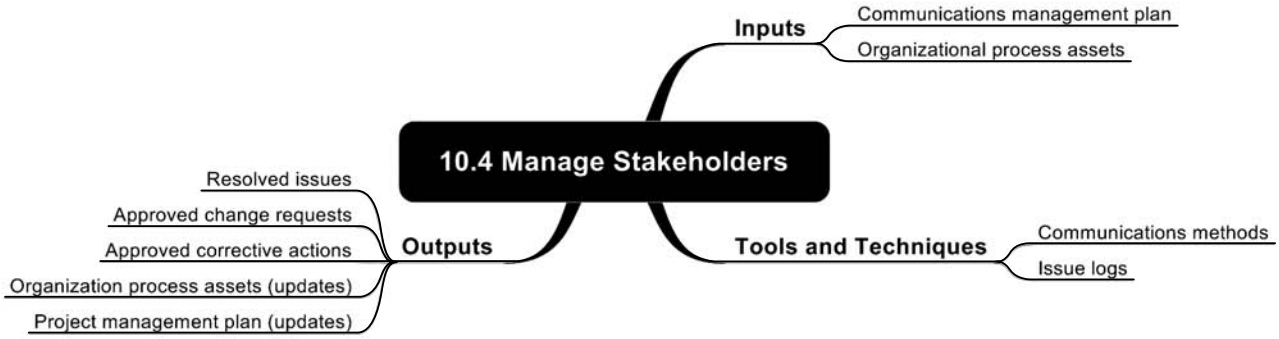

Figure 2.52 Process mindmap: Managing stakeholders.

2.11 Risk Management

Risk management provides an opportunity to better understand the project nature, involving the team members to identify and respond to potential project opportunities and risks, usually associated with time, quality, and costs.

The PMBOK Guide subdivides risk management into six processes:

- Risk management planning
- Risk identification
- Qualitative risk analysis
- Quantitative risk analysis
- Risk response planning
- Risk monitoring and control

Figure 2.53 Risk management processes distributed among project phases.

The risk management processes are broken down according to the mindmap in Figure 2.54.

Figure 2.54 Risk management mindmap.

Risk management planning — Decisions on how to approach, plan, and perform the risk management activities of a project. See Figure 2.55.

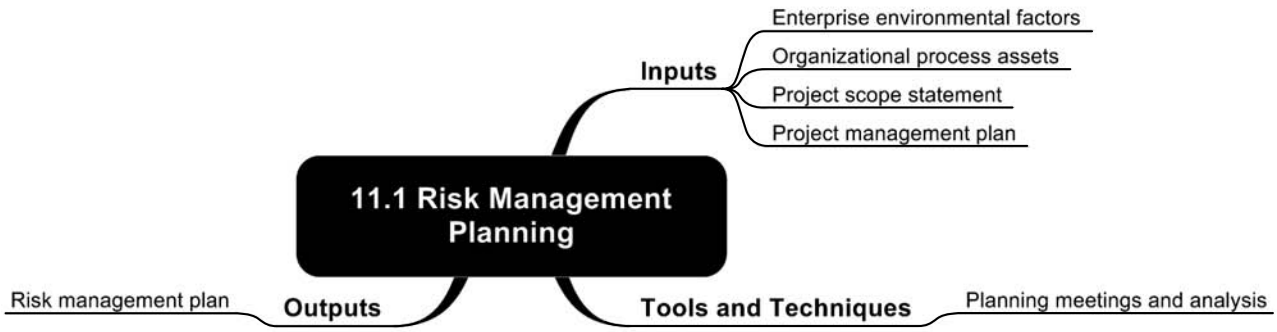

Figure 2.55 Process mindmap: risk management planning.

Risk identification — The determination of risks that might affect the project and documentation of its characteristics. See Figure 2.56.

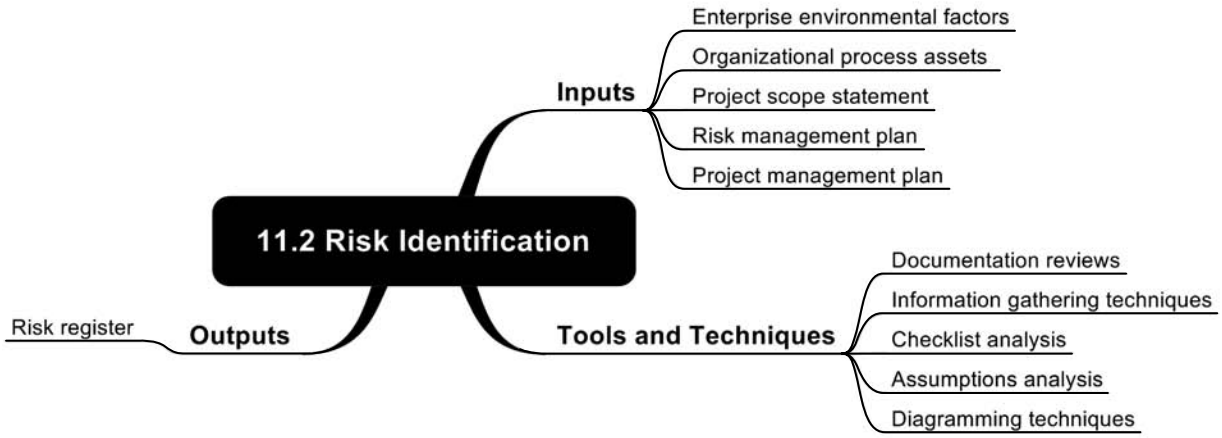

Figure 2.56 Process mindmap: risk identification.

Qualitative risk analysis — The determination of risk priorities for review or additional subsequent action through the evaluation and combination of their occurrence probability and impact. See Figure 2.57.

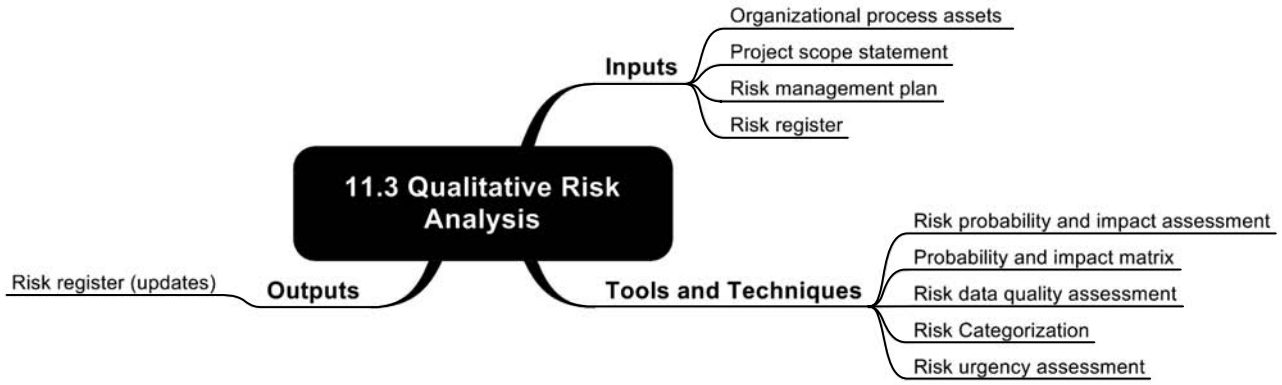

Figure 2.57 Process mindmap: qualitative risk analysis.

Quantitative risk analysis — A numerical approach to evaluate the effect of identified risks on the general project objectives. See Figure 2.58.

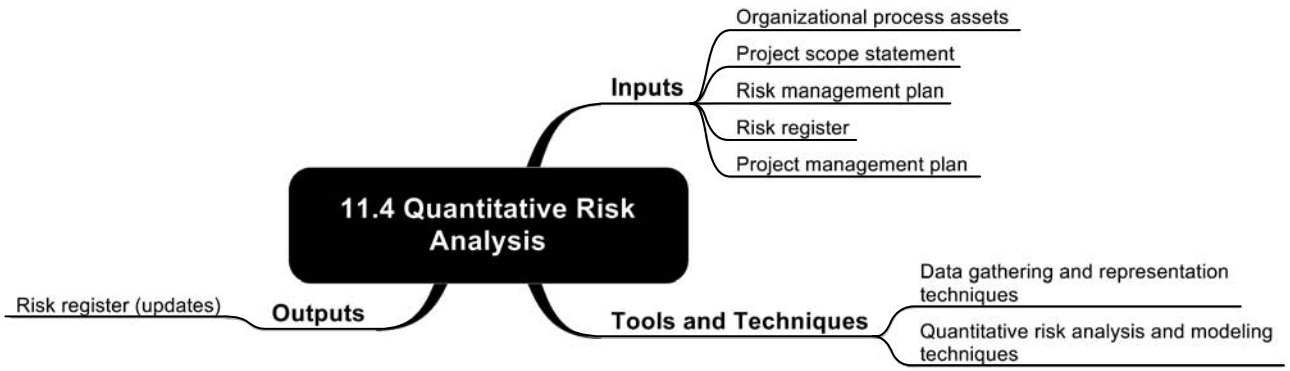

Figure 2.58 Process mindmap: quantitative risk analysis.

Risk response planning — The development of options and actions to increase opportunities and reduce threats to the project objectives. See Figure 2.59.

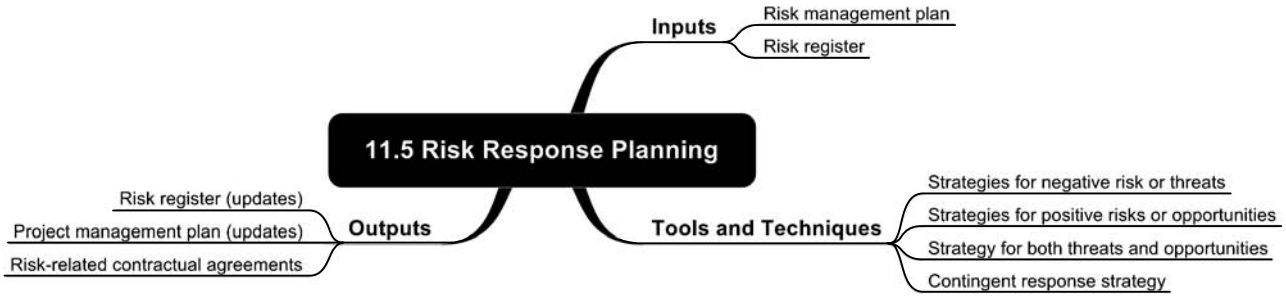

Figure 2.59 Process mindmap: risk response planning.

Risk monitoring and control — Follow-up of identified risks, monitoring residual risks, identification of new risks, executing risk response plans, and evaluation of their efficacy during the entire project life cycle. See Figure 2.60.

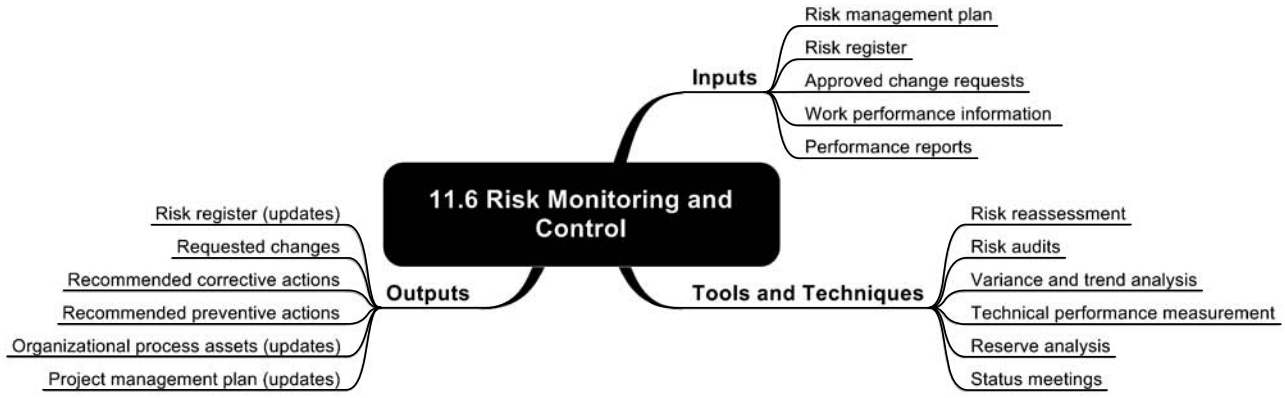

Figure 2.60 Process mindmap: risk monitoring and control.

2.12 Procurement Management

The purpose of procurement management is to ensure that all external participating elements will guarantee the supply of their products, or services, to the project.

The PMBOK Guide subdivides procurement management into six processes (Figure 2.61):

- Planning purchase and acquisitions
- Planning contract execution
- Requesting seller responses
- Selecting sellers
- Contract administration
- Contract closure

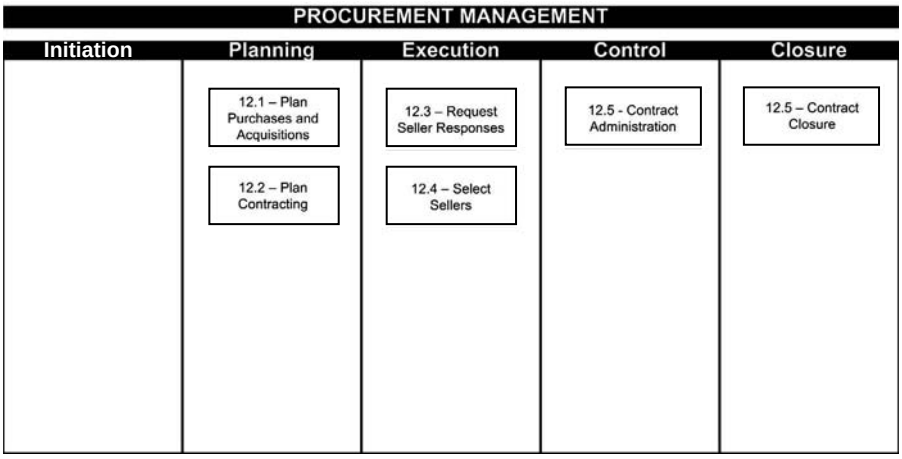

Figure 2.61 Procurement management processes distributed among project phases.

The procurement management processes are broken down according to the mindmap in Figure 2.62.

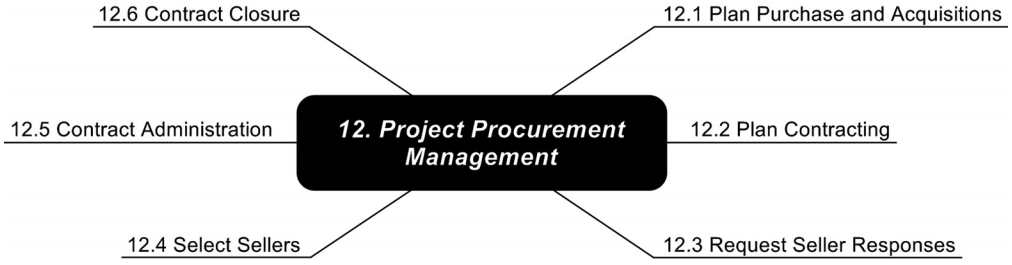

Figure 2.62 Procurement management mindmap.

Planning purchases and acquisitions — Determination of what to purchase or acquire, as well as when and how. See Figure 2.63.

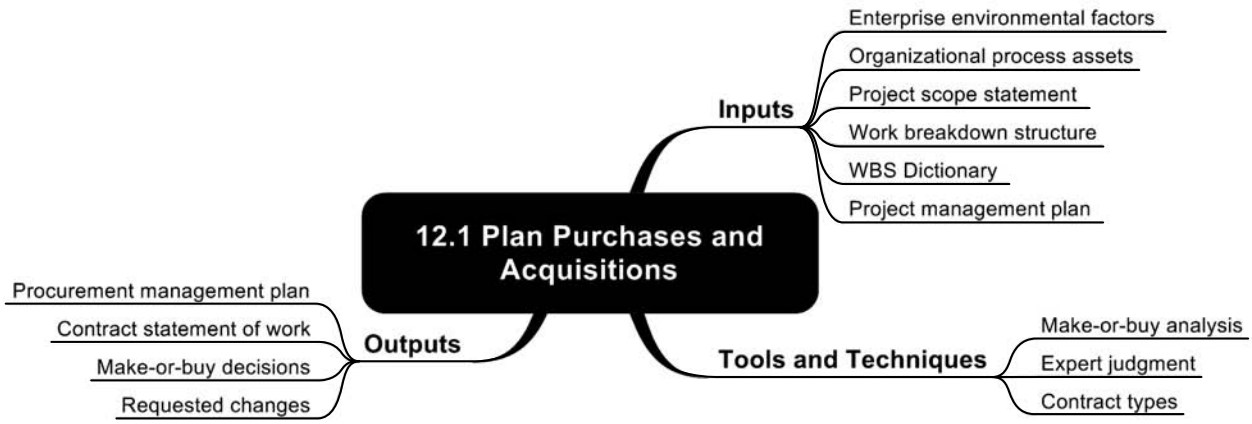

Figure 2.63 Process mindmap: planning purchases and acquisitions.

Planning contract execution — Documentation of the products, services, and quality requirements, including the identification of prospective suppliers. See Figure 2.64.

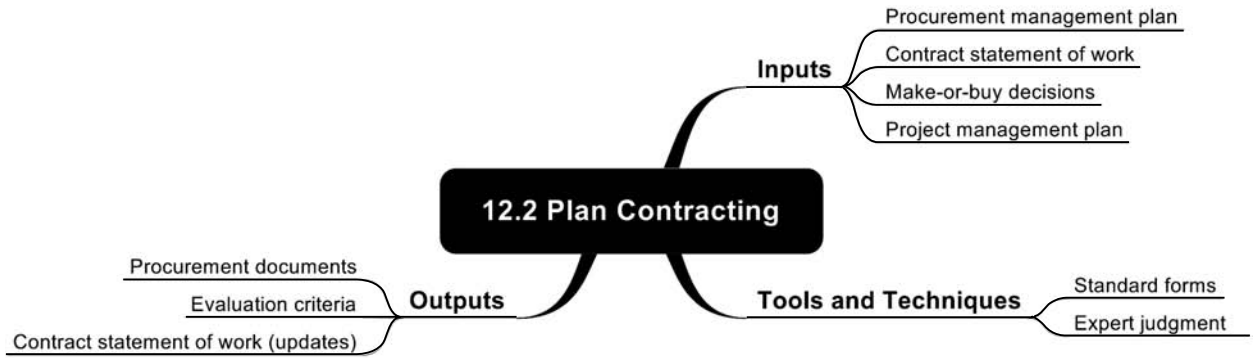

Figure 2.64 Process mindmap: planning contract execution.

Requesting seller responses — Gathering of information, quotations, prices, offers, or proposals, as appropriate. See Figure 2.65.

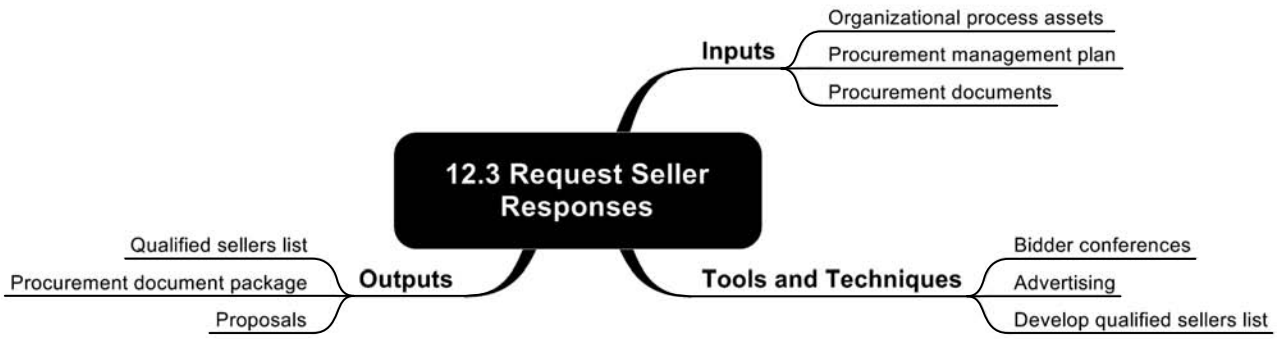

Figure 2.65 Process mindmap: requesting seller responses.

Selecting sellers — Review of offers, selecting prospective suppliers, and negotiation of a written contract with each supplier. See Figure 2.66.

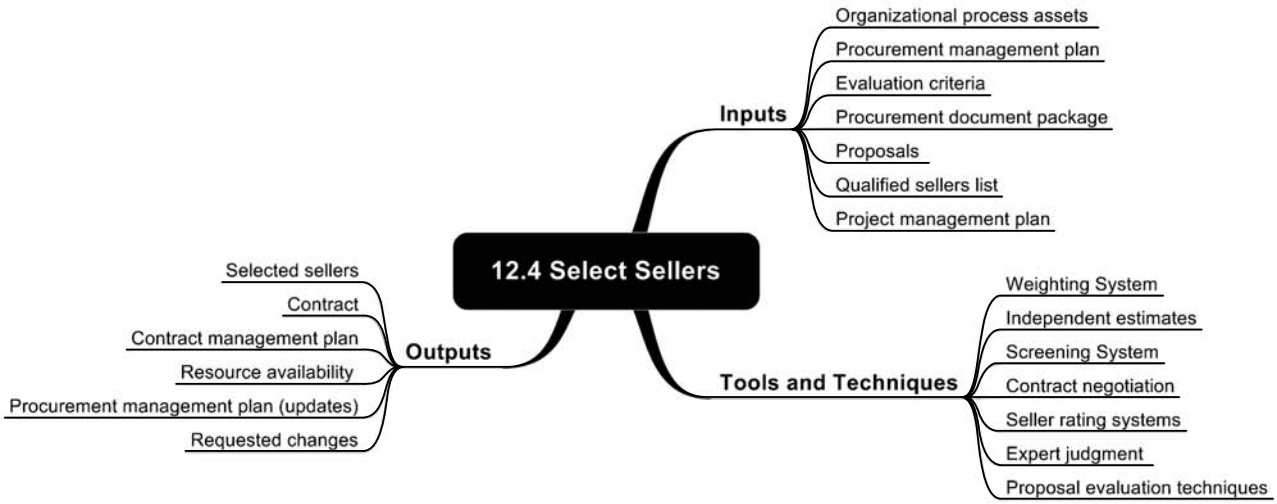

Figure 2.66 Process mindmap: selecting sellers.

Contract administration — Management of the contract and of the relationship between purchaser and supplier, review and documentation of present or past supplier performance to establish necessary corrective actions and provide a base for the future relationship with the supplier. See Figure 2.67.

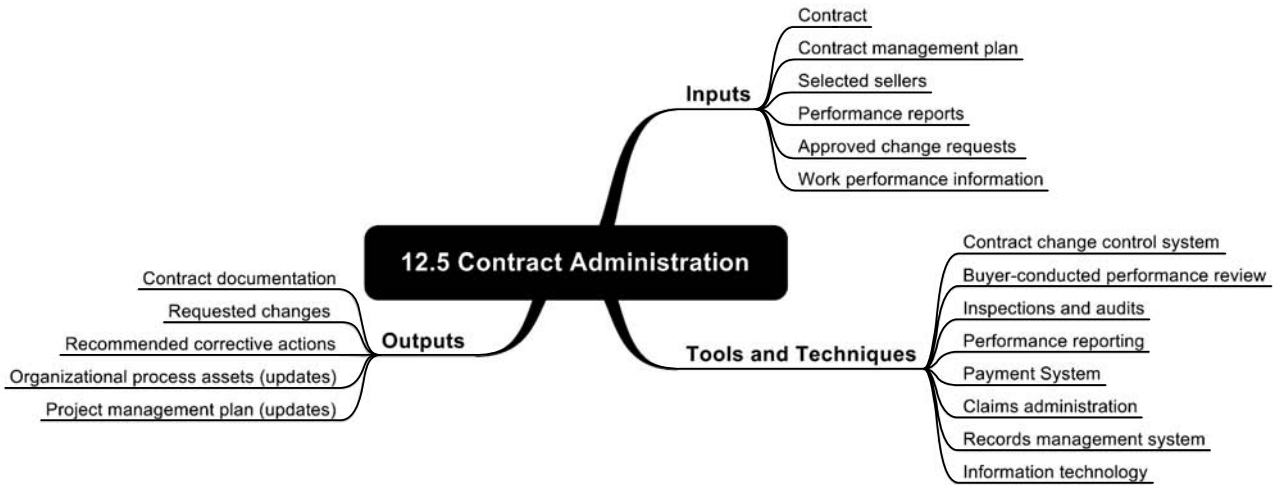

Figure 2.67 Process mindmap: contract administration.

Contract closure — Completion and settlement of each contract, including the solution of any outstanding issues, and closure of each contract applicable to the project or a phase of the project. See Figure 2.68.

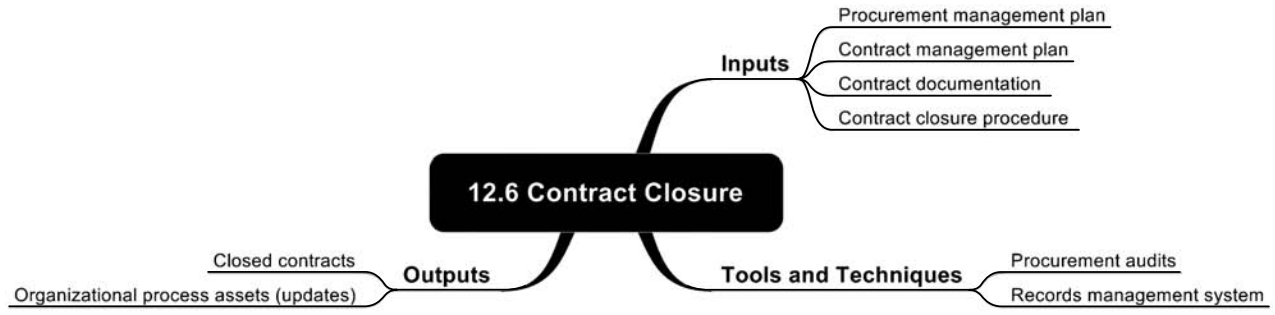

Figure 2.68 Process mindmap: contract closure.

Part III

Project Plan Documents

3.1 Introduction

In this part, the most important project plan documents will be presented, and they will be further detailed in Part IV, New Frontiers Project Plan.

The New Frontiers project was developed for didactic purposes. It is not intended to discuss the strategies used to build the plan, but to provide an example of a project plan, from the beginning to the end, aiming particularly at presenting the document integration.

The plans described in the following text are only for reference and cannot be deemed as complete for real projects. It is also not the purpose of the New Frontiers project to teach the techniques implemented in this plan or to conduct any type of value judgment about the best techniques to be used in a project plan, and it also does not necessarily represent the official stand of the Project Management Institute (PMI) or an exact correspondence with the PMBOK® Guide.

All the reports, charts, and texts presented are only suggestions and not a proposed rigid model. All changes and customizations regarding the elements presented are allowed, and are welcome. Finally, any similarity with real projects regarding the type of project, the type of reports, the names of the resources, and other data is merely coincidental.

3.2 Integration Management

3.2.1 Project Charter

The project charter is the legal document that acknowledges the existence of a project. It acts as a baseline for the project manager work. It contains varied information about the project, including initial estimates of the assigned timeframe, the necessary resources and the available budget. It is usually developed by the project sponsor or at the executive level of the company. The project charter should usually contain the following:

- Project title
- A summary of the conditions defining the project (introduction)
- Project justification
- Name of the project manager and his or her responsibilities and authority
- Basic needs of the work to be met
- Main stakeholders
- Description of the project's product
- Basic project schedule
- Initial cost estimates
- Initial assumptions
- Initial restrictions
- Initial resource needs

- Need for support by the organization
- Composition of the executive committee or Change Control Board (CCB)
- Control and management of the project information
- Approvals with the signature of the executive responsible for the document (element external to the project)

3.2.2 Preliminary Project Scope Statement

It is the document that formalizes the scope of all the works to be developed in the project, serving as the base to define its characteristics and boundaries. The preliminary scope statement is the first version of the project scope statement and is refined and reviewed during the project scope management processes. It is important to note that there is only one scope statement in a project. The difference between the preliminary and final statement is only in the detailing level. The project will use the final project scope statement for planning and control purposes.

Usually, the preliminary project scope statement contains the following:

- Project title
- Name of the person who prepared the document
- Name of the sponsor
- Name of the project manager, his or her responsibilities, and authority
- The preliminary organization chart
- Names of project team members
- Composition of the executive committee or CCB
- Project description
- Project objectives
- Project justification
- Project product
- Client's or sponsor's expectations
- Project success factors
- Constraints
- Assumptions
- Project boundaries and specific exclusions (everything that will not be covered by the project)
- The work breakdown structure (preliminary)
- Main project activities and strategies
- Main project deliverables
- Initial project budget
- Deliverables plan and project milestones
- Initial project risks
- The project's configuration management and change requirements
- Document change log
- Approvals

3.2.3 Project Plan

The project plan is the formal document that describes the procedures to be performed during its execution. It is the foundation of the entire execution. It contains all the knowledge area plans, schedules, technical aspects, etc. The project plan should contain the following:

- An overview of the project objectives, targets and scope, in a summarized and global way, to assist the high project executives (basic introduction to the subject)
- Detailed project objectives, to assist the project manager and the project team

- Names and responsibilities of the project manager and of the main project team members (responsibility matrix)
- The project's organization chart
- Technical study of the solutions to be adopted by the project
- Contractual aspects regarding the participation of elements external to the project
- The work breakdown structure (WBS)
- Schedules, Gantt chart, and network diagram
- Main milestones
- Resource utilization by the project (including roles)
- The budget, cost review, and cash flows
- Human resources training needs
- Systems established to evaluate quality and performance indexes to be achieved by the project
- Potential obstacles to be faced by the project and possible solutions
- Pending list
- Knowledge area plans:
  - Scope management plan
  - Time management plan
  - Cost management plan
  - Quality management plan
  - Human resources management plan
  - Communication management plan
  - Risk management plan
  - Procurement management plan

3.2.4 Top-Level Gantt Chart

The top-level Gantt chart (Figure 3.1) displays directly the main project phases and works over time. It is summarized, and its purpose is to provide a global view of how the main works are distributed over time. It is a standard graphic representation that displays the project works in a global way. Executives, the sponsor, and elements external to the project normally use it.

Figure 3.1 Top-level Gantt chart.

3.2.5 Integrated Change Control System

The integrated change control system is a formal document that describes all the processes regarding changes in the project, whether changes of scope, time, or costs. Its purpose is to ensure that changes were duly evaluated before being approved, rejected, or modified. Usually, the integrated change control is represented by a process guided by rules and flowcharts, among others.

3.2.6 Stakeholders Priority Matrix

The stakeholders priority matrix identifies and determines the priority of each one of the project stakeholders. Its purpose is to document the capacity of each one of the project stakeholders to exert an influence, either positive or negative, on the project.

3.2.7 Lessons Learned Log

The purpose of this document is to log the lessons learned in the project within the responsible area. It is usually prepared in an analytic format or as a mindmap, highlighting on a first level the affected area or the WBS macroelements and on a second level the lesson learned.

3.3 Scope Management

3.3.1 Scope Statement

The preliminary project scope statement was already developed in Subsection 3.2.2. At this point, the preliminary scope statement will be detailed, and the project boundaries will be defined. The degree of detail and level at which the project scope statement defines the work to be carried out and the work that will be excluded may determine the effectiveness with which the project management team may control the global project scope.

The scope statement contains the same elements of the preliminary project scope statement, previously described and presented. The difference at this point is the detailing level and the information accuracy.

3.3.2 Work Breakdown Structure (WBS)

The work breakdown structure, also known as WBS, is a project scope management tool (Figure 3.2). Each descending project level represents an increase in the project detailing level, as in an organization chart (hierarchical). The detailing may be performed up to the desired level, presenting generic or detailed data. The most usual detailing is up to the work package. The WBS characteristics are the following:

- It allows the viewing of the work package contributions to the main project.
- It allows the directing of teams, resources, and responsibilities.
- It determines what materials will be necessary to execute each package.
- It determines the project final cost based on the cost of each package.

Its main advantages are the following:

- Sets of deliverables are grouped in a simple way.
- Easy attribution of responsibilities.
- Easy project breakdown in the work packages.

Its main disadvantages are the following:

- It does not distinguish visually the timeframe and the duration of each package, as well as the importance of each one.
- It does not display the interdependencies between the deliverables and the packages.

The WBS presents variations, particularly regarding the presentation form, as follows:

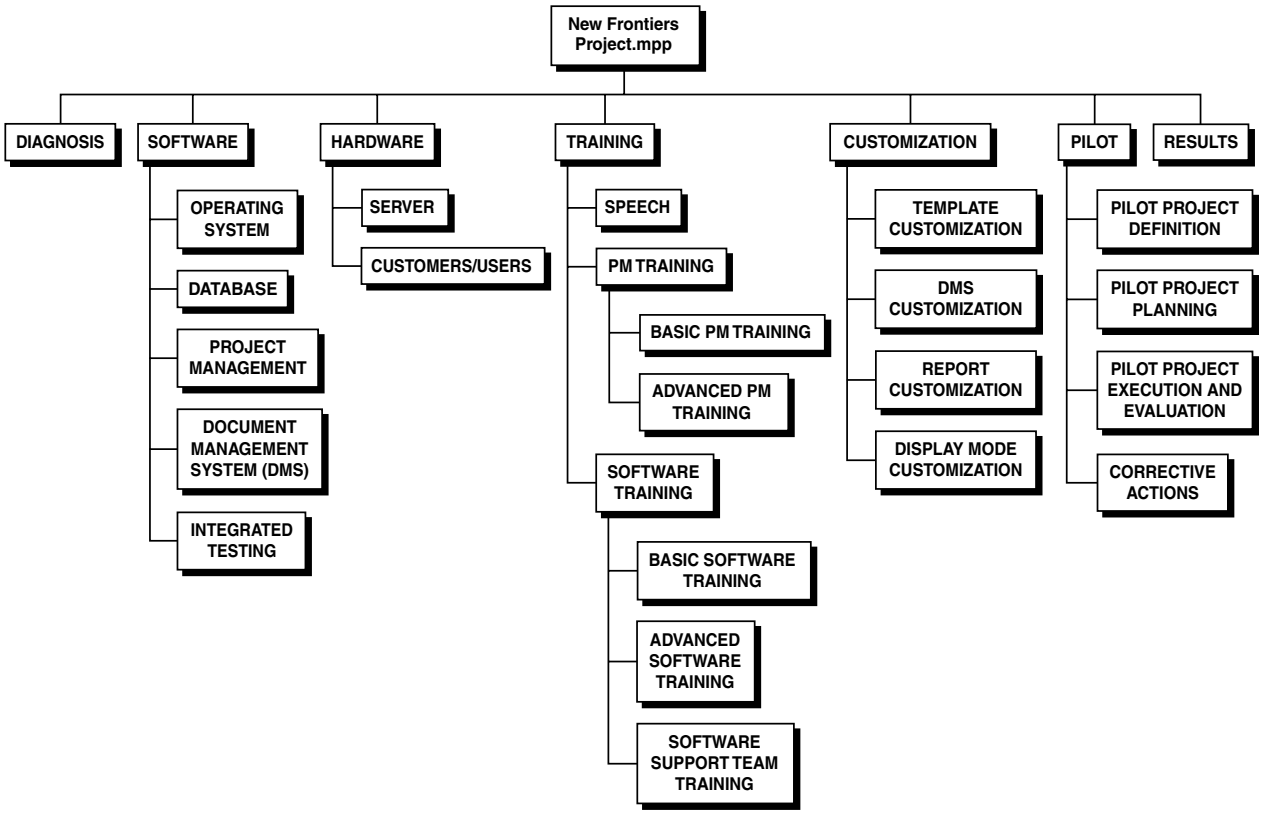

Figure 3.2 Work breakdown structure (WBS).

Analytic WBS — A WBS that presents the work scope through a list of recessed elements indicating the work groups (Figure 3.3). It is usually accompanied by numbering.

WBS Mindmap® — A scope structuring option for presenting the WBS (see Figure 3.4). Mindmaps are a world standard for the creation, management, and communication of ideas. Mindmaps support the organization of ideas and knowledge by means of an intuitive and friendly visualization, besides presenting high visual versatility. Mindmaps stem from a central idea, where all map branches represent a breakdown of the main idea into related ideas, based on a visual thought template.

NEW FRONTIERS PROJECT
- ⊟ 1 DIAGNOSIS
- ⊟ 2 SOFTWARE
  - ⊟ 2.1 OPERATING SYSTEM
  - ⊟ 2.2 DATABASE
  - ⊟ 2.3 PROJECT MANAGEMENT
  - ⊟ 2.4 DOCUMENT MANAGEMENT SYSTEM (DMS)
  - ⊟ 2.5 INTEGRATED TESTING
- ⊟ 3 HARDWARE
  - ⊟ 3.1 SERVER
  - ⊟ 3.2 CUSTOMERS/USERS

Figure 3.3 Analytic WBS.

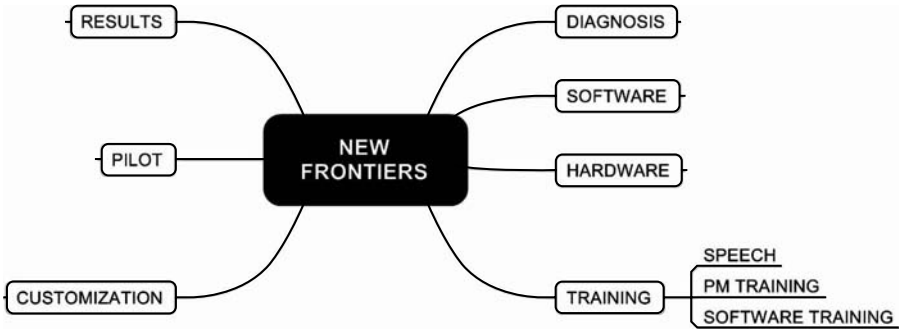

Figure 3.4 WBS mindmap.

3.3.3 WBS Dictionary

The WBS dictionary is a set of definitions that describe each work package of the project. It details the work to be performed, as well as aspects related to resources, predecessors, and successors, among others. The WBS dictionary contains the following elements:

- The work package name and code
- The main person responsible for the work package (and to whom this person is accountable)
- Estimated duration of the work package
- Estimated costs of the work package
- Main tasks to be accomplished
- Planned resources
- Main work package predecessors
- Main work package successors
- Risks associated with the package
- Other related information
- Approvals

3.3.4 Scope Management Plan

The scope management plan is a formal document that describes the procedures that will be used to manage the entire project scope. In the plan, the following should be documented:

- Project title
- Name of the person who prepared the document
- Description of the scope management processes
- The priority of scope changes and responses
- Configuration management process
- Frequency of the project scope evaluation
- Cost allocation for scope changes
- Name of the person responsible for the plan
- Frequency of updating the scope management plan
- Other issues related to the project scope management not included in the plan
- Document change log
- Approvals

3.4 Time Management

3.4.1 Activity List

This is a complete list of project activities, detailing all the work packages according to their respective actions.

Activities *are the necessary stages for the completion of a project. They are performed on a sequence determined by the project characteristics. The activities may occur sequentially or simultaneously.*

The main types of activities are described in the following text:

Executive activities or tasks — These are the activities directly related to the course of action within the project. Examples of executive activities:

- Packing computers
- Cleaning the land
- Typing a purchase report
- Reviewing an article

Milestones or deliverables — The milestone represents an event or condition that marks the execution of a group of activities related to each other, or the completion of a project phase. It serves also to identify the work package deliverables and has no duration. It is also referred to as *stages* or *gates*. Examples of milestones:

- Roof ready (delivery)
- Product tests performed
- Third installment paid

Summary activities, summary tasks, or work packages — These are activities that comprise other activities, called *subactivities*. They represent sets of activities that encompass the duration, dates, and costs of the activities belonging to them. They may also be called work packages. Examples of summary activities:

- Planning phase
- Building the house foundation
- Drawing the product prototype
- Design phase

3.4.2 Gantt Chart

A Gantt chart is a very popular graphical representation of schedules (Figure 3.5). The chart uses horizontal bars, placed within a timescale. The relative bar lengths determine the activity duration. Sometimes the Gantt chart includes lines connecting the individual bars, reflecting the relationship among tasks. The main advantages of the Gantt chart are the following:

- Easy to understand
- Delays are easily viewed
- Well-defined timescale

Its main disadvantages are the following:

- Not adequate for projects with a large number of tasks

Figure 3.5 Gantt chart.

- Dependencies are difficult to view
- Vague description of how the project reacts to scope changes

The Gantt chart is the standard display in most of the project management software.

3.4.3 Leveling Gantt Chart

This is the conventional Gantt chart but with two lines for each task, one describing the chart behavior before, and the other after, the resource leveling (Figure 3.6). It is a very useful representation for evaluating the impact of leveling on the project resources.

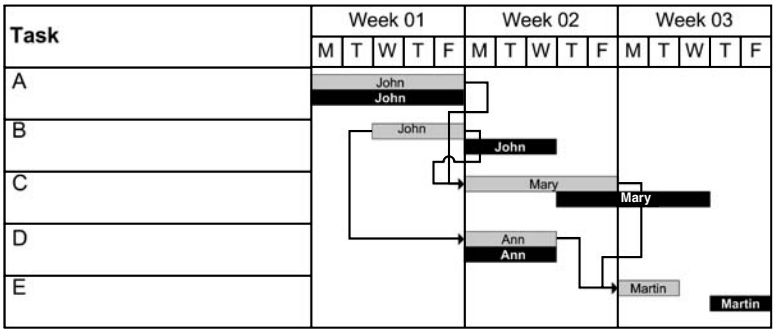

Figure 3.6 Leveling Gantt chart.

3.4.4 Network Diagram

A network diagram is a graphic representation of the interrelationship among project activities (Figure 3.7). In the past, it was sometimes incorrectly known as PERT (program evaluation and review technique) chart. The network diagram highlights the interrelationship among activities in the global project. The advantages of a network diagram are the following:

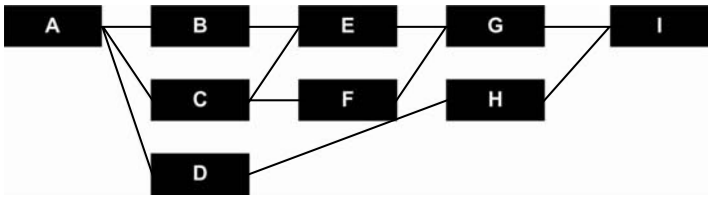

Figure 3.7 Network diagram.

- Easy to understand
- Well-defined interdependency among activities

The disadvantages of a network diagram are the following:

- Presents too long reports
- Does not display a visual relationship among activity durations
- Difficult to handle (too much paper)

3.4.5 Milestones Chart

The Milestones chart is a representation of the main project deliverables within a schedule (Figure 3.8). It is an extremely condensed report with high management value.

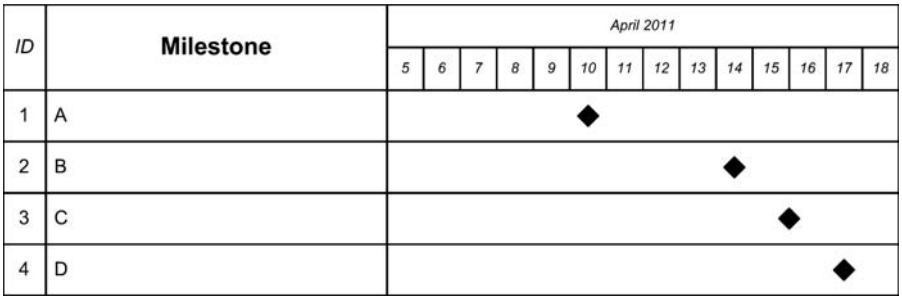

Figure 3.8 Milestones chart.

3.4.6 Schedule Management Plan

The schedule management plan is a formal document that describes the procedures that will be used to manage the entire project schedule. The following should be documented in the plan:

- Project title
- Name of the person who prepared the document
- Description of schedule management processes
- Schedule change priorities
- Schedule change control system (SCCS)
- Process adopted for resource conflicts
- The project's schedule buffer
- Frequency of the project's schedule evaluation
- Cost allocation for schedule changes
- Name of the person responsible for the plan
- Frequency of updating the schedule management plan
- Other subjects related to the project's time management not included in the plan
- Document change log
- Approvals

3.5 Cost Management

3.5.1 Project Task Budget

The project budget can be represented by the sum of the fixed cost plus the cost of the resources of each project activity. Budgets are the financial attributions of the resources necessary to complete the project, usually expressed in currency units (see Table 3.5.1).

Table 3.5.1 Budget Display Example

Activity	*Budget*			*Total ($)*
	Cost Fixed ($)	*Cost Direct ($)*	*Cost Indirect ($)*	
A	300	1200	0	**1500**
B	0	1500	400	**1900**
C	500	0	0	**500**
D	200	1000	700	**1900**
Total	**1000**	**3700**	**1100**	**5800**

The WBS can be used to estimate the costs of the project phases and even of the entire project (see Figure 3.9). The phase cost is the sum of the costs of the activities belonging to it. The overall project cost is the sum of the costs of its phases. This process is also known as bottom-up estimating.

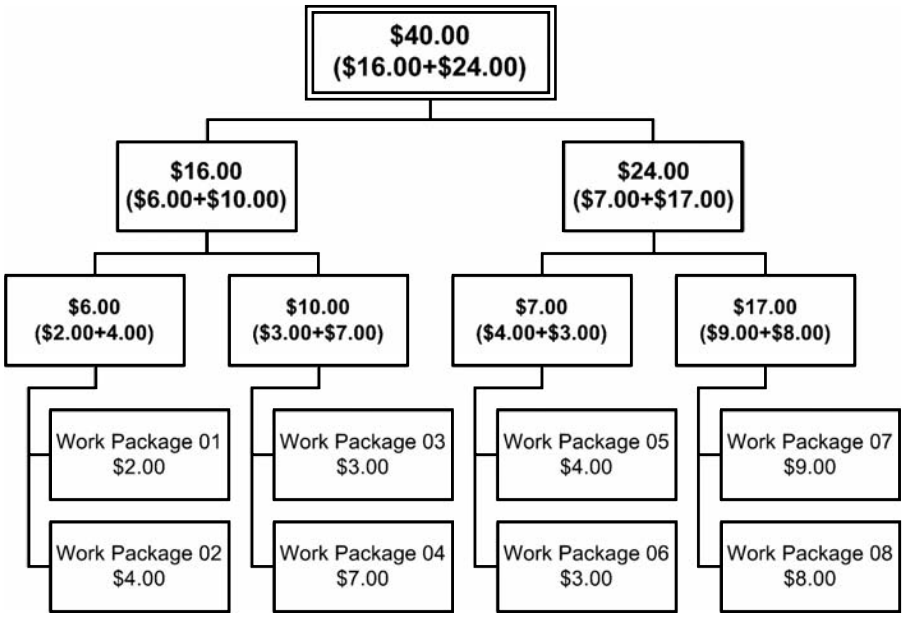

Figure 3.9 The work breakdown structure (WBS) as a tool to calculate project cost.

3.5.2 Allocated Resources Budget

This report presents the total cost per allocated project resource, allowing the cost analysis of each resource allocated to the project. There are two ways of attributing costs to a resource:

- Fixed firm cost (cost per use)
- Variable work-hour cost

The fixed firm cost is used for resources that will charge for a certain work, regardless of the time spent in performing it. It is also used for materials that will be consumed by the project. As an example, it is possible to hire an engineer to carry out the structural calculation of a building and remunerate him for the work performed (contracted cost).

The variable work-hour cost is attributed to resources that will be remunerated per worked hour and may include costs arising from overtime. For capital equipment-type resources, the cost per hour should be the depreciation value or the hourly lease amount for the utilization. Another example is that of a worker participating in a complex and large project remunerated by a monthly salary. The cost of this worker should be included in the project as a variable cost per hour of work. The cost per hour is calculated by dividing the monthly salary by the hours worked in the month.

3.5.3 Cash Flow

The cash flow is one of the most important instruments to view project costs. If it considers only project expenses, it is also known as the *project disbursement schedule*. It relates the costs of each activity to the project schedule, thus allowing the analysis of the average disbursement and of the average cost of each project activity (see Table 3.5.2).

Table 3.5.2 Example of a Project Disbursement Schedule

Task	*Weekly Cost*				*Total ($)*
	S1 ($)	*S2 ($)*	*S3 ($)*	*S4 ($)*	
A	2000	3000	2000	8000	**15000**
B	4000	2000	9000	4000	**19000**
C	1000	1000	1000	2000	**5000**
D	3000	8000	3000	5000	**19000**
Total	**10000**	**14000**	**15000**	**19000**	**58000**

3.5.4 S-Curve

The S-curve, or accumulated cost curve, allows the graphical evaluation of the foreseen project cost evolution over time (Figure 3.10). It constitutes the base for the evaluation of the project disbursement

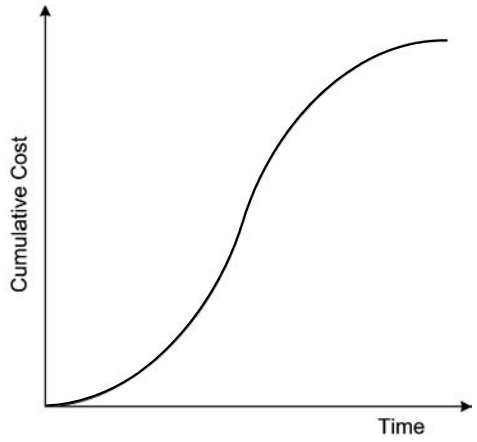

Figure 3.10 An example of an S-curve.

process, as well as the base for the determination of the budgeted cost of work scheduled (BCWS), of the earned value management system (EVMS). It is usually obtained from the project data by means of electronic spreadsheet applications or chart generators.

3.5.5 Cost Management Plan

The cost management plan is a formal document that describes the procedures that will be used to manage all the project costs. The following should be documented in the plan:

- Project title
- Name of the person who prepared the document
- Description of the cost management processes
- Frequency of evaluation of the project's budget and the management reserves
- Financial reserves
- Authorities for using financial reserves
- Cost change control system (CCCS)
- Cost allocation for budget changes
- Name of the person responsible for the plan
- Frequency of updating the cost management plan
- Other subjects related to the project cost management not included in the plan
- Document change log
- Approvals

3.6 Quality Management

3.6.1 Quality Management Plan

The quality management plan is a formal document that describes the procedures that will be used to manage the entire project quality. The following should be documented in the plan:

- Project title
- Name of the person who prepared the document
- Description of the quality management processes
- Quality requirements
- Quality standards
- The priority of quality requirement changes and answers
- The quality change control system (QCCS)
- Frequency of evaluation of the project's quality processes
- Cost allocation for quality changes
- Name of the person responsible for the plan
- Frequency of updating the quality management plan
- Other subjects related to the project cost management not included in the plan
- Document change log
- Approvals

3.7 Human Resources Management

3.7.1 Organizational Chart

The organizational chart is a hierarchical representation of the different project levels (Figure 3.11). It usually displays in its upper part the name of the sponsor, the project manager, or both. It shows the command relationship within the project. Usually, the organization chart is part of the staff management plan.

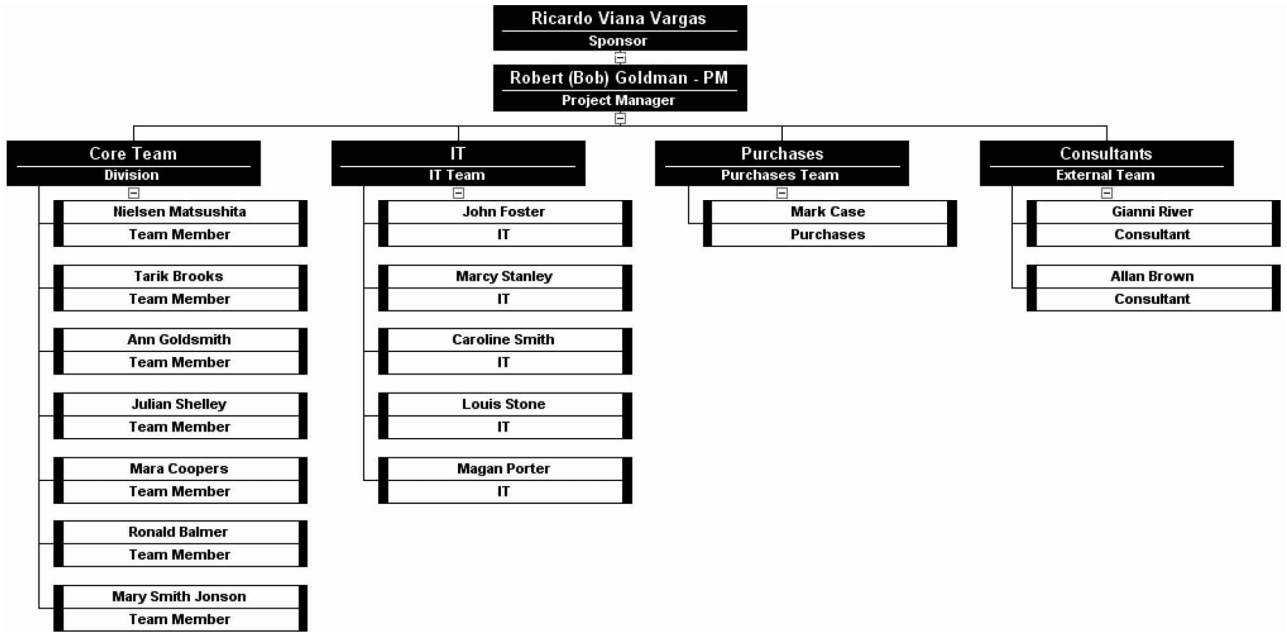

Figure 3.11 Project organization chart.

3.7.2 Project Team Directory

The team directory is a list of the project team members, including their position, industry, and liaison (Table 3.7.1). Usually, the team directory is part of the staff management plan.

Table 3.7.1 Project Team Directory

No	*Name*	*Area*	*E-mail*	*Phone Number*
1	Allan Brown	Consulting	allan.brown@ricardovargas.com.br	11-222-1111
2	Caroline Smith	IT	caroline.smith@ricardovargas.com.br	11-222-1222
3	Ann Goldsmith	Team Member	ann.goldsmith@ricardovargas.com.br	11-222-1333
4	Gianni River	Consulting	gianni.river@ricardovargas.com.br	11-222-1444
5	John Foster	IT	john.foster@ricardovargas.com.br	11-222-1555

3.7.3 Responsibility Matrix

The responsibility matrix displays the responsibilities of each project team member (Table 3.7.2). It may display the detailed responsibilities of each resource, or only the project people and key-role responsibilities. Also, the responsibility matrix identifies the responsibilities, the support needs, and the supervision of each project activity group and of each specific project plan. Usually, the responsibility matrix is part of the staff management plan.

3.7.4 Who Does What (Role Diagram)

The role diagram displays a list of the resources in their respective activities (Figure 3.12). It also displays the number of resources destined for each project activity. It is used to define the allocation of each project resource.

Table 3.7.2 Responsibility Matrix

Name	*Diagnosis*	*Software*	*Hardware*	*Training*	*Customization*	*Pilot*	*Results*
Allan Brown	A			R		R	R
Caroline Smith		A	R				
Ann Goldsmith				A	R	R	
Gianni River		R					R
John Foster	R	R		R	R	S	R
Julian Shelley		R				R	
Louis Stone		S	R				
Magan Porter		R	S				
Mara Coopers				S	S	R	

Note: A = accountable for successful completion of task (final authority), R = responsible for the task execution, s = substitute (second accountable for the task).

Task Name	Units	Duration
NEW FRONTIERS PROJECT		**128 days**
1 DIAGNOSIS		**10 days**
1.1 Have the project kick-off meeting		1 day
Robert (Bob) Goldman - PM	*100%*	
Ricardo Viana Vargas - Sponsor	*100%*	
Allan Brown - Consultant	*100%*	
1.2 Gather the project team and define the committee		2 days
John Foster - IT	*50%*	
Robert (Bob) Goldman - PM	*100%*	
Ricardo Viana Vargas - Sponsor	*20%*	
Allan Brown - Consultant	*100%*	
Travel Global PMO	*1 Unit (s)*	
1.3 Prepare the work scope		3 days
John Foster - IT	*50%*	
Robert (Bob) Goldman - PM	*100%*	
Allan Brown - Consultant	*100%*	
1.4 Create the responsible committee		2 days
John Foster - IT	*50%*	
Robert (Bob) Goldman - PM	*100%*	
1.5 Approve the committee		1 day
Robert (Bob) Goldman - PM	*100%*	
Ricardo Viana Vargas - Sponsor	*20%*	
1.6 Approve the work scope		1 day
Robert (Bob) Goldman - PM	*100%*	
Ricardo Viana Vargas - Sponsor	*20%*	
1.7 Diagnosis completed		0 days
Robert (Bob) Goldman - PM	*100%*	

Figure 3.12 Role diagram.

3.7.5 Human Resources Management Plan

The human resources management plan is a formal document that describes the procedures that will be used to manage all the project human resources. The following should be documented in the plan:

- Project title

- Name of the person that prepared the document
- The project organization chart displaying the project team hierarchical structure, including the related matrix structure elements
- The project team directory containing all the human resources information on the project, including position, actuation area, and liaison
- The responsibility matrix, which associates the WBS elements with team members
- Policies regarding new resources and the reallocation and replacement of team members
- Training policies
- Resource performance review
- Bonus for team members
- Frequency of team performance review
- Cost allocation for extraordinary human resource needs
- Name of the person responsible for the plan
- Frequency of updating the staff management plan
- Other subjects related to human resources management of the project not included in the plan
- Document change log
- Approvals

3.8 Communication Management

3.8.1 Communication Management Plan

The communication management plan is a formal document that describes the procedures that will be used to manage all the project communications. The following should be documented in the plan:

- Project title
- Name of the person who prepared the document
- Description of the communication management processes
- Communication events (meetings and presentations)
- The communication events schedule
- Meeting minutes
- Project reports
- Technical environment, information storage, and distribution framework (enterprise project management)
- Cost allocation for extraordinary communications needs
- Name of the person responsible for the plan
- Frequency of updating the communications management plan
- Other subjects related to communications management of the project not included in this plan
- Document change log
- Approvals

3.9 Risk Management

3.9.1 Risk Management Plan

The risk management plan is a formal document that describes the procedures that will be used to manage all the project risks. The risk plan is one of the secondary plans of the project overall plan. The following should be documented in the plan:

- Project title
- Name of the person who prepared the document

- Description of the risk management processes
- The risk breakdown structure (RBS) for risk identification
- Identified risks
- Qualitative risk analysis
- Quantitative risk analysis
- The risk change control system (RCCS)
- Risk response plan
- Contingency reserves
- Frequency of evaluation of the project risk management
- Cost allocation for risk management
- Name of the person responsible for the plan
- Frequency of updating the risk management plan
- Other subjects related to risk management of the project not included in the plan
- Document change log
- Approvals

3.10 Procurement Management

3.10.1 Statement of Work

The statement of work describes the item to be contracted with enough detail to allow potential suppliers to evaluate whether they are capable of complying with the solicitation. The level of detail may vary according to the nature of the item, purchaser needs, or the contracting mode. The statement of work may be elaborated and refined during the project life cycle. The following should be documented in the statement of the work:

- Purpose of the statement of work
- Specifications and quantities of the material and equipment to be purchased or description of the service to be contracted
- Supply conditions
- Proponent qualifications
- Contract requirements
- Supplier performance review
- Document change log
- Approvals

3.10.2 Procurement Management Plan

The procurement management plan is a formal document that describes the procedures that will be used to manage all the project acquisition contracts. The following should be documented in the plan:

- Project title
- Name of the person who prepared the document
- Description of the procurement management processes
- Contract management
- Evaluation criteria for proposals
- Contractor evaluation
- Supplier performance review
- Frequency of evaluation of the project's procurement management
- Cost allocation for the procurement process
- Name of the person responsible for the plan

- Frequency of updating the procurement management plan
- Other subjects related to the project's procurement management not included in the plan
- Document change log
- Approvals

Part IV

New Frontiers Project Plan

Version 3.0

This project is just an example for teaching purposes. Its purpose is not to discuss the strategies used in the plan but to describe the project plan development from the beginning to the end, with the main objective of showing the integration of its documents and standards.

The plans described constitute a single example, but cannot be considered complete for use in real projects. Its objective is neither to teach the techniques implemented in this plan nor conduct any kind of value judgment about the best techniques to be used in a project plan.

The data presented do not necessarily represent an official Project Management Institute (PMI) opinion or an exact correspondence with the PMBOK® Guide, 3rd edition. All reports, charts, and text presented represent a methodological suggestion, and not an inflexible model. All changes and customization made to the elements presented are allowed, and are welcome. Any similarity with real projects regarding the type of project, type of reports, resource names, and other data is merely coincidental.

Figure 4.1

4.1 Project Integration Management

NEW FRONTIERS PROJECT		
PROJECT DOCUMENTS		
Prepared by	Tarik Brooks — team member	Version 2
Approved by	Bob Goldman — project manager	12/14/2010

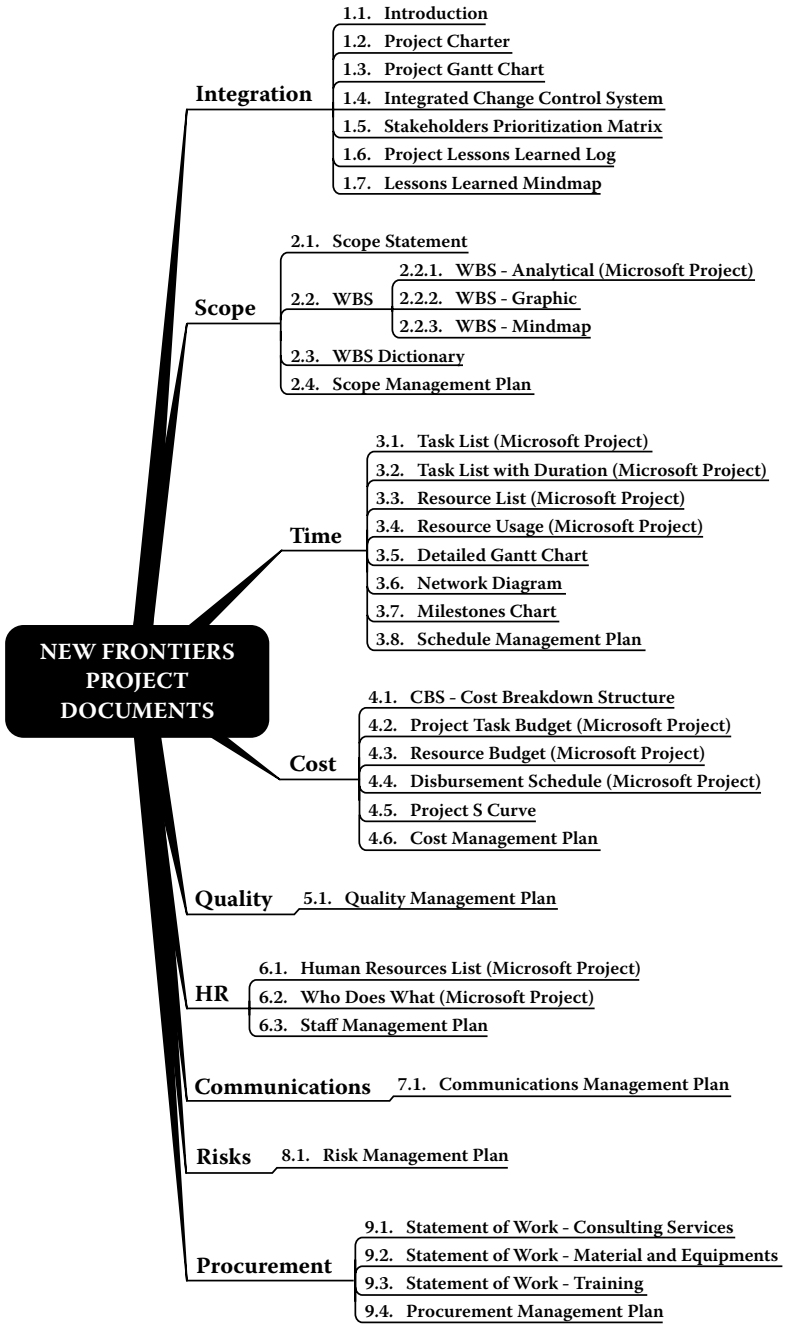

Figure 4.2

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 12/15/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
PROJECT CONTEXT		
Prepared by	Ricardo Viana Vargas — project sponsor	Version 2
Approved by	Senior management	09/01/2010

A division (150 employees) of a large company became aware of the need to strengthen its focus on projects. As a result of this process, a committee was formed to redefine the division's future steps and effectively implement project management in the organization. Such a division had already tried to use project management, without success. Cultural barriers had to be overcome. The committee identified three major obstacles that should be dealt with to avoid errors in the new process.

1. In the first implementation attempt, only the functional managers could act as project managers.
2. Employees of the functional areas resisted using software to plan and control the projects, because they were afraid that the program would identify the "real" results.
3. Executives were always too busy to meet with the consultants for the process implementation.

The committee accomplished an organization auditing. It was planned to identify the issues presently existing within the division. The results are listed as follows:

1.	Process of ongoing technological change	16.	Dependence on resources out of control
2.	Too little time allocated to work	17.	The phrase "this is not my problem" is frequently used by the people in the project
3.	Excessive external interference in the project (meetings, delays, etc.)	18.	Inexistence of a formal control process
4.	Schedules developed based on assumptions	19.	Little or no focus on the client
5.	Lack of work force balance	20.	Inexistence of a risk management process
6.	Different targets in each group	21.	Constant change in responsibilities (you never know who is driving the bus)
7.	Lack of skill in open discussions	22.	Constant extensions of the project scope
8.	Lack of quality planning	23.	Overlapping assignments for the project resources (too many activities at the same time)
9.	Inexistence of resource tracking mechanisms	24.	People get uneasy when asked about their performance
10.	Inexistence of documentation	25.	Little support from other areas
11.	Problems when dealing with hired and outsourced personnel	26.	Desire to involve everybody, but few have the skills to solve the issue
12.	Constant changes in project result expectations	27.	Poor guidance from the executives
13.	Frequent last-minute changes	28.	Little sense of cooperation
14.	Team members with parallel agendas	29.	Too much work scheduled from the end to the beginning (ALAP)
15.	Project scope not defined, and inaccurate	30.	The communication mechanism among the team is poor and slow

Therefore, the project sponsor decided to develop a project to establish a project management office (PMO) so as to prepare the division for a significant increase in the demand for services arising from an expansion of the product lines offered by the company and from competitors' moves.

NEW FRONTIERS PROJECT		
PROJECT CHARTER		
Prepared by	Ricardo Viana Vargas — sponsor	Version 2
Approved by	Senior management	09/12/2010

I. Summary of the Project Context

A small division (150 employees) of an organization became aware of the need to strengthen its focus on projects and therefore decided to set up a project management office (PMO) in the division.

The move to focus on projects was driven by the strong need to prepare the division for a significant increase in the demand for services arising from an expansion of the product lines offered by the company and from competitors' moves.

Such a division had already tried to use project management, with little success. Cultural barriers had to be overcome.

II. Project Justification

Prepare the division for a significant increase in the demand for services arising from an expansion of the product lines offered by the company and from competitors' moves.

III. Project Manager's Name, Responsibilities, and Authority

Bob Goldman is the project manager. He has full authority within the division and he may hire, purchase, and manage the personnel according to his own criteria.

In the financial aspect, the project manager's authority will be restricted to certain boundaries, to be defined in the cost management plan.

If the need for relationship outside the division arises, his authority will be the functional authority inherent in his position within the organization.

IV. Basic Needs of the Work to Be Accomplished

The project will involve environmental diagnosis, software and hardware procurement, methodology creation, the pilot project, project customization, and the training of division personnel.

V. Main Stakeholders

- Project manager (Bob Goldman)
- Project sponsor (Ricardo Viana Vargas)
- Consultants (Allan Brown and Gianni River)
- IT team
- Project team members
- Suppliers
- Users
- Financial area
- CEO

VI. Project Description

1. ***Project's product***: An implemented and documented methodology, approved by the sponsor, as well as a pilot project implemented in the division to evaluate its effectiveness.
2. ***Basic project schedule***: The execution of the works will begin in January 2011 and will take approximately six months.
3. ***Initial cost estimates***: A budget of $1,000,000 is allotted for this project toward additional expenses (internal costs will not be considered).

VII. Initial Assumptions

- The team is motivated to work in the project.
- All communications will be controlled.
- There will be support from other areas.
- The team members will be available to work on the project.

VIII. Initial Constraints

- The budget is limited.
- The project shall be kept within the department area.

IX. Administration

1. ***Initial resource needs***: The project team will consist of six professionals, including the manager, who will also be able to hire external people for the project. IT equipments will have to be procured.
2. ***Need for the organization's support***: The organization will support the whole division's external needs, because there is a long-term interest in implementing project management in other areas.
3. ***Executive committee or Change Control Board (CCB)***: An executive committee will be created, composed of the sponsor, the project managers, a representative of the procurement area, an external consultant, and the team member responsible for the project scope area, totaling five attendees. This committee will be responsible for the change management process.

   The committee's decision process will be based on consensus, where the sponsor has the prerogative to interpose and make decisions if a consensus cannot be reached.
4. ***Project information control and management***: The project manager is the person responsible for the information. All information must be stored in databases and can be accessed at www.ricardovargas.com.br.

APPROVALS		
Ricardo Viana Vargas Sponsor	*Ricardo Viana Vargas*	Date 09/15/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
TOP LEVEL GANTT CHART		
Prepared by	Bob Goldman — project manager	Version 2
Approved by	Ricardo Viana Vargas — sponsor	11/23/2010

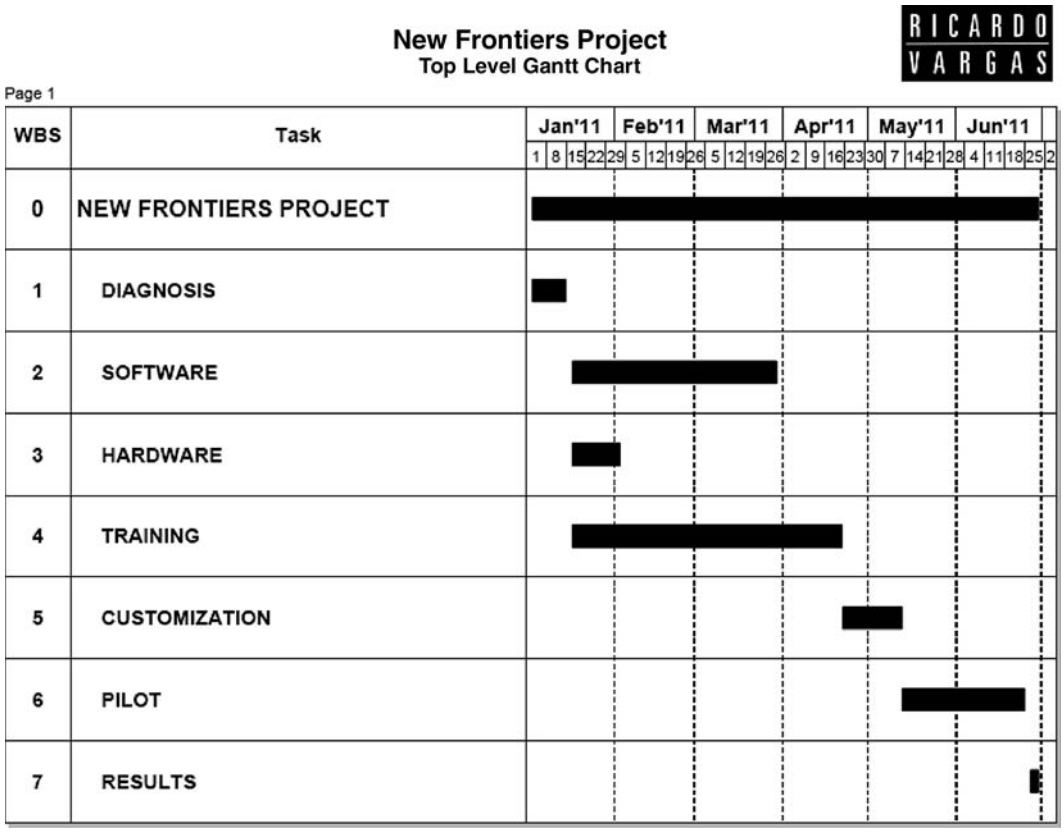

Figure 4.3

APPROVALS		
Ricardo Viana Vargas Sponsor	*Ricardo Viana Vargas*	Date 11/25/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
INTEGRATED CHANGE CONTROL SYSTEM		
Prepared by	Bob Goldman — project manager	Version 2
Approved by	Ricardo Viana Vargas — sponsor	11/01/2010

The integrated change control system that will be used is presented as follows in Figure 4.4:

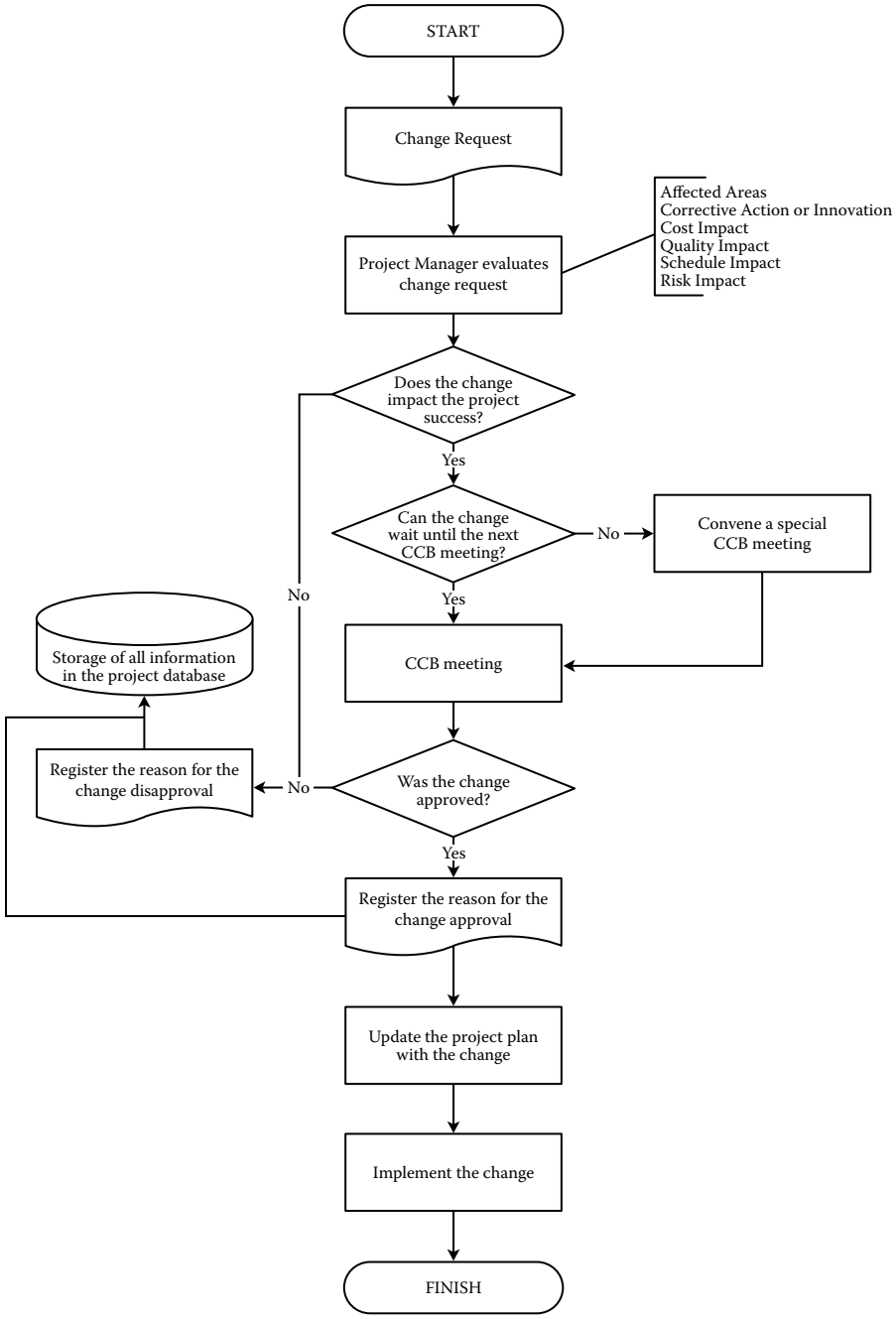

Figure 4.4

CHANGE LOG		
Date	*Modified by*	*Change Description*
11/10/2010	Bob Goldman	Change in the process to include the changes to the original project plan

APPROVALS		
Ricardo Viana Vargas Sponsor	*Ricardo Viana Vargas*	Date 11/10/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
STAKEHOLDERS PRIORITIZATION MATRIX		
Prepared by	Bob Goldman — project manager	Version 2
Approved by	Bob Goldman — project manager	11/20/2010

I. Main Stakeholders

- Project manager (Bob Goldman)
- Project sponsor (Ricardo Viana Vargas)
- Consultants (Allan Brown and Gianni River)
- IT team
- Project team members
- Suppliers
- Users
- Financial area
- CEO

II. Stakeholders Priorization Matrix

Stakeholder	PM	Sponsor	Consultants	IT Team	Team	Suppliers	Users	Financial Area	CEO	Row Totals	Rank
PM		1	5	5	5	5	1/5	10	1	32,2	4º
Sponsor	1		10	5	5	10	1	10	1	43	1º
Consultant	1/5	1/10		1	1/5	5	1/5	1	1/10	7,8	8º
IT Team	1/5	1/5	1		1	5	1/5	5	1/10	12,7	6º
Team	1/5	1/5	5	1		5	1/5	5	1	17,8	5º
Suppliers	1/5	1/10	1/5	1/5	1/5		1/5	10	1/10	11,2	7º
Users	5	1	5	5	5	5		10	1	37	3º
Financial Area	1/10	1/10	1	1/5	1/5	1/10	1/10		1/5	2	9º
CEO	1	1	10	10	1	10	1	5		39	2º

Scale: 1/10 – much less important 1/5 – less important 1 – equal importance 5 – more important 10 – much more important

Figure 4.5

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 11/25/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
PROJECT LESSONS LEARNED LOG		
Prepared by	Bob Goldman — project manager	Version 2
Approved by	Ricardo Viana Vargas — sponsor	11/20/2010

I. Lessons Learned Log

The lessons learned in the project will be logged during the entire project's life cycle. The weekly CCB meetings will compile the weekly logs, which will be attached to the project's minutes of meeting.

The lessons learned will be rated according to priority (1 to 4), type of influence on the project (negative or positive), and affected area (knowledge areas), according to the Mindmap® models presented in the following items.

II. Lessons Learned — Global

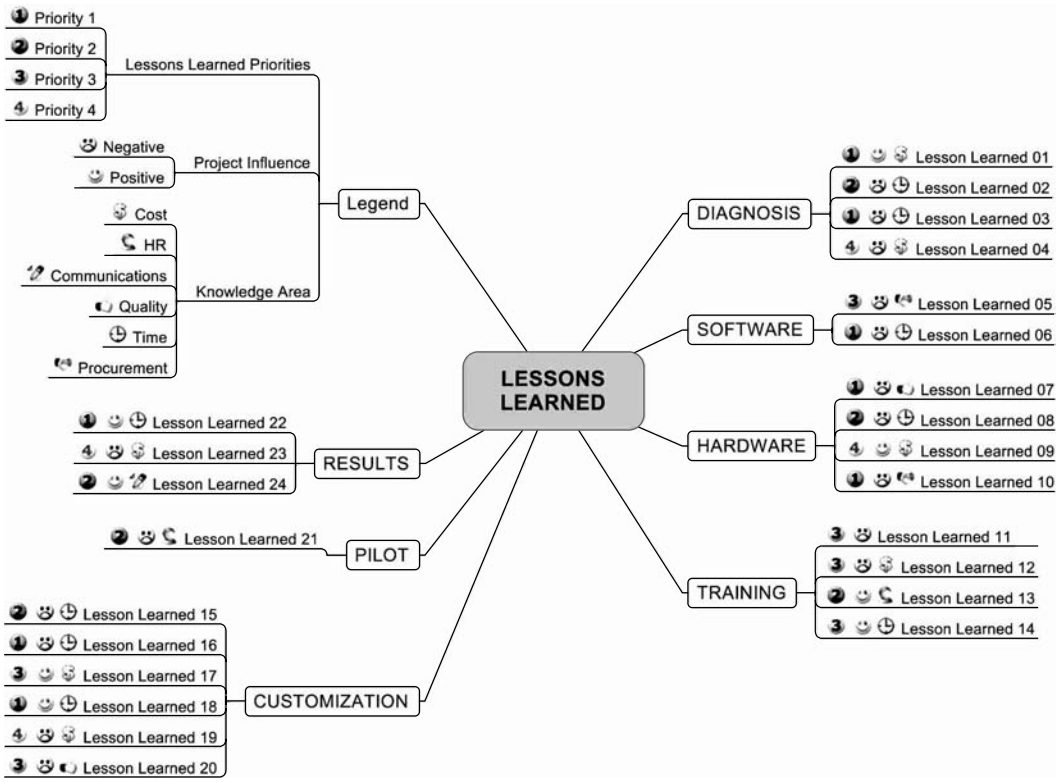

Figure 4.6

III. Lessons Learned — Top Priority

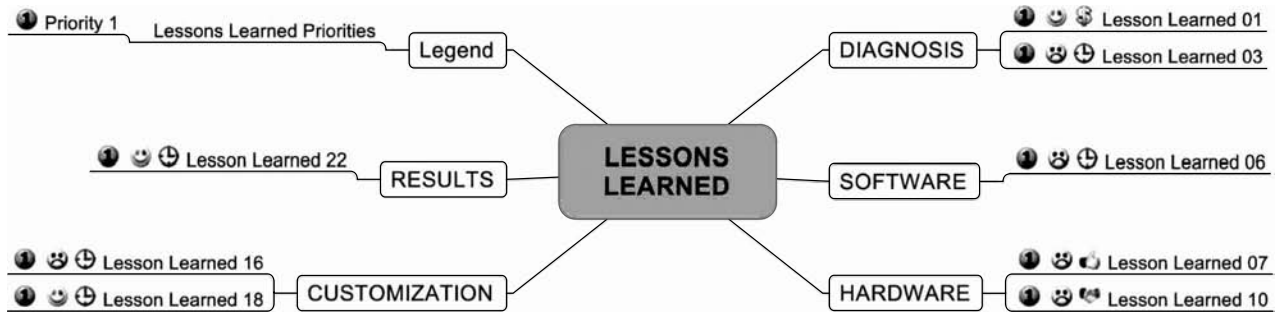

Figure 4.7

IV. Lessons Learned — Negative Influence on the Project

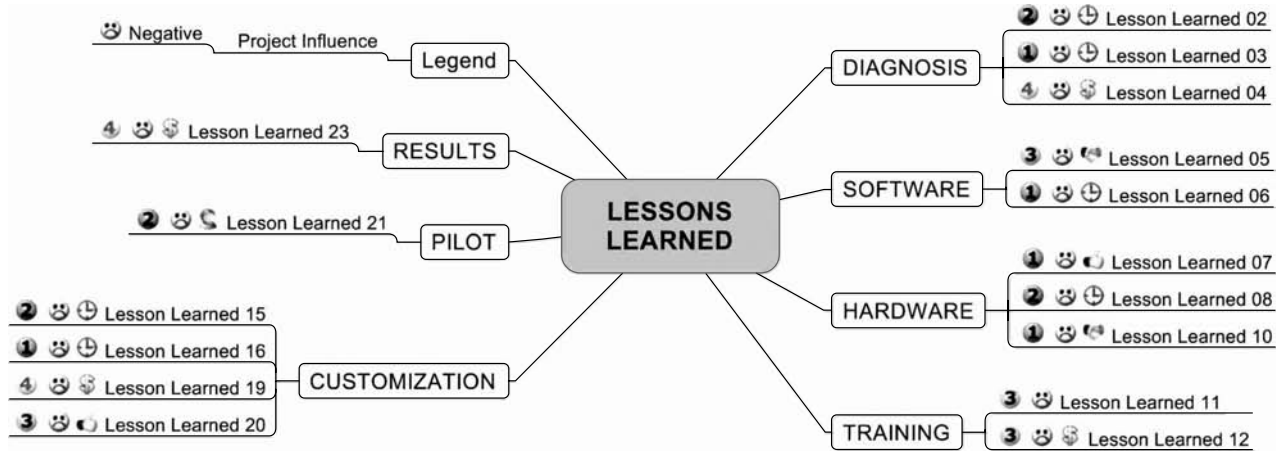

Figure 4.8

V. Lessons Learned — Positive Influence on the Project

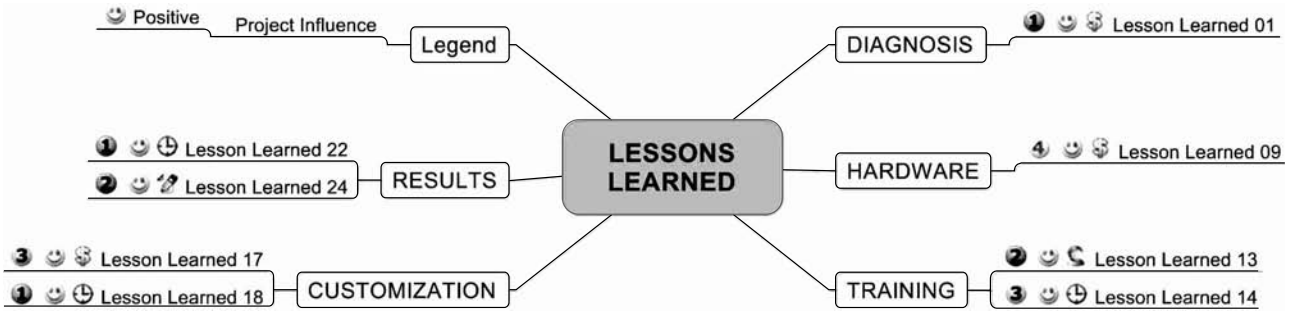

Figure 4.9

TEMPLATE APPROVALS		
Ricardo Viana Vargas Sponsor	*Ricardo Viana Vargas*	Date 11/25/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

4.2 Project Scope Management

NEW FRONTIERS PROJECT		
SCOPE STATEMENT		
Prepared by	Bob Goldman — project manager	Version 3
Approved by	Ricardo Viana Vargas — sponsor	01/11/2010

I. Sponsor

Ricardo Viana Vargas — division manager

II. Project Manager's Name, Responsibilities, and Authority

Bob Goldman is the project manager. He has full authority within the division and may contract third parties, purchase, and manage personnel according to his own criteria. If the need for relationship outside the division arises, his authority will be the functional authority inherent in his position within the organization.

III. Preliminary Organization Chart

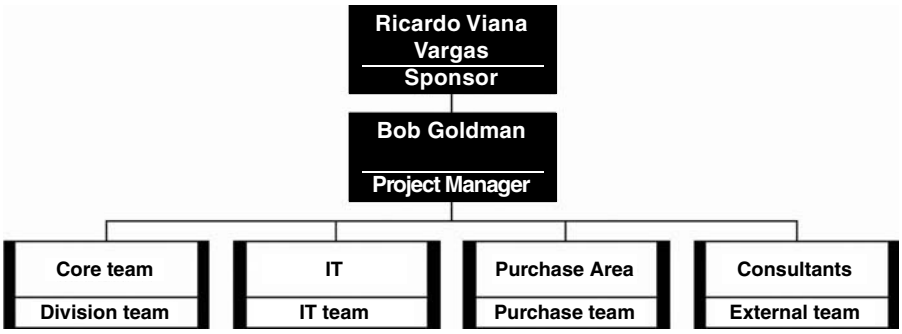

Figure 4.10

IV. Project Team

Nielsen Matsushita *Team member*	Tarik Brooks *Team member*	Ann Goldsmith *Team member*	Julian Shelley *Team member*
Ronald Balmer *Team member*	Mary Smith Jonson *Team member*	Mara Coopers *Team member*	John Foster *IT*
Magan Porter *IT*	Marcy Stanley *IT*	Caroline Smith *IT*	Louis Stone *IT*
Mark Case *Purchases*	Gianni River *External consultant*	Allan Brown *External consultant*	

V. Executive Committee or Change Control Board (CCB)

The executive committee will be composed of:

- Bob Goldman — Project manager
- Ricardo Viana Vargas — sponsor
- Mark Case — purchases
- Allan Brown — consultant
- Julian Shelley — team member responsible for scope management

This committee will be responsible for the integrated change control system as well as all budget approvals.

VI. Project Description

The project will involve environmental diagnosis, software and hardware procurement, methodology creation, the pilot project, project standardization, and the training of division personnel.

VII. Project Objective

The project objective is to establish a project management office (PMO) in the company's division, according to the processes established by the parent organization's corporate projects division, within a maximum timeframe of 180 days as of January 2011 and at a total estimated cost of $1,000,000 (additional cost).

VIII. Project Justification

Prepare the division for a significant increase in the demand for services arising from an expansion of the product lines offered by the company and from competitors' moves.

IX. Main Project Delivery

An implemented and documented methodology, approved by the sponsor, as well as a pilot project implemented in the division to evaluate its effectiveness.

X. Client and Sponsor Expectations

- Project is according to the charter
- Project is within the planned schedule and budget

XI. Project Success Factors

- Effective communication among the team members
- Full support of the IT area
- Permanent sponsor support

XII. Constraints

- The budget is limited.
- The final deadline is the end of the company's fiscal year, under the risk of budgetary reallocation.
- The project shall be kept within the department area, having only external contact with the IT and procurement areas.

XIII. Assumptions

- People can change their behavior if adequately stimulated and prepared.
- Communication within the team will be conducted through the site www.ricardovargas.com.br, with the use of Microsoft's Enterprise Project Management.
- The full support of everyone involved within the division is necessary.
- The team members will have full-time dedication to the project.
- The project team will have knowledge of project management and information technology.

XIV. Project Boundaries and Specific Exclusions

- The project does not have the objective of managing the projects after their implementation.
- The project does not have the objective of creating policies and processes for projects outside the department or among the organization's departments.
- The consulting team will act only as support, and not as direct labor.

XV. Work Breakdown Structure (Preliminary)

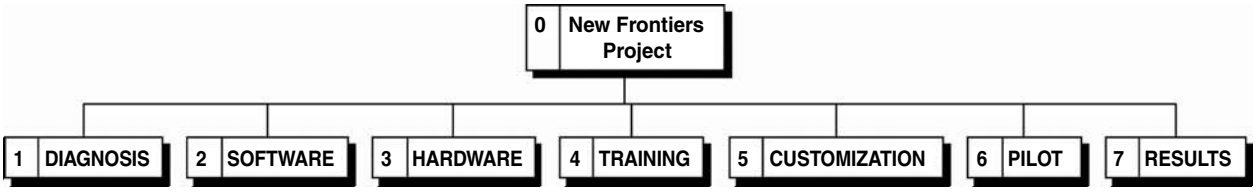

Figure 4.11

XVI. Main Project Activities and Strategies

1. **General**
   - The internal personnel cost is not included in the previous amount and will not be considered because it is already part of the company's indirect cost.
   - Activities with a total slack (schedule) lower than or equal to three business days will be considered critical.

2. **Diagnosis**
   - Will be accomplished by the parent organization's project management division (United States), with costs such as travels, connections, lodging, etc., supported by the division.
   - The standard adopted will be the PMBOK® Guide, 3rd edition (already used by other areas of the organization).
   - The diagnosis will be accomplished by an external consultant.

3. **Training**
   - Includes training on software and project management methodology, also for end users.
   - The training will be conducted in the company's training center (outside the work environment) full time, except if mentioned otherwise.
   - Five basic project management classes (150 attendees) and one advanced project management class (30 attendees) will be conducted.
   - The basic and advanced project management courses will have a duration of 24 hr, or 3 days.
   - Five software training classes (150 attendees), one advanced software class, and one class for the software support team will be conducted.
   - The basic software course will have a duration of 16 hr per class.
   - The advanced software course will have a duration of 24 hr per class.
   - The support team course will have a duration of 40 hr over 2 weeks, part time (half-day periods), outside the company.
   - An evaluation of the students' knowledge, with the purpose of achieving a leveling of the class, shall be undertaken before beginning the classes.
   - It includes a lecture for the higher administration and team members.
   - The machines employed in the training will be the already defined ones, for the users.
   - The training will be full time and with all classes in sequence.
   - The training will have a fixed price per class (30 students each) and shall not depend on the training site.

4. **Software**
   - A total of 150 Microsoft Office Project Professional licenses with Microsoft Project Web Access for all machines.
   - One Microsoft Project Server license, as project server software in the server.
   - SQL Server as the database platform in the server.
   - Windows (Server) and Windows (users) for servers and users, respectively.
   - Installation will be accomplished by the information technology department.
   - All applications will be procured, except the project server that will be supplied free by the manufacturer.
   - The Document Management Systems (DMS) application must also be evaluated and purchased.

5. **Hardware**
   - Two servers (including backup).
   - A total of 165 computers (including 15 backup computers).
   - Installation will be accomplished by the company's information technology department.

6. **Pilot**
   - The pilot will cover the launching of an advertising campaign to be defined by the division.
   - Maximum duration of 15 days.

- Will be accomplished by a specialized company in partnership with the division.
- Evaluation of the results, in association with the sponsor.

7. **Customization**
   - Include project customization, reports preparation, display modes setup and DMS framework development.
   - External accomplishment with the division's support.
   - Standard preparation will be accomplished internally by the company.
   - The standards must be approved by the project manager.

XVII. Main Project Deliverables

- Diagnosis completed
- Training completed
- Software installed
- Hardware installed
- Pilot performed and evaluated
- Standards established
- Project Implementation approved

XVIII. Initial Project Budget

- The project includes an additional expenditure of up to $1,000,000, including management reserves.
- The sum of management and contingency reserves cannot exceed $100,000 (10% of the budget).
- The payment of estimated values will be made according to the cash flow to be developed for the project and approved by the company's finance area.
- Expenses on personnel and internal resources will not be considered within the project budget.
- Schedule delays or anticipations do not change the project's cash flow.

XIX. Deliverables Plan and Project Milestones

The execution of works will begin in January 2011 and will take approximately six months. The project planning, as well as its finalization, shall be accomplished before the period described.

Process	*Description*	*Finish*
Initiating process	Project manager assigned	09/15/2010
	Project charter approved	09/15/2010
Planning process	Scope statement approved	11/01/2010
	Schedule defined	11/30/2010
	Budget defined	12/03/2010
	Project plan finished	12/20/2010
	Project plan approved	12/20/2010
Executing process	Diagnosis completed	01/14/2011
	Training completed	04/21/2011
	Software installed	03/29/2011
	Hardware installed	02/02/2011
	Standards established	05/12/2011
	Pilot performed and evaluated	06/24/2011
Closing process	Project closure	06/28/2011
	Lessons learned log ready	07/15/2011

XX. Initial Project Risks

- Exchange rate issues may impact the software and hardware procurement.
- Lack of user availability for training and qualification.
- Delay in the delivery of supplies, delaying the project.
- Lack of team's knowledge on project offices implementation.

XXI. Configuration Management and Project Change Requirements

A change control system will be defined and controlled by the CCB to make change easier and track the entire project change request process.

CHANGE LOG		
Date	*Modified by*	*Change Description*
10/20/2010	Ricardo Viana Vargas	Restriction details
11/01/2010	Bob Goldman	Specification of the software to be used

APPROVALS		
Ricardo Viana Vargas Sponsor	*Ricardo Viana Vargas*	Date 11/01/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
Work Breakdown Structure — ANALYTIC		
Prepared by	Julian Shelley — team member	Version 3
Approved by	Bob Goldman — project manager	11/05/2010

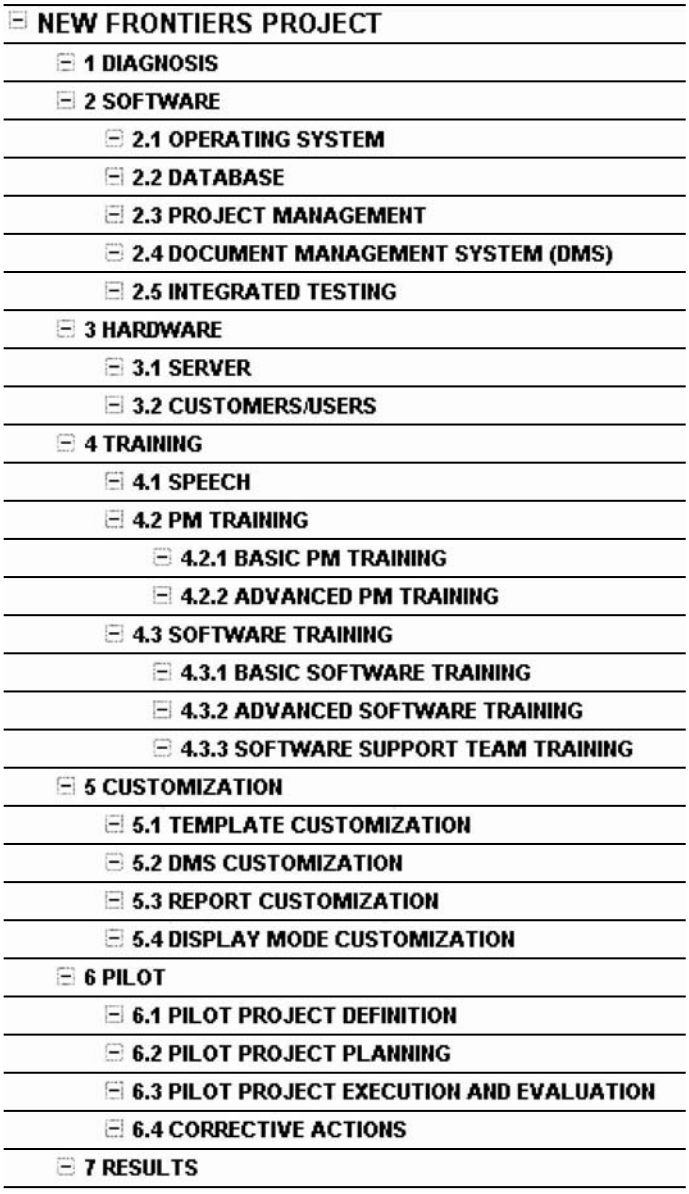

Figure 4.12

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 11/08/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
WORK BREAKDOWN STRUCTURE		
Prepared by	Julian Shelley — team member	Version 3
Approved by	Bob Goldman — project manager	11/05/2010

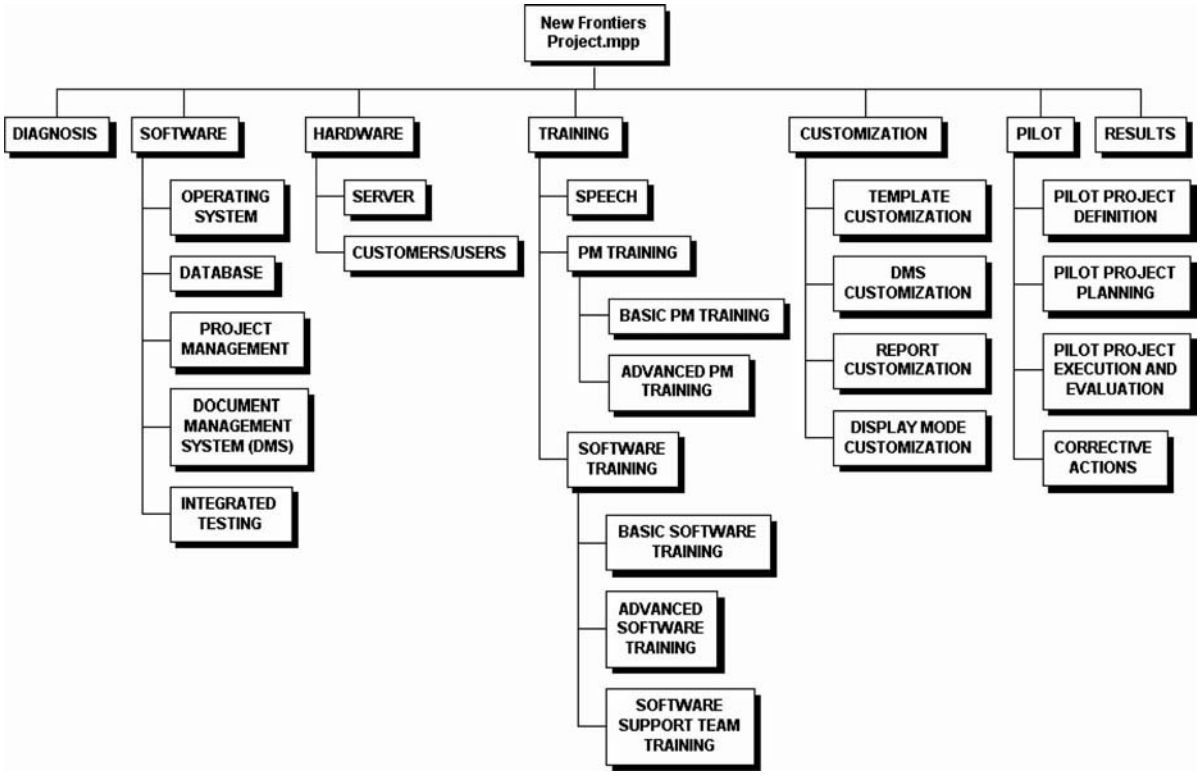

Figure 4.13

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 08/11/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
WORK BREAKDOWN STRUCTURE — MINDMAP		
Prepared by	Julian Shelley — team member	Version 3
Approved by	Bob Goldman — project manager	05/11/2010

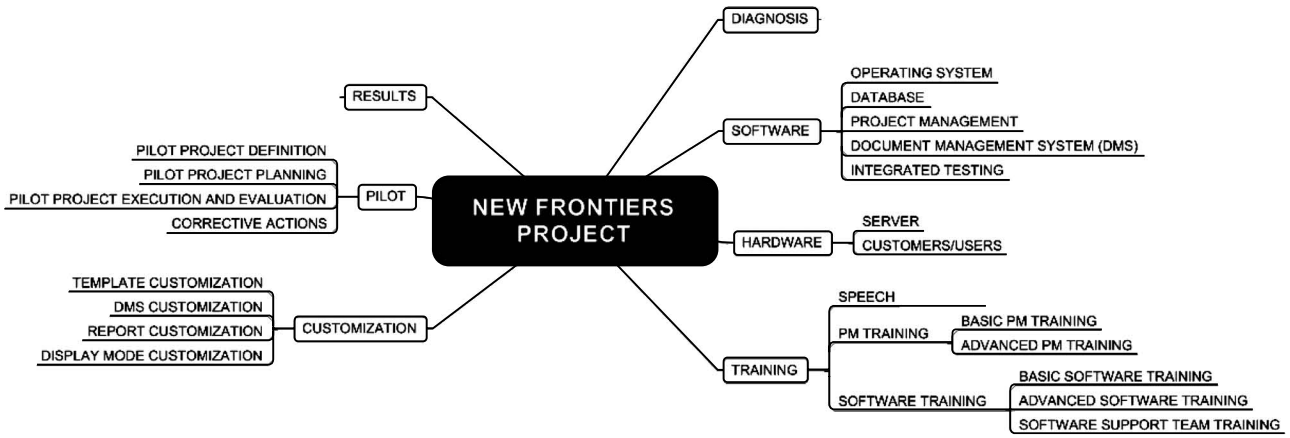

Figure 4.14

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 11/08/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
WBS DICTIONARY ***Work Package: 1 — DIAGNOSIS***		
Prepared by	Allan Brown — consultant	Version 3
Approved by	Bob Goldman — project manager	11/05/2010

I. Basic Information

WBS code	1
Accountable to	Allan Brown — consultant
Estimated Duration	10 days
Estimated Cost	$20,000.00

II. Main Tasks to Be Accomplished

- Have the project kick-off meeting
- Gather the project team and define the committee
- Prepare the work scope
- Create the responsible committee
- Approve the committee
- Approve the work scope

III. Planned Resources

- Allan Brown — consultant
- John Foster — IT
- Ricardo Viana Vargas — sponsor
- Bob Goldman — PM

IV. Main Predecessors of the Work Package

- None

V. Main Successors of the Work Package

- 2.1 — Software (operating systems)
- 3.1 — Hardware (server)
- 3.2 — Hardware (clients)
- 4.1 — Training (speech)

VI. Risks Associated with the Package

- Lack of knowledge about the project by team members, which may cause excessive dependence on consulting, during the project.

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 08/11/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
WBS DICTIONARY ***Work Package: 2.1 — SOFTWARE (OPERATING SYSTEMS)***		
Prepared by	Caroline Smith — IT	Version 3
Approved by	Bob Goldman — project manager	11/05/2010

I. Basic Information

WBS code	2.1
Accountable to	Caroline Smith — IT
Estimated duration	19 days
Estimated cost	$80,000.00

II. Main Tasks to Be Accomplished

- Quote the operating system (Windows Vista)
- Purchase the software (operating system)
- Install the operating system
- Test the operating system

III. Planned Resources

- Caroline Smith — IT
- Julian Shelley — team member
- Louis Stone — IT
- Marcy Stanley — IT
- Mark Case — purchases

IV. Main Predecessors of the Work Package

- 1 — Diagnosis

V. Main Successors of the Work Package

- 2.2 — Software (database)

VI. Risks Associated with the Package

- Software price is directly related to the exchange rate, which may affect the feasibility of the project budget.

- Lack of experience in software installation by the IT area, which may delay the installation and turn the tests not feasible.
- Incompatibility among the different software environments, which may cause an unstable work environment.

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 08/11/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
WBS DICTIONARY ***Work Package: 2.2 — SOFTWARE (DATABASE)***		
Prepared by	Caroline Smith — IT	Version 3
Approved by	Bob Goldman — project manager	11/05/2010

I. Basic Information

WBS code	2.2
Accountable to	Caroline Smith — IT
Estimated duration	27 days
Estimated cost	$2,000.00

II. Main Tasks to Be Accomplished

- Quote Microsoft SQL Server
- Purchase the software (database)
- Install the database
- Prepare the project data table
- Test the database

III. Planned Resources

- Caroline Smith — IT
- Louis Stone — IT
- Marcy Stanley — IT
- Mark Case — purchases

IV. Main Predecessors of the Work Package

- 2.1 — Software (operating systems)

V. Main Successors of the Work Package

- 2.3 — Software (document management system)

VI. Risks Associated with the Package

- Software price is directly related to the exchange rate, which may affect the feasibility of the project budget.

- Lack of experience in software installation by the IT area, which may delay the installation and turn the tests not feasible.
- Incompatibility among the different software environments, which may cause an unstable work environment.

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 08/11/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
WBS DICTIONARY ***Work Package: 2.3 — SOFTWARE (PROJECT MANAGEMENT)***		
Prepared by	Caroline Smith — IT	Version 3
Approved by	Bob Goldman — project manager	11/05/2010

I. Basic Information

WBS code	2.3
Accountable to	Caroline Smith — IT
Estimated duration	44 days
Estimated cost	$120,000.00

II. Main Tasks to Be Accomplished

- Quote Microsoft Office Project
- Purchase the software (project management)
- Install Microsoft Office Project on server and users
- Test the software (project management)

III. Planned Resources

- Caroline Smith — IT
- Mark Case — purchases

IV. Main Predecessors of the Work Package

- 2.1 — Software (operating systems)

V. Main Successors of the Work Package

- 4.3.3 — Software support team training

VI. Risks Associated with the Package

- Software price is directly related to the exchange rate, which may affect the feasibility of the project budget.
- Lack of experience in software installation by the IT area, which may delay the installation and turn the tests not feasible.

- Incompatibility among the different software environments, which may cause an unstable work environment.

APPROVALS		
Bob Goldman Project manager	Bob Goldman	Date 08/11/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
WBS DICTIONARY ***Work Package: 2.4 — SOFTWARE (DOCUMENT MANAGEMENT SYSTEM, DMS)***		
Prepared by	Caroline Smith — IT	Version 3
Approved by	Bob Goldman — project manager	11/05/2010

I. Basic Information

WBS code	2.4
Accountable to	Caroline Smith — IT
Estimated duration	32 days
Estimated cost	$20,000.00

II. Main Tasks to Be Accomplished

- Identify potential DMS application suppliers
- Request presentations on the products
- Define the DMS seller
- Purchase the software (DMS)
- Install the software (DMS)
- Test the software (DMS)

III. Planned Resources

- Allan Brown — consultant
- Caroline Smith — IT
- Gianni River — consultant
- John Foster — IT
- Louis Stone — IT
- Magan Porter — IT
- Marcy Stanley — IT
- Mark Case — purchases

IV. Main Predecessors of the Work Package

- 2.2 — Software (database)

V. Main Successors of the Work Package

- 2.5 — Software (integrated testing)

VI. Risks Associated with the Package

- Software price is directly related to the exchange rate, which may affect the feasibility of the project budget.
- Lack of experience in the software installation by the IT area, which may delay the installation and turn the tests not feasible.
- Incompatibility among the different software environments, which may cause an unstable work environment.

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 08/11/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
WBS DICTIONARY ***Work Package: 2.5 — SOFTWARE (INTEGRATED TESTING)***		
Prepared by	Caroline Smith — IT	Version 3
Approved by	Bob Goldman — project manager	11/05/2010

I. Basic Information

WBS Code	2.5
Accountable to	Caroline Smith — IT
Estimated duration	8 days
Estimated cost	$0.00

II. Main Tasks to Be Accomplished

- Perform the integrated test
- Evaluate the integrated test
- Perform the required corrections

III. Planned Resources

- Caroline Smith — IT
- Magan Porter — IT
- John Foster — IT
- Bob Goldman — PM
- Louis Stone — IT
- Ann Goldsmith — team member
- Nielsen Matsushita — team member

IV. Main Predecessors of the Work Package

- 2.1 — Software (operating systems)
- 2.2 — Software (database)
- 2.3 — Software (project management)
- 2.4 — Software (DMS)

V. Main Successors of the Work Package

- 4.3.1 — Basic software training
- 4.3.2 — Advanced software training

VI. Risks Associated with the Package

- Lack of experience in software installation by the IT area may delay the installation and turn the tests not feasible.
- Incompatibility among the different software environments may cause an unstable work environment.

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 08/11/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
WBS DICTIONARY ***Work Package: 3.1 — HARDWARE (SERVER)***		
Prepared by	Marcy Stanley — TI	Version 3
Approved by	Bob Goldman — project manager	11/05/2010

I. Basic Information

WBS code	3.1
Accountable to	Marcy Stanley — IT
Estimated duration	10 days
Estimated cost	$20,000.00

II. Main Tasks to Be Accomplished

- Purchase servers
- Install servers
- Test the servers physically and logically

III. Planned Resources

- Caroline Smith — IT
- Mark Case — purchases

IV. Main Predecessors of the Work Package

- 1 — Diagnosis

V. Main Successors of the Work Package

- 5.1 — Template customization
- 5.2 — DMS customization
- 5.3 — Report customization
- 5.4 — Display mode customization

VI. Risks Associated with the Package

- Hardware price is directly related to the exchange rate, which may affect the feasibility of the project budget.
- Need to adapt the infrastructure (network and power) to the new user machines.
- Delay in servers delivery, which may delay the software installation.

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 08/11/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
WBS DICTIONARY ***Work Package: 3.2 — HARDWARE (CUSTOMERS/USERS)***		
Prepared by	Marcy Stanley — IT	Version 3
Approved by	Bob Goldman — project manager	11/05/2010

I. Basic Information

WBS code	3.2
Accountable to	Marcy Stanley — IT
Estimated duration	13 days
Estimated cost	$500,000.00

II. Main Tasks to Be Accomplished

- Purchase computers for the users
- Install the computers
- Test the computers physically and logically

III. Planned Resources

- Louis Stone — IT
- Magan Porter — IT
- Marcy Stanley — IT
- Mark Case — purchases

IV. Main Predecessors of the Work Package

- 1 — Diagnosis

V. Main Successors of the Work Package

- 5.1 — Template customization
- 5.2 — DMS customization
- 5.3 — Report customization
- 5.4 — Display mode customization

VI. Risks Associated with the Package

- Hardware price is directly related to the exchange rate, which may affect the feasibility of the project budget.
- Need to adapt the infrastructure (network and power) to the new user machines.

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 08/11/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
WBS DICTIONARY ***Work Package: 4.1 — TRAINING (SPEECH)***		
Prepared by	Ann Goldsmith — team member	Version 3
Approved by	Bob Goldman — project manager	11/05/2010

I. Basic Information

WBS code	4.1
Accountable to	Ann Goldsmith — team member
Estimated duration	3 days
Estimated cost	$7000.00

II. Main Tasks to Be Accomplished

- Schedule the awareness speech
- Perform the speech
- Evaluate results

II.I Planned Resources

- Ann Goldsmith — team member
- Ricardo Viana Vargas — sponsor
- Bob Goldman — project manager

IV. Main Predecessors of the Work Package

- 1 — Diagnosis

V. Main Successors of the Work Package

- 4.2.1 — Basic project management (PM) training

VI. Risks Associated with the Package

- Lack of training experience by the contractor company for the type of training requested and for the type of division business
- Lack of knowledge leveling in the class, causing loss of productivity during the course
- The unavailability of users for training, causing low attendance in the class and therefore the need for additional classes

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 08/11/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
WBS DICTIONARY ***Work Package: 4.2.1 — BASIC PM TRAINING***		
Prepared by	Ann Goldsmith — team member	Version 3
Approved by	Bob Goldman — project manager	11/05/2010

I. Basic Information

WBS code	4.2.1
Accountable to	Ann Goldsmith — team member
Estimated duration	19 days
Estimated cost	$45,000.00

II. Main Tasks to Be Accomplished

- Schedule the basic PM training
- Perform the training
- Evaluate training results

III. Planned Resources

- Allan Brown — consultant
- Ann Goldsmith — team member
- Mara Coopers — team member
- Bob Goldman — project manager

IV. Main Predecessors of the Work Package

- 4.1 — Training (speech)

V. Main Successors of the Work Package

- 4.2.2 — Advanced PM training
- 4.3.1 — Basic software training

VI. Risks Associated with the Package

- Lack of training experience by the contractor company for the type of training requested and for the type of division business
- Lack of knowledge leveling in the class, causing loss of productivity during the course

- The unavailability of users for training, causing low attendance in the class and therefore the need for additional classes

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 08/11/2010
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NEW FRONTIERS PROJECT		
WBS DICTIONARY ***Work Package: 4.2.2 — ADVANCED PM TRAINING***		
Prepared by	Ann Goldsmith — team member	Version 3
Approved by	Bob Goldman — project manager	11/05/2010

I. Basic Information

WBS code	4.2.2
Accountable to	Ann Goldsmith — team member
Estimated duration	5 days
Estimated cost	$15,000.00

II. Main Tasks to Be Accomplished

- Schedule the advanced PM training
- Perform the training
- Evaluate training results

III. Planned Resources

- Allan Brown — consultant
- Ann Goldsmith — team member
- Mara Coopers — team member
- Bob Goldman — project manager

IV. Main Predecessors of the Work Package

- 4.2.1 — Basic PM training

V. Main Successors of the Work Package

- 4.3.1 — Basic software training

VI. Risks Associated with the Package

- Lack of training experience by the contractor company for the type of training requested and for the type of division business
- Lack of knowledge leveling in the class, causing loss of productivity during the course

- The unavailability of users for training, causing low attendance in the class and therefore the need for additional classes

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 08/11/2010
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NEW FRONTIERS PROJECT		
WBS DICTIONARY ***Work Package: 4.3.1 — BASIC SOFTWARE TRAINING***		
Prepared by	Ann Goldsmith — team member	Version 3
Approved by	Bob Goldman — project manager	11/05/2010

I. Basic Information

WBS code	4.3.1
Accountable to	Ann Goldsmith — Team Member
Estimated duration	13 days
Estimated cost	$45,000.00

II. Main Tasks to Be Accomplished

- Schedule the basic software training
- Perform the training
- Evaluate the training results

III. Planned Resources

- Allan Brown — consultant
- Ann Goldsmith — team member
- Mara Coopers — team member
- Bob Goldman — project manager

IV. Main Predecessors of the Work Package

- 2.5 — Software (integrated testing)
- 4.2.1 — Basic PM training

V. Main Successors of the Work Package

- 4.3.2 — Advanced software training

VI. Risks Associated with the Package

- Lack of training experience by the contractor company for the type of training requested and for the type of division business
- Lack of knowledge leveling in the class, causing loss of productivity during the course
- The unavailability of users for training, causing low attendance in the class and therefore the need for additional classes

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 08/11/2010
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NEW FRONTIERS PROJECT		
WBS DICTIONARY ***Work Package: 4.3.2 — ADVANCED SOFTWARE TRAINING***		
Prepared by	Ann Goldsmith — team member	Version 3
Approved by	Bob Goldman — project manager	11/05/2010

I. Basic Information

WBS code	4.3.2
Accountable to	Ann Goldsmith — team member
Estimated duration	4 days
Estimated cost	$15,000.00

II. Main Tasks to Be Accomplished

- Schedule the advanced software training
- Perform the training
- Evaluate training results

III. Planned Resources

- Allan Brown — consultant
- Ann Goldsmith — team member
- Mara Coopers — team member
- Bob Goldman — project manager

IV. Main Predecessors of the Work Package

- 4.2.2 — Advanced PM training
- 4.3.1 — Basic software training

V. Main Successors of the Work Package

- 4.3.3 — Training the software support team

VI. Risks Associated with the Package

- Lack of training experience by the contractor company in the type of training requested and in the type of division business
- Lack of knowledge leveling in the class, causing loss of productivity during the course
- The unavailability of users for training, causing low attendance in the class and therefore the need for additional classes

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 08/11/2010
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NEW FRONTIERS PROJECT		
WBS DICTIONARY ***Work Package: 4.3.3 — SOFTWARE SUPPORT TEAM TRAINING***		
Prepared by	Ann Goldsmith — team member	Version 3
Approved by	Bob Goldman — project manager	11/05/2010

I. Basic Information

WBS code	4.3.3
Accountable to	Ann Goldsmith — team member
Estimated duration	12 days
Estimated cost	$20,000.00

II. Main Tasks to Be Accomplished

- Schedule the software support team training
- Perform the training
- Evaluate results

III. Planned Resources

- Allan Brown — consultant
- Ann Goldsmith — team member
- John Foster — IT
- Bob Goldman — project manager

IV. Main Predecessors of the Work Package

- 4.3.2 — Advanced software training

V. Main Successors of the Work Package

- 5.1 — template customization
- 5.2 — DMS Customization
- 5.3 — report customization
- 5.4 — display mode customization

VI. Risks Associated with the Package

- Lack of training experience by the contractor company in the type of training requested and in the type of business of the division.
- Lack of knowledge leveling in the class, causing loss of productivity during the course

- The unavailability of users for the training, causing low attendance in the class and therefore the need for additional classes

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 08/11/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
WBS DICTIONARY ***Work Package: 5.1 — TEMPLATE CUSTOMIZATION***		
Prepared by	Mary Smith Jonson — team member	Version 3
Approved by	Bob Goldman — project manager	11/05/2010

I. Basic Information

WBS code	5.1
Accountable to	Mary Smith Jonson — team member
Estimated duration	15 days
Estimated cost	$3000.00

II. Main Tasks to Be Accomplished

- Define the template standards
- Prepare the templates
- Test the template operation
- Approve the templates

III. Planned Resources

- Gianni River — consultant
- John Foster — IT
- Louis Stone — IT
- Mara Coopers — team member
- Bob Goldman — project manager

IV. Main Predecessors of the Work Package

- 4.3.3 — Training the software support team

V. Main Successors of the Work Package

- 6.1 — Pilot project definition
- 7 — Results

VI. Risks Associated with the Package

- Lack of experience in the company in the use of electronic document management applications, causing a scattering of efforts in the definition of document flow standards
- Lack of technical skill in the software in the standardization team, which may cause delays and quality issues in the standards created
- Poor methodological skills in project management in the team, which may cause the creation of standards incompatible with the needs

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 08/11/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
WBS DICTIONARY ***Work Package: 5.2 — DMS CUSTOMIZATION***		
Prepared by	Mary Smith Jonson — team member	Version 3
Approved by	Bob Goldman — project manager	11/05/2010

I. Basic Information

WBS code	5.2
Accountable to	Mary Smith Jonson — team member
Estimated duration	15 days
Estimated cost	$3000.00

II. Main Tasks to Be Accomplished

- Define the DMS standards
- Prepare the DMS parameters
- Test the DMS operation
- Approve the DMS

III. Planned Resources

- Allan Brown — consultant
- John Foster — IT
- Magan Porter — IT
- Mary Smith Jonson — team member
- Bob Goldman — project manager

IV. Main Predecessors of the Work Package

- 4.3.3 — Training the software support team

V. Main Successors of the Work Package

- 6.1 — Pilot project definition
- 7 — Results

VI. Risks Associated with the Package

- Lack of experience in the company in the use of electronic document management applications, causing a scattering of efforts in the definition of document flow standards
- Lack of technical skill in the software in the standardization team, which may cause delays and quality issues in the standards created

- Poor methodological skills in project management in the team, which may cause the creation of standards incompatible with the needs

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 08/11/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
WBS DICTIONARY ***Work Package: 5.3 — REPORT CUSTOMIZATION***		
Prepared by	Mary Smith Jonson — team member	Version 3
Approved by	Bob Goldman — project manager	11/05/2010

I. Basic Information

WBS code	5.3
Accountable to	Mary Smith Jonson — team member
Estimated duration	7 days
Estimated cost	$2000.00

II. Main Tasks to Be Accomplished

- Define the report standards
- Prepare the reports
- Test the report operation
- Approve the reports

III. Planned Resources

- Gianni River — consultant
- John Foster — IT
- Ronald Balmer — team member
- Tarik Brooks — team member

IV. Main Predecessors of the Work Package

- 4.3.3 — Training the software support team

V. Main Successors of the Work Package

- 6.1 — Pilot project definition
- 7 — Results

VI. Risks Associated with the Package

- Lack of experience in the company in the use of electronic document management applications, causing a scattering of efforts in the definition of document flow standards
- Lack of technical skill in the software in the standardization team, which may cause delays and quality issues in the standards created

- Poor methodological skills in project management in the team, which may cause the creation of standards incompatible with the needs

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 08/11/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
WBS DICTIONARY ***Work Package: 5.4 — DISPLAY MODE CUSTOMIZATION***		
Prepared by	Mary Smith Jonson — team member	Version 3
Approved by	Bob Goldman — project manager	11/05/2010

I. Basic Information

WBS code	5.4
Accountable to	Mary Smith Jonson — team member
Estimated duration	7 days
Estimated cost	$2000.00

II. Main Tasks to Be Accomplished

- Define the display mode standards
- Prepare the display mode
- Test the display mode operation
- Approve the display mode

III. Planned Resources

- Allan Brown — consultant
- Ann Goldsmith — team member
- John Foster — IT
- Julian Shelley — team member
- Marcy Stanley — IT
- Nielsen Matsushita — team member
- Bob Goldman — project manager

IV. Main Predecessors of the Work Package

- 4.3.3 — Training the software support team

V. Main Successors of the Work Package

- 6.1 — Pilot project definition
- 7 — Results

VI. Risks Associated with the Package

- Lack of experience in the company in the use of electronic document management applications, causing a scattering of efforts in the definition of the document flow standards
- Lack of technical skill in the software in the standardization team, which may cause delays and quality issues in the standards created
- Poor methodological skills in project management in the team, which may cause the creation of standards incompatible with the needs

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 08/11/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
WBS DICTIONARY ***Work Package: 6.1 — PILOT PROJECT DEFINITION***		
Prepared by	Ronald Balmer — team member	Version 3
Approved by	Bob Goldman — project manager	11/05/2010

I. Basic Information

WBS code	6.1
Accountable to	Ronald Balmer — team member
Estimated duration	2 days
Estimated cost	$2000.00

II. Main Tasks to Be Accomplished

- Define the pilot project theme
- Approve the pilot project theme

III. Planned Resources

- Allan Brown — consultant
- John Foster — IT
- Ricardo Viana Vargas — sponsor
- Bob Goldman — project manager

IV. Main Predecessors of the Work Package

- 5.1 — Template customization
- 5.2 — DMS customization
- 5.3 — Report customization
- 5.4 — Display mode customization

V. Main Successors of the Work Package

- 6.2 — Pilot project planning

VI. Risks Associated with the Package

- The pilot does not represent the organizational unit and may cause a false perception of the results obtained.

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 08/11/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
WBS DICTIONARY ***Work Package: 6.2 — PILOT PROJECT PLANNING***		
Prepared by	Ronald Balmer — team member	Version 3
Approved by	Bob Goldman — project manager	11/05/2010

I. Basic Information

WBS code	6.2
Accountable to	Ronald Balmer — team member
Estimated duration	6 days
Estimated cost	$8000.00

II. Main Tasks to Be Accomplished

- Prepare the pilot project global plan
- Approve the pilot project global plan

III. Planned Resources

- Allan Brown — consultant
- Mara Coopers — team member
- Ricardo Viana Vargas — sponsor
- Bob Goldman — project manager
- Ronald Balmer — team member

IV. Main Predecessors of the Work Package

- 6.1 — Pilot project definition

V. Main Successors of the Work Package

- 6.3 — Pilot project execution and evaluation

VI. Risks Associated with the Package

- The pilot does not represent the organizational unit and may cause a false perception of the results obtained.

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 08/11/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
WBS DICTIONARY ***Work Package: 6.3 — PILOT PROJECT EXECUTION AND EVALUATION***		
Prepared by	Ronald Balmer — team member	Version 3
Approved by	Bob Goldman — project manager	11/05/2010

I. Basic Information

WBS code	6.3
Accountable to	Ronald Balmer — team member
Estimated duration	18 days
Estimated cost	$5000.00

II. Main tasks to Be Accomplished

- Execute the pilot project
- Evaluate the pilot project results

III. Planned Resources

- Allan Brown — consultant
- John Foster — IT
- Mara Coopers — team member
- Ricardo Viana Vargas — sponsor
- Bob Goldman — project manager

IV. Main Predecessors of the Work Package

- 6.2 — Pilot project planning

V. Main Successors of the Work Package

- 6.4 — Corrective actions (pilot project)

VI. Risks Associated with the Package

- The pilot does not represent the organizational unit and may cause a false perception of the results obtained.

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 08/11/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
WBS DICTIONARY ***Work Package: 6.4 — CORRECTIVE ACTIONS (PILOT PROJECT)***		
Prepared by	Ronald Balmer — team member	Version 3
Approved by	Bob Goldman — project manager	11/05/2010

I. Basic Information

WBS code	6.4
Accountable to	Ronald Balmer — team member
Estimated duration	5 days
Estimated cost	$8000.00

II. Main Tasks to Be Accomplished

- Corrective actions based on the pilot project results

III. Planned Resources

- Allan Brown — consultant
- Ann Goldsmith — team member
- Julian Shelley — team member
- Bob Goldman — project manager

IV. Main Predecessors of the Work Package

- 6.3 — Pilot project execution and evaluation

V. Main Successors of the Work Package

- 7 — Results

VI. Risks Associated with the Package

- The pilot does not represent the organizational unit and may cause a false perception of the results obtained.

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 08/11/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
WBS DICTIONARY ***Work Package: 7 — RESULTS***		
Prepared by	Bob Goldman — Project manager	Version 3
Approved by	Bob Goldman — Project manager	11/05/2010

I. Basic Information

WBS code	7
Accountable to	Bob Goldman — project manager
Estimated duration	3 days
Estimated cost	$7000.00

II. Main Tasks to Be Accomplished

- Present the results, customization, and pilot
- Project implementation approved
- Project closure

III. Planned Resources

- Allan Brown — consultant
- Gianni River — consultant
- John Foster — IT
- Ricardo Viana Vargas — sponsor
- Bob Goldman — project manager
- Ronald Balmer — team member

IV. Main Predecessors of the Work Package

- 6.4 — Corrective actions (pilot project)

V. Main Successors of the Work Package

- None

VI. Risks Associated with the Package

- There are no identified risks related to the results in the risk management plan.

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 08/11/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
SCOPE MANAGEMENT PLAN		
Prepared by	Julian Shelley — team member	Version 3
Approved by	Bob Goldman — project manager	05/11/2010

I. Description of Scope Management Processes

- The project scope management will be accomplished based on two specific documents: scope statement for the project's functional scope and WBS for the scope of the activities to be performed by the project, including its respective deliveries.
- All changes in the initial project scope shall be evaluated and rated within the Scope Change Control System.
- Only corrective measures will be considered as scope changes. The scope management will not consider innovations and new product or project characteristics.
- All scope change requests shall be made in writing or through e-mail, as described in the project communications plan.

II. Priority of Scope Changes and Responses

Scope changes are rated at four priority levels:

Priority 0 (zero) — Priority-zero changes require immediate action by the project manager, who shall immediately notify the sponsor, because the change is urgent and has significant impact on the project and on other areas over which the project manager has no authority.
Priority 1 (one) — Priority-one changes require immediate action by the project manager, regardless of the control meetings planned, because of the urgency, and the sponsor shall be immediately notified when financial authorizations beyond the scope of the project manager are needed.
Priority 2 (two) — Priority-two changes require an action plan by third parties or by teams that, in principle, have availability, because they add value to the project success and are urgent, but have no significant impact on costs and on the project schedule.
Priority 3 (three) — Priority-three changes can be implemented to influence the project's success, but they do not require urgent action because they have no immediate impact.

III. Configuration Management

The Scope Change Control System shall guarantee that all project scope changes are dealt with according to the flow presented in the following figure and have their results presented in the weekly Change Control Board (CCB) meeting, together with their conclusions, priorities, and related actions. The configuration management process is directly related to the project change control system. See Figure 4.15.

IV. Frequency of Project Scope Evaluation

The project scope shall be evaluated weekly at the CCB meeting to be held according to the communications management plan.

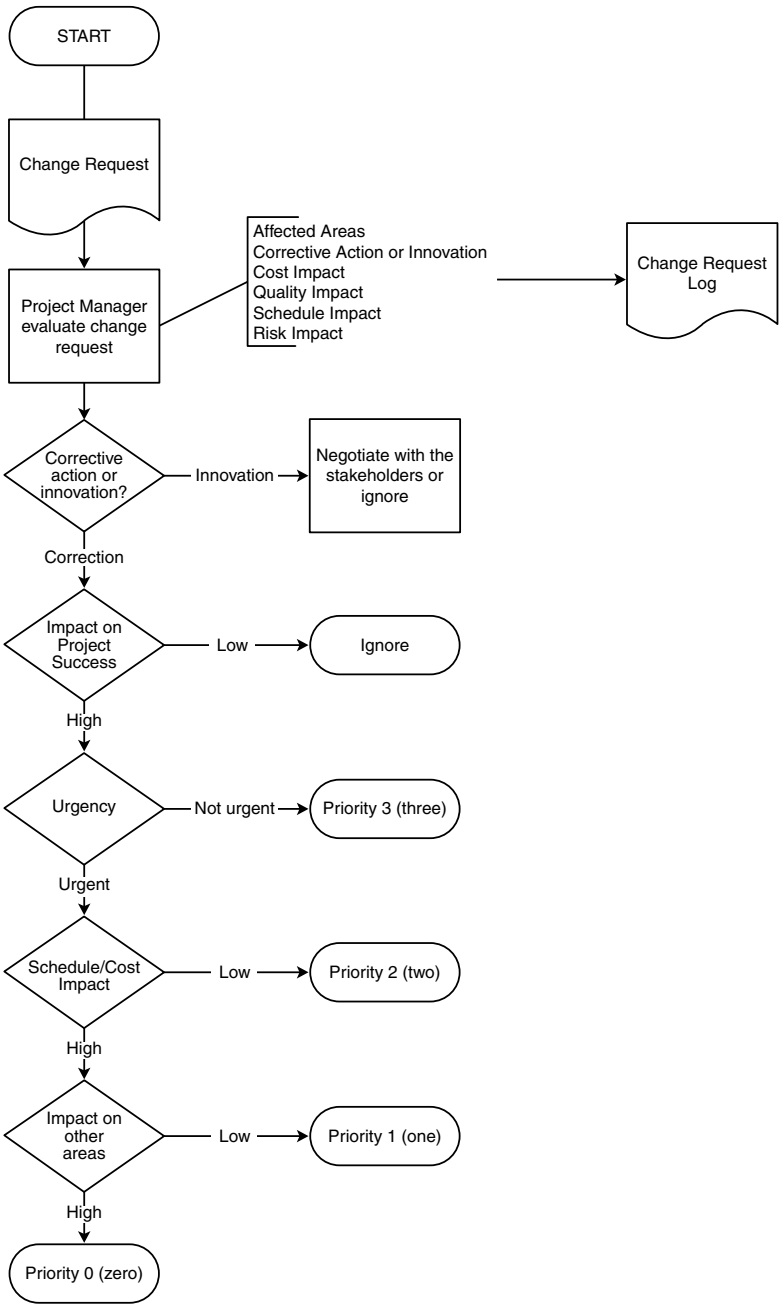


Figure 4.15

V. Cost Allocation for Scope Changes

Corrective scope changes may be allocated to the project reserves as management reserves.

For priority corrective scope changes that are beyond the project manager's authority, or when there is no management reserve available, the sponsor shall be notified, because the project manager does not have the necessary authority to decide about the use of risk contingency reserves for scope changes or to request the company's senior management for an increase in the management reserves.

VI. Administration of Scope Management Plan

1. **Persons responsible for the plan:**
   - Julian Shelley, project team member, will be the person directly responsible for the scope management plan.
   - Mary Smith Jonson, project team member, will be the substitute for the person directly responsible for the scope management plan.

2. **Frequency of updating the scope management plan:**
   The scope management plan will be reevaluated monthly in the first monthly CCB meeting, together with the other project management plans.

   The plan updating needs, before the first project CCB meeting, shall be dealt with according to the procedures described in the item *other issues not included in this plan*.

VII. Other Issues Related to Project Scope Management Not Included in This Plan

All requests not included in this plan shall be submitted to the CCB meeting for approval. Immediately after its approval, the scope management plan, including the log of the changes carried out, shall be updated.

CHANGE LOG		
Date	*Modified by*	*Change Description*
01/11/2010	Bob Goldman	Priority details
05/11/2010	Bob Goldman	Insertion of the scope change formalization request item

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 11/05/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

4.3 Project Time Management

NEW FRONTIERS PROJECT		
ACTIVITY LIST		
Prepared by	Tarik Brooks — team member	Version 3
Approved by	Bob Goldman — project manager	11/19/2010

Task Name
NEW FRONTIERS PROJECT
1 DIAGNOSIS
1.1 Have the project kick-off meeting
1.2 Gather the project team and define the committee
1.3 Prepare the work scope
1.4 Create the responsible committee
1.5 Approve the committee
1.6 Approve the work scope
1.7 Diagnosis completed
2 SOFTWARE
2.1 OPERATING SYSTEM
2.1.1 Quote the operating system (Windows Vista)
2.1.2 Purchase the software (Operating System)
2.1.3 Install the operating system
2.1.4 Test the operating system
2.2 DATABASE
2.2.1 Quote Microsoft SQL Server
2.2.2 Purchase the software (database)
2.2.3 Install the database
2.2.4 Prepare the project data table
2.2.5 Test the database
2.3 PROJECT MANAGEMENT
2.3.1 Quote Microsoft Office Project
2.3.2 Purchase the software (Project Management)
2.3.3 Install Microsoft Office Project on server and users
2.3.4 Test the software (Project Management)
2.4 DOCUMENT MANAGEMENT SYSTEM (DMS)
2.4.1 Identify potential DMS application suppliers
2.4.2 Request presentations on the products
2.4.3 Define the DMS seller
2.4.4 Purchase the software (DMS)
2.4.5 Install the software (DMS)
2.4.6 Test the software (DMS)
2.5 INTEGRATED TESTING
2.5.1 Perform the integrated test
2.5.2 Evaluate the integrated test
2.5.3 Perform the required corrections
2.5.4 Software installed
3 HARDWARE
3.1 SERVER
3.1.1 Purchase servers
3.1.2 Install servers
3.1.3 Test the servers physically and logically
3.2 CUSTOMERS/USERS
3.2.1 Purchase the users' computers
3.2.2 Install the users' computers
3.2.3 Test the users' computers physically and logically
3.3 Hardware installed
4 TRAINING
4.1 SPEECH
4.1.1 Schedule the awareness speech
4.1.2 Perform the awareness speech
4.1.3 Evaluate the speech results
4.2 PM TRAINING
4.2.1 BASIC PM TRAINING
4.2.1.1 Schedule the basic PM training
4.2.1.2 Perform the basic PM training
4.2.1.3 Evaluate the basic PM training results
4.2.2 ADVANCED PM TRAINING
4.2.2.1 Schedule the advanced PM training
4.2.2.2 Perform the advanced PM training
4.2.2.3 Evaluate the advanced PM training results
4.3 SOFTWARE TRAINING
4.3.1 BASIC SOFTWARE TRAINING
4.3.1.1 Schedule the basic software training
4.3.1.2 Perform the basic software training
4.3.1.3 Evaluate the basic software training results
4.3.2 ADVANCED SOFTWARE TRAINING
4.3.2.1 Schedule the advanced software training
4.3.2.2 Perform the advanced software training
4.3.2.3 Evaluate the advanced software training results
4.3.3 SOFTWARE SUPPORT TEAM TRAINING
4.3.3.1 Schedule the software support team training
4.3.3.2 Perform the software support team training
4.3.3.3 Evaluate the software support team training results
4.4 Training completed
5 CUSTOMIZATION
5.1 TEMPLATE CUSTOMIZATION
5.1.1 Define the template standards
5.1.2 Prepare the templates
5.1.3 Test the template operation
5.1.4 Approve the templates
5.2 DMS CUSTOMIZATION
5.2.1 Define the DMS standards
5.2.2 Prepare the DMS parameters

Figure 4.16a

Task Name
5.2.3 Test the DMS operation
5.2.4 Approve the DMS
5.3 REPORT CUSTOMIZATION
5.3.1 Define the report standards
5.3.2 Prepare the reports
5.3.3 Test the report operation
5.3.4 Approve the reports
5.4 DISPLAY MODE CUSTOMIZATION
5.4.1 Define the display mode standards
5.4.2 Prepare the display mode
5.4.3 Test the display mode operation
5.4.4 Approve the display mode
5.5 Standards estabilished
6 PILOT
6.1 PILOT PROJECT DEFINITION
6.1.1 Define the pilot project theme
6.1.2 Approve the pilot-project theme
6.2 PILOT PROJECT PLANNING
6.2.1 Prepare the pilot project global plan
6.2.2 Approve the pilot project global plan
6.3 PILOT PROJECT EXECUTION AND EVALUATION
6.3.1 Execute the pilot project
6.3.2 Evaluate the pilot project results
6.4 CORRECTIVE ACTIONS
6.4.1 Perform the corrective actions based on the pilot project results
6.5 Pilot performed and evaluated
7 RESULTS
7.1 Present the results, customization and pilot
7.2 Project Implementation approved
7.3 Project close-out

Figure 4.16b

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 11/19/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
ACTIVITY DURATION LIST		
Prepared by	Tarik Brooks — team member	Version 3
Approved by	Bob Goldman — project manager	11/19/2010

ID	Task Name	Duration
0	**NEW FRONTIERS PROJECT**	
1	**1 DIAGNOSIS**	
2	1.1 Have the project kick-off meeting	1 day
3	1.2 Gather the project team and define the committee	2 days
4	1.3 Prepare the work scope	3 days
5	1.4 Create the responsible committee	2 days
6	1.5 Approve the committee	1 day
7	1.6 Approve the work scope	1 day
8	1.7 Diagnosis completed	0 days
9	**2 SOFTWARE**	
10	**2.1 OPERATING SYSTEM**	
11	2.1.1 Quote the operating system (Windows Vista)	2 days
12	2.1.2 Purchase the software (Operating System)	2 days
13	2.1.3 Install the operating system	4 days
14	2.1.4 Test the operating system	2 days
15	**2.2 DATABASE**	
16	2.2.1 Quote Microsoft SQL Server	2 days
17	2.2.2 Purchase the software (database)	2 days
18	2.2.3 Install the database	4 days
19	2.2.4 Prepare the project data table	2 days
20	2.2.5 Test the database	2 days
21	**2.3 PROJECT MANAGEMENT**	
22	2.3.1 Quote Microsoft Office Project	2 days
23	2.3.2 Purchase the software (Project Management)	2 days
24	2.3.3 Install Microsoft Office Project on server and users	4 days
25	2.3.4 Test the software (Project Management)	1 day
26	**2.4 DOCUMENT MANAGEMENT SYSTEM (DMS)**	
27	2.4.1 Identify potential DMS application suppliers	5 days
28	2.4.2 Request presentations on the products	2 days
29	2.4.3 Define the DMS seller	5 days
30	2.4.4 Purchase the software (DMS)	2 days
31	2.4.5 Install the software (DMS)	2 days
32	2.4.6 Test the software (DMS)	3 days
33	**2.5 INTEGRATED TESTING**	
34	2.5.1 Perform the integrated test	2 days
35	2.5.2 Evaluate the integrated test	2 days
36	2.5.3 Perform the required corrections	4 days
37	2.5.4 Software installed	0 days
38	**3 HARDWARE**	
39	**3.1 SERVER**	
40	3.1.1 Purchase servers	2 days
41	3.1.2 Install servers	2 days
42	3.1.3 Test the servers physically and logically	1 day
43	**3.2 CUSTOMERS/USERS**	
44	3.2.1 Purchase the users' computers	2 days
45	3.2.2 Install the users' computers	5 days
46	3.2.3 Test the users' computers physically and logically	1 day
47	3.3 Hardware installed	0 days
48	**4 TRAINING**	
49	**4.1 SPEECH**	
50	4.1.1 Schedule the awareness speech	1 day
51	4.1.2 Perform the awareness speech	2 hrs
52	4.1.3 Evaluate the speech results	14 hrs
53	**4.2 PM TRAINING**	
54	**4.2.1 BASIC PM TRAINING**	
55	4.2.1.1 Schedule the basic PM training	1 day
56	4.2.1.2 Perform the basic PM training	15 days
57	4.2.1.3 Evaluate the basic PM training results	3 days
58	**4.2.2 ADVANCED PM TRAINING**	
59	4.2.2.1 Schedule the advanced PM training	1 day
60	4.2.2.2 Perform the advanced PM training	3 days
61	4.2.2.3 Evaluate the advanced PM training results	1 day
62	**4.3 SOFTWARE TRAINING**	
63	**4.3.1 BASIC SOFTWARE TRAINING**	
64	4.3.1.1 Schedule the basic software training	1 day
65	4.3.1.2 Perform the basic software training	10 days
66	4.3.1.3 Evaluate the basic software training results	2 days
67	**4.3.2 ADVANCED SOFTWARE TRAINING**	
68	4.3.2.1 Schedule the advanced software training	1 day
69	4.3.2.2 Perform the advanced software training	2 days
70	4.3.2.3 Evaluate the advanced software training results	1 day
71	**4.3.3 SOFTWARE SUPPORT TEAM TRAINING**	
72	4.3.3.1 Schedule the software support team training	1 day
73	4.3.3.2 Perform the software support team training	10 days
74	4.3.3.3 Evaluate the software support team training results	1 day
75	4.4 Training completed	0 days
76	**5 CUSTOMIZATION**	
77	**5.1 TEMPLATE CUSTOMIZATION**	
78	5.1.1 Define the template standards	2 days
79	5.1.2 Prepare the templates	10 days
80	5.1.3 Test the template operation	2 days
81	5.1.4 Approve the templates	1 day

Figure 4.17a

ID	Task Name	Duration
82	**5.2 DMS CUSTOMIZATION**	
83	5.2.1 Define the DMS standards	16 hrs
84	5.2.2 Prepare the DMS parameters	10 days
85	5.2.3 Test the DMS operation	2 days
86	5.2.4 Approve the DMS	1 day
87	**5.3 REPORT CUSTOMIZATION**	
88	5.3.1 Define the report standards	1 day
89	5.3.2 Prepare the reports	4 days
90	5.3.3 Test the report operation	1 day
91	5.3.4 Approve the reports	1 day
92	**5.4 DISPLAY MODE CUSTOMIZATION**	
93	5.4.1 Define the display mode standards	1 day
94	5.4.2 Prepare the display mode	4 days
95	5.4.3 Test the display mode operation	1 day
96	5.4.4 Approve the display mode	1 day
97	5.5 Standards estabilished	0 days
98	**6 PILOT**	
99	**6.1 PILOT PROJECT DEFINITION**	
100	6.1.1 Define the pilot project theme	1 day
101	6.1.2 Approve the pilot-project theme	1 day
102	**6.2 PILOT PROJECT PLANNING**	
103	6.2.1 Prepare the pilot project global plan	5 days
104	6.2.2 Approve the pilot project global plan	1 day
105	**6.3 PILOT PROJECT EXECUTION AND EVALUATION**	
106	6.3.1 Execute the pilot project	15 days
107	6.3.2 Evaluate the pilot project results	3 days
108	**6.4 CORRECTIVE ACTIONS**	
109	6.4.1 Perform the corrective actions based on the pilot project results	5 days
110	6.5 Pilot performed and evaluated	0 days
111	**7 RESULTS**	
112	7.1 Present the results, customization and pilot	2 days
113	7.2 Project Implementation approved	0 hrs
114	7.3 Project close-out	1 day

Figure 4.17b

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 11/19/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
RESOURCE LIST		
Prepared by	Tarik Brooks — team member	Version 3
Approved by	Bob Goldman — project manager	11/21/2010

Name	Group	Initials	Material Label	Max Units	Standard Rate	Accrue At	Base Calendar
Allan Brown - Consultant	Consulting Services	Allan		100%	$ 200,00/hr	Prorated	Standard
Ann Goldsmith - Team Member	Team Member	Ann		100%	$ 0,00/hr	Prorated	Standard
Caroline Smith - IT	IT	Caroline		100%	$ 0,00/hr	Prorated	Standard
Gianni River - Consultant	Consulting Services	Gianni		100%	$ 200,00/hr	Prorated	Standard
John Foster - IT	IT	John		100%	$ 0,00/hr	Prorated	Standard
Julian Shelley - Team Member	Team Member	Julian		100%	$ 0,00/hr	Prorated	Standard
Louis Stone - IT	IT	Louis		100%	$ 0,00/hr	Prorated	Standard
Magan Porter - IT	IT	Magan		100%	$ 0,00/hr	Prorated	Standard
Mara Coopers - Team Member	Team Member	Mara		100%	$ 0,00/hr	Prorated	Standard
Marcy Stanley - TI	IT	Márcia		100%	$ 0,00/hr	Prorated	Standard
Mark Case - Purchases	Purchases	Mark		100%	$ 0,00/hr	Prorated	Standard
Mary Smith Jonson - Team Member	Team Member	Maria Sônia		100%	$ 0,00/hr	Prorated	Standard
Nielsen Matsushita - Team Member	Team Member	Nielsen		100%	$ 0,00/hr	Prorated	Standard
Ricardo Viana Vargas - Sponsor	Sponsor	Ricardo		100%	$ 0,00/hr	Prorated	Standard
Robert (Bob) Goldman - PM	Project Manager	Bob		100%	$ 0,00/hr	Prorated	Standard
Ronald Balmer - Team Member	Team Member	Ronald		100%	$ 0,00/hr	Prorated	Standard
Tarik Brooks - Team Member	Team Member	Tarik		100%	$ 0,00/hr	Prorated	Standard
Advanced Microsoft Office Project Training	Training	Adv Pro	Class (s)		$ 14.000,00	End	
Advanced PM Training	Training	Adv PM	Class (s)		$ 12.000,00	End	
Basic Microsoft Office Project Training	Training	Bas Pro	Class (s)		$ 8.000,00	End	
Basic PM Training	Training	Bas PM	Class (s)		$ 8.000,00	End	
Computer	IT Equipment	Computer	Unit (s)		$ 3.000,00	Prorated	
Document Management System	Software	DMS	Unit (s)		$ 8.500,00	Start	
KeyNote Awareness Speech	Training	K	Unit (s)		$ 4.000,00	End	
Microsoft Office Project	Software	M	Unit (s)		$ 800,00	Start	
Microsoft Office Project Server	Software	M	Unit (s)		$ 1.500,00	Start	
Microsoft SQL Server	Software	M	Unit (s)		$ 2.000,00	Start	
Microsoft Windows Professional	Software	M	Unit (s)		$ 500,00	Start	
Microsoft Windows Server	Software	M	Unit (s)		$ 1.500,00	Start	
Server	IT Equipment	S	Unit (s)		$ 10.000,00	Start	
Support Team Training	Training	Sup Team	Class (s)		$ 19.000,00	End	
Travel Global PMO	External	T	Unit (s)		$ 10.000,00	Prorated	

Figure 4.18

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 11/22/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
RESOURCE ALLOCATION		
Prepared by	Tarik Brooks — team member	Version 3
Approved by	Bob Goldman — project manager	11/21/2010

ID	Task Name	Units	Duration
0	**NEW FRONTIERS PROJECT**		
1	**1 DIAGNOSIS**		
2	1.1 Have the project kick-off meeting		1 day
	Robert (Bob) Goldman - PM	*100%*	
	Ricardo Viana Vargas - Sponsor	*100%*	
	Allan Brown - Consultant	*100%*	
3	1.2 Gather the project team and define the committee		2 days
	John Foster - IT	*50%*	
	Robert (Bob) Goldman - PM	*100%*	
	Ricardo Viana Vargas - Sponsor	*20%*	
	Allan Brown - Consultant	*100%*	
	Travel Global PMO	*1 Unit (s)*	
4	1.3 Prepare the work scope		3 days
	John Foster - IT	*50%*	
	Robert (Bob) Goldman - PM	*100%*	
	Allan Brown - Consultant	*100%*	
5	1.4 Create the responsible committee		2 days
	John Foster - IT	*50%*	
	Robert (Bob) Goldman - PM	*100%*	
6	1.5 Approve the committee		1 day
	Robert (Bob) Goldman - PM	*100%*	
	Ricardo Viana Vargas - Sponsor	*20%*	
7	1.6 Approve the work scope		1 day
	Robert (Bob) Goldman - PM	*100%*	
	Ricardo Viana Vargas - Sponsor	*20%*	
8	1.7 Diagnosis completed		0 days
	Robert (Bob) Goldman - PM	*100%*	
9	**2 SOFTWARE**		
10	**2.1 OPERATING SYSTEM**		
11	2.1.1 Quote the operating system (Windows Vista)		2 days
	Mark Case - Purchases	*20%*	
12	2.1.2 Purchase the software (Operating System)		2 days
	Mark Case - Purchases	*20%*	
	Microsoft Windows Server	*1 Unit (s)*	
	Microsoft Windows Professional	*150 Unit (s)*	
13	2.1.3 Install the operating system		4 days
	Caroline Smith - IT	*100%*	
	Louis Stone - IT	*100%*	
14	2.1.4 Test the operating system		2 days
	Marcy Stanley - TI	*100%*	
	Julian Shelley - Team Member	*100%*	
15	**2.2 DATABASE**		
16	2.2.1 Quote Microsoft SQL Server		2 days
	Mark Case - Purchases	*20%*	
17	2.2.2 Purchase the software (database)		2 days
	Mark Case - Purchases	*20%*	
	Microsoft SQL Server	*1 Unit (s)*	
18	2.2.3 Install the database		4 days
	Louis Stone - IT	*100%*	
	Marcy Stanley - TI	*100%*	
19	2.2.4 Prepare the project data table		2 days
	Marcy Stanley - TI	*100%*	
20	2.2.5 Test the database		2 days
	Caroline Smith - IT	*100%*	
21	**2.3 PROJECT MANAGEMENT**		
22	2.3.1 Quote Microsoft Office Project		2 days
	Mark Case - Purchases	*20%*	
23	2.3.2 Purchase the software (Project Management)		2 days
	Mark Case - Purchases	*20%*	
	Microsoft Office Project	*150 Unit (s)*	
	Microsoft Office Project Server	*1 Unit (s)*	
24	2.3.3 Install Microsoft Office Project on server and users		4 days
	Caroline Smith - IT	*100%*	
25	2.3.4 Test the software (Project Management)		1 day
	Caroline Smith - IT	*100%*	
26	**2.4 DOCUMENT MANAGEMENT SYSTEM (DMS)**		
27	2.4.1 Identify potential DMS application suppliers		5 days
	Marcy Stanley - TI	*100%*	
	John Foster - IT	*50%*	
	Gianni River - Consultant	*100%*	
28	2.4.2 Request presentations on the products		2 days
	Marcy Stanley - TI	*100%*	
	John Foster - IT	*50%*	
	Allan Brown - Consultant	*100%*	
29	2.4.3 Define the DMS seller		5 days
	Mark Case - Purchases	*20%*	
	John Foster - IT	*50%*	
30	2.4.4 Purchase the software (DMS)		2 days
	Mark Case - Purchases	*20%*	
	Document Management System	*1 Unit (s)*	
31	2.4.5 Install the software (DMS)		2 days
	Caroline Smith - IT	*100%*	

Figure 4.19a

ID	Task Name	Units	Duration
	Louis Stone - IT	*100%*	
32	2.4.6 Test the software (DMS)		3 days
	Magan Porter - IT	*100%*	
	Marcy Stanley - TI	*100%*	
33	**2.5 INTEGRATED TESTING**		
34	2.5.1 Perform the integrated test		2 days
	Caroline Smith - IT	*100%*	
	Magan Porter - IT	*100%*	
	John Foster - IT	*100%*	
	Robert (Bob) Goldman - PM	*100%*	
35	2.5.2 Evaluate the integrated test		2 days
	Caroline Smith - IT	*100%*	
	Louis Stone - IT	*100%*	
	Magan Porter - IT	*100%*	
	Robert (Bob) Goldman - PM	*100%*	
	Ann Goldsmith - Team Member	*100%*	
36	2.5.3 Perform the required corrections		4 days
	Nielsen Matsushita - Team Member	*100%*	
37	2.5.4 Software installed		0 days
	Robert (Bob) Goldman - PM	*100%*	
38	**3 HARDWARE**		
39	**3.1 SERVER**		
40	3.1.1 Purchase servers		2 days
	Mark Case - Purchases	*20%*	
	Server	*2 Unit (s)*	
41	3.1.2 Install servers		2 days
	Caroline Smith - IT	*100%*	
	Marcy Stanley - TI	*100%*	
42	3.1.3 Test the servers physically and logically		1 day
	Caroline Smith - IT	*100%*	
43	**3.2 CUSTOMERS/USERS**		
44	3.2.1 Purchase the users' computers		2 days
	Mark Case - Purchases	*20%*	
	Computer	*165 Unit (s)*	
45	3.2.2 Install the users' computers		5 days
	Louis Stone - IT	*100%*	
	Magan Porter - IT	*100%*	
46	3.2.3 Test the users' computers physically and logically		1 day
	Magan Porter - IT	*100%*	
	Marcy Stanley - TI	*100%*	
47	3.3 Hardware installed		0 days
	Robert (Bob) Goldman - PM	*100%*	
48	**4 TRAINING**		
49	**4.1 SPEECH**		
50	4.1.1 Schedule the awareness speech		1 day
	Robert (Bob) Goldman - PM	*100%*	
	Ann Goldsmith - Team Member	*100%*	
51	4.1.2 Perform the awareness speech		2 hrs
	KeyNote Awareness Speech	*1 Unit (s)*	
52	4.1.3 Evaluate the speech results		14 hrs
	Ann Goldsmith - Team Member	*100%*	
	Ricardo Viana Vargas - Sponsor	*20%*	
	Allan Brown - Consultant	*100%*	
53	**4.2 PM TRAINING**		
54	**4.2.1 BASIC PM TRAINING**		
55	4.2.1.1 Schedule the basic PM training		1 day
	Robert (Bob) Goldman - PM	*100%*	
56	4.2.1.2 Perform the basic PM training		15 days
	Basic PM Training	*5 Class (s)*	
57	4.2.1.3 Evaluate the basic PM training results		3 days
	Ann Goldsmith - Team Member	*100%*	
	Mara Coopers - Team Member	*100%*	
	Allan Brown - Consultant	*100%*	
58	**4.2.2 ADVANCED PM TRAINING**		
59	4.2.2.1 Schedule the advanced PM training		1 day
	Robert (Bob) Goldman - PM	*100%*	
60	4.2.2.2 Perform the advanced PM training		3 days
	Advanced PM Training	*1 Class (s)*	
61	4.2.2.3 Evaluate the advanced PM training results		1 day
	Ann Goldsmith - Team Member	*100%*	
	Mara Coopers - Team Member	*100%*	
	Allan Brown - Consultant	*100%*	
62	**4.3 SOFTWARE TRAINING**		
63	**4.3.1 BASIC SOFTWARE TRAINING**		
64	4.3.1.1 Schedule the basic software training		1 day
	Robert (Bob) Goldman - PM	*100%*	
65	4.3.1.2 Perform the basic software training		10 days
	Basic Microsoft Office Project Training	*5 Class (s)*	
66	4.3.1.3 Evaluate the basic software training results		2 days
	Ann Goldsmith - Team Member	*100%*	
	Mara Coopers - Team Member	*100%*	
	Allan Brown - Consultant	*100%*	

Figure 4.19b

ID	Task Name	Units	Duration
67	**4.3.2 ADVANCED SOFTWARE TRAINING**		
68	4.3.2.1 Schedule the advanced software training		1 day
	Robert (Bob) Goldman - PM	*100%*	
69	4.3.2.2 Perform the advanced software training		2 days
	Advanced Microsoft Office Project Training	*1 Class (s)*	
70	4.3.2.3 Evaluate the advanced software training results		1 day
	Ann Goldsmith - Team Member	*100%*	
	Mara Coopers - Team Member	*100%*	
	Allan Brown - Consultant	*100%*	
71	**4.3.3 SOFTWARE SUPPORT TEAM TRAINING**		
72	4.3.3.1 Schedule the software support team training		1 day
	Robert (Bob) Goldman - PM	*100%*	
73	4.3.3.2 Perform the software support team training		10 days
	Support Team Training	*1 Class (s)*	
74	4.3.3.3 Evaluate the software support team training results		1 day
	John Foster - IT	*50%*	
	Ann Goldsmith - Team Member	*100%*	
	Allan Brown - Consultant	*100%*	
75	4.4 Training completed		0 days
	Robert (Bob) Goldman - PM	*100%*	
76	**5 CUSTOMIZATION**		
77	**5.1 TEMPLATE CUSTOMIZATION**		
78	5.1.1 Define the template standards		2 days
	John Foster - IT	*50%*	
	Gianni River - Consultant	*100%*	
79	5.1.2 Prepare the templates		10 days
	Louis Stone - IT	*100%*	
	Mara Coopers - Team Member	*100%*	
80	5.1.3 Test the template operation		2 days
	John Foster - IT	*100%*	
	Robert (Bob) Goldman - PM	*100%*	
81	5.1.4 Approve the templates		1 day
	John Foster - IT	*50%*	
82	**5.2 DMS CUSTOMIZATION**		
83	5.2.1 Define the DMS standards		16 hrs
	John Foster - IT	*50%*	
	Robert (Bob) Goldman - PM	*100%*	
	Allan Brown - Consultant	*100%*	
84	5.2.2 Prepare the DMS parameters		10 days
	Magan Porter - IT	*100%*	
	Mary Smith Jonson - Team Member	*100%*	
85	5.2.3 Test the DMS operation		2 days
	Magan Porter - IT	*100%*	
	Mary Smith Jonson - Team Member	*100%*	
86	5.2.4 Approve the DMS		1 day
	John Foster - IT	*50%*	
87	**5.3 REPORT CUSTOMIZATION**		
88	5.3.1 Define the report standards		1 day
	John Foster - IT	*50%*	
	Gianni River - Consultant	*100%*	
89	5.3.2 Prepare the reports		4 days
	Ronald Balmer - Team Member	*100%*	
	Tarik Brooks - Team Member	*100%*	
90	5.3.3 Test the report operation		1 day
	John Foster - IT	*100%*	
91	5.3.4 Approve the reports		1 day
	John Foster - IT	*50%*	
92	**5.4 DISPLAY MODE CUSTOMIZATION**		
93	5.4.1 Define the display mode standards		1 day
	John Foster - IT	*50%*	
	Allan Brown - Consultant	*100%*	
94	5.4.2 Prepare the display mode		4 days
	Marcy Stanley - TI	*100%*	
	Julian Shelley - Team Member	*100%*	
	Ann Goldsmith - Team Member	*100%*	
	Nielsen Matsushita - Team Member	*100%*	
95	5.4.3 Test the display mode operation		1 day
	Marcy Stanley - TI	*100%*	
	Robert (Bob) Goldman - PM	*100%*	
96	5.4.4 Approve the display mode		1 day
	John Foster - IT	*50%*	
97	5.5 Standards estabilished		0 days
	Robert (Bob) Goldman - PM	*100%*	
98	**6 PILOT**		
99	**6.1 PILOT PROJECT DEFINITION**		
100	6.1.1 Define the pilot project theme		1 day
	John Foster - IT	*50%*	
	Robert (Bob) Goldman - PM	*100%*	
	Ricardo Viana Vargas - Sponsor	*100%*	
	Allan Brown - Consultant	*100%*	
101	6.1.2 Approve the pilot-project theme		1 day
	Ricardo Viana Vargas - Sponsor	*20%*	

Figure 4.19c

ID	Task Name	Units	Duration
102	**6.2 PILOT PROJECT PLANNING**		
103	6.2.1 Prepare the pilot project global plan		5 days
	Robert (Bob) Goldman - PM	*100%*	
	Ronald Balmer - Team Member	*100%*	
	Mara Coopers - Team Member	*100%*	
	Allan Brown - Consultant	*100%*	
104	6.2.2 Approve the pilot project global plan		1 day
	Ricardo Viana Vargas - Sponsor	*20%*	
105	**6.3 PILOT PROJECT EXECUTION AND EVALUATION**		
106	6.3.1 Execute the pilot project		15 days
	Robert (Bob) Goldman - PM	*100%*	
	Mara Coopers - Team Member	*100%*	
107	6.3.2 Evaluate the pilot project results		3 days
	John Foster - IT	*50%*	
	Ricardo Viana Vargas - Sponsor	*20%*	
	Allan Brown - Consultant	*100%*	
108	**6.4 CORRECTIVE ACTIONS**		
109	6.4.1 Perform the corrective actions based on the pilot project results		5 days
	Robert (Bob) Goldman - PM	*100%*	
	Julian Shelley - Team Member	*100%*	
	Ann Goldsmith - Team Member	*100%*	
	Allan Brown - Consultant	*100%*	
110	6.5 Pilot performed and evaluated		0 days
	Robert (Bob) Goldman - PM	*100%*	
111	**7 RESULTS**		
112	7.1 Present the results, customization and pilot		2 days
	John Foster - IT	*50%*	
	Robert (Bob) Goldman - PM	*100%*	
	Ronald Balmer - Team Member	*100%*	
	Ricardo Viana Vargas - Sponsor	*20%*	
	Allan Brown - Consultant	*100%*	
	Gianni River - Consultant	*100%*	
113	7.2 Project Implementation approved		0 hrs
	Ricardo Viana Vargas - Sponsor	*100%*	
114	7.3 Project close-out		1 day

Figure 4.19d

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 11/22/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
PROJECT GANTT CHART		
Prepared by	Tarik Brooks — team member	Version 3
Approved by	Bob Goldman — project manager	11/30/2010

New Frontiers Project
Gantt Chart

RICARDO VARGAS

Page 1 of 5

WBS	Task Name	J				F				M				A				M				J			
		1	8	15	22	29	5	12	19	26	5	12	19	26	2	9	16	23	30	7	14	21	28	4	11	18	25
0	NEW FRONTIERS PROJECT																										
1	DIAGNOSIS																										
1.1	Have the project kick-off meeting																										
1.2	Gather the project team and define the committee																										
1.3	Prepare the work scope																										
1.4	Create the responsible committee																										
1.5	Approve the committee																										
1.6	Approve the work scope																										
1.7	Diagnosis completed																										
2	SOFTWARE																										
2.1	OPERATING SYSTEM																										
2.1.1	Quote the operating system (Windows Vista)																										
2.1.2	Purchase the software (Operating System)																										
2.1.3	Install the operating system																										
2.1.4	Test the operating system																										
2.2	DATABASE																										
2.2.1	Quote Microsoft SQL Server																										
2.2.2	Purchase the software (database)																										
2.2.3	Install the database																										
2.2.4	Prepare the project data table																										
2.2.5	Test the database																										
2.3	PROJECT MANAGEMENT																										
2.3.1	Quote Microsoft Office Project																										

Figure 4.20a

New Frontiers Project
Gantt Chart

RICARDO VARGAS

Page 2 of 5

WBS	Task Name	J					F				M				A				M				J			
		1	8	15	22	29	5	12	19	26	5	12	19	26	2	9	16	23	30	7	14	21	28	4	11	18	25
2.3.2	Purchase the software (Project Management)																									
2.3.3	Install Microsoft Office Project on server and users																									
2.3.4	Test the software (Project Management)																									
2.4	DOCUMENT MANAGEMENT SYSTEM (DMS)																									
2.4.1	Identify potential DMS application suppliers																									
2.4.2	Request presentations on the products																									
2.4.3	Define the DMS seller																									
2.4.4	Purchase the software (DMS)																									
2.4.5	Install the software (DMS)																									
2.4.6	Test the software (DMS)																									
2.5	INTEGRATED TESTING																									
2.5.1	Perform the integrated test																									
2.5.2	Evaluate the integrated test																									
2.5.3	Perform the required corrections																									
2.5.4	Software installed																									
3	HARDWARE																									
3.1	SERVER																									
3.1.1	Purchase servers																									
3.1.2	Install servers																									
3.1.3	Test the servers physically and logically																									
3.2	CUSTOMERS/USERS																									
3.2.1	Purchase the users' computers																									
3.2.2	Install the users' computers																									

Figure 4.20b

New Frontiers Project
Gantt Chart

RICARDO VARGAS

Page 3 of 5

WBS	Task Name	J				F				M				A				M				J			
		1	8	15	22	29	5	12	19	26	5	12	19	26	2	9	16	23	30	7	14	21	28	4	11	18	25
3.2.3	Test the users' computers physically and logically																										
3.3	Hardware installed																										
4	TRAINING																										
4.1	SPEECH																										
4.1.1	Schedule the awareness speech																										
4.1.2	Perform the awareness speech																										
4.1.3	Evaluate the speech results																										
4.2	PM TRAINING																										
4.2.1	BASIC PM TRAINING																										
4.2.1.1	Schedule the basic PM training																										
4.2.1.2	Perform the basic PM training																										
4.2.1.3	Evaluate the basic PM training results																										
4.2.2	ADVANCED PM TRAINING																										
4.2.2.1	Schedule the advanced PM training																										
4.2.2.2	Perform the advanced PM training																										
4.2.2.3	Evaluate the advanced PM training results																										
4.3	SOFTWARE TRAINING																										
4.3.1	BASIC SOFTWARE TRAINING																										
4.3.1.1	Schedule the basic software training																										
4.3.1.2	Perform the basic software training																										
4.3.1.3	Evaluate the basic software training results																										
4.3.2	ADVANCED SOFTWARE TRAINING																										
4.3.2.1	Schedule the advanced software training																										

Figure 4.20c

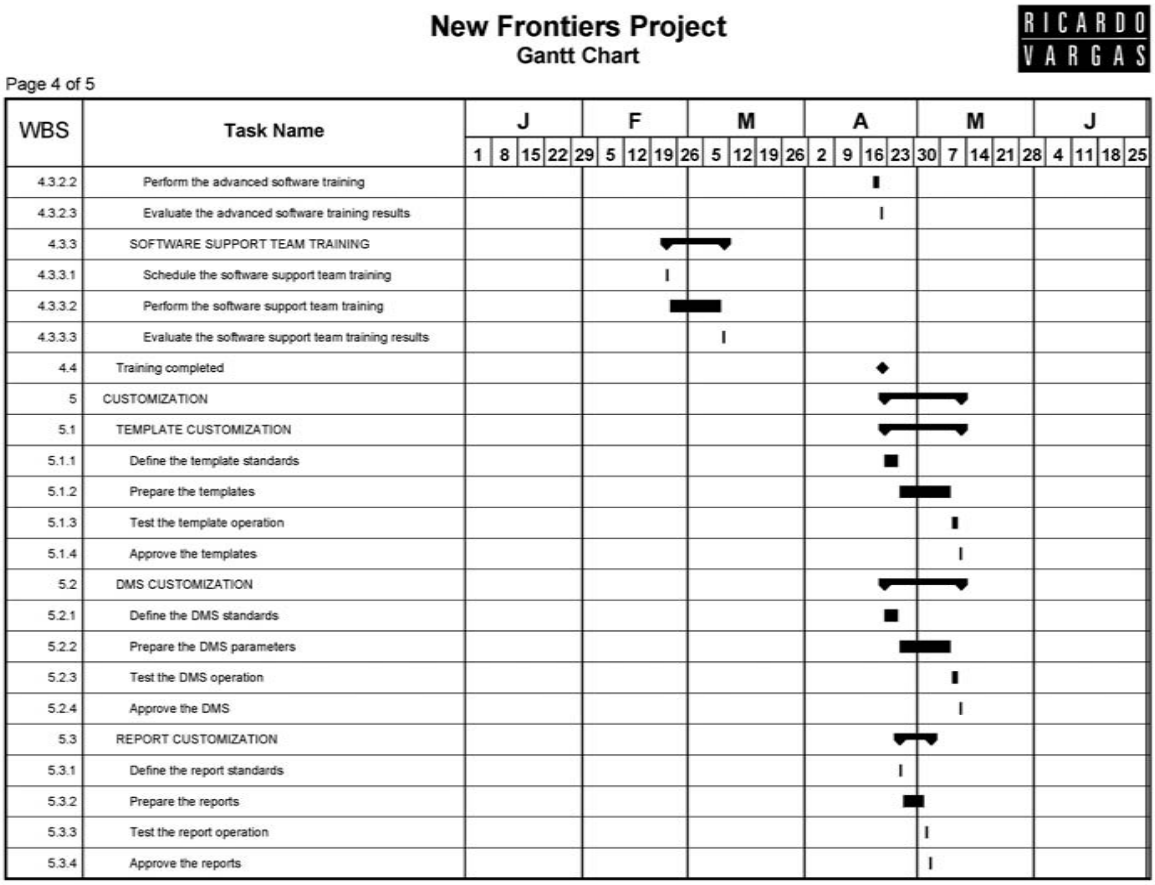
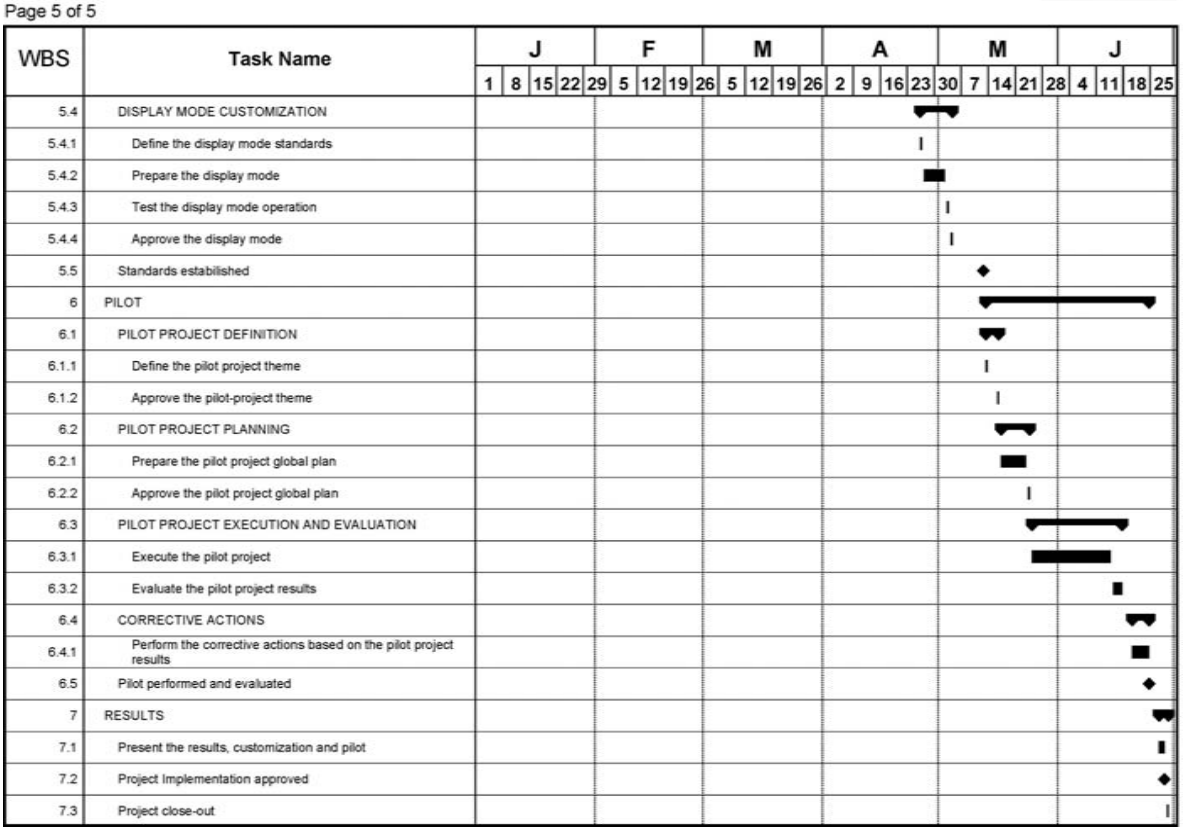

New Frontiers Project
Gantt Chart
RICARDO VARGAS
Page 4 of 5
WBS
Task Name
J
F
M
A
M
J
1 8 15 22 29 5 12 19 26 5 12 19 26 2 9 16 23 30 7 14 21 28 4 11 18 25
4.3.2.2 Perform the advanced software training
4.3.2.3 Evaluate the advanced software training results
4.3.3 SOFTWARE SUPPORT TEAM TRAINING
4.3.3.1 Schedule the software support team training
4.3.3.2 Perform the software support team training
4.3.3.3 Evaluate the software support team training results
4.4 Training completed
5 CUSTOMIZATION
5.1 TEMPLATE CUSTOMIZATION
5.1.1 Define the template standards
5.1.2 Prepare the templates
5.1.3 Test the template operation
5.1.4 Approve the templates
5.2 DMS CUSTOMIZATION
5.2.1 Define the DMS standards
5.2.2 Prepare the DMS parameters
5.2.3 Test the DMS operation
5.2.4 Approve the DMS
5.3 REPORT CUSTOMIZATION
5.3.1 Define the report standards
5.3.2 Prepare the reports
5.3.3 Test the report operation
5.3.4 Approve the reports

Figure 4.20d

New Frontiers Project
Gantt Chart

RICARDO VARGAS

Page 5 of 5



WBS	Task Name	J					F					M					A					M					J				
		1	8	15	22	29	5	12	19	26	5	12	19	26	2	9	16	23	30	7	14	21	28	4	11	18	25
5.4	DISPLAY MODE CUSTOMIZATION																														
5.4.1	Define the display mode standards																														
5.4.2	Prepare the display mode																														
5.4.3	Test the display mode operation																														
5.4.4	Approve the display mode																														
5.5	Standards estabilished																														
6	PILOT																														
6.1	PILOT PROJECT DEFINITION																														
6.1.1	Define the pilot project theme																														
6.1.2	Approve the pilot-project theme																														
6.2	PILOT PROJECT PLANNING																														
6.2.1	Prepare the pilot project global plan																														
6.2.2	Approve the pilot project global plan																														
6.3	PILOT PROJECT EXECUTION AND EVALUATION																														
6.3.1	Execute the pilot project																														
6.3.2	Evaluate the pilot project results																														
6.4	CORRECTIVE ACTIONS																														
6.4.1	Perform the corrective actions based on the pilot project results																														
6.5	Pilot performed and evaluated																														
7	RESULTS																														
7.1	Present the results, customization and pilot																														
7.2	Project Implementation approved																														
7.3	Project close-out																														

Figure 4.20e

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 11/30/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
NETWORK DIAGRAM		
Prepared by	Tarik Brooks — team member	Version 3
Approved by	Bob Goldman — project manager	11/30/2010

Figure 4.21

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 11/30/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
MILESTONES CHART		
Prepared by	Tarik Brooks — team member	Version 3
Approved by	Bob Goldman — project manager	11/30/2010

New Frontiers Project
Milestones Chart

RICARDO VARGAS

Page 1

WBS	Milestones	Date
1.7	Diagnosis completed	01/14/2011
2.5.4	Software installed	03/29/2011
3.3	Hardware installed	02/02/2011
4.4	Training completed	04/21/2011
5.5	Standards established	05/12/2011
6.5	Pilot performed and evaluated	06/24/2011
7.2	Project Implementation approved	06/28/2011

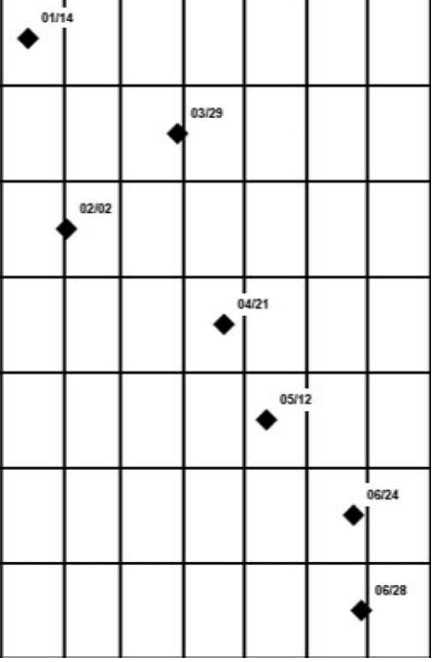


Figure 4.22

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 11/30/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
SCHEDULE MANAGEMENT PLAN		
Prepared by	Tarik Brooks — team member	Version 3
Approved by	Bob Goldman — project manager	11/15/2010

I. Description of Schedule Management Processes

- Schedule management will be accomplished based on the percentage of project activities completed, with the use of the Microsoft Office Project.
- The project schedule updating will be accomplished in the Microsoft Office Project through the publishing of the following reports on the project Web site:
  - Gantt chart
  - Network diagram
  - Percentage completed
  - Milestones chart
- The project performance evaluation will be accomplished using the Earned Value Management System (EVMS), in which the project cost and schedule are tracked in a single control process.
- All activities with a tolerance lower than or equal to 3 business days will be considered critical. A tolerance of 3 days or less will not be considered as availability, because of the reallocation of work hours in the project.
- All changes to the schedule initially prepared for the project shall be evaluated and rated using the Schedule Change Control System.
- Delays arising from corrective measures will be considered as such and, when affecting the project success, shall be integrated into the plan. The time management will not cover innovations and new resources, which will be subject to schedule negotiations or will be ignored.
- The updating of the previous project baseline filed, documented, and published for lessons learned purposes will only be allowed with the express authorization of the project manager and of the sponsor.
- All change requests regarding the previously defined schedules shall be made in writing or through e-mail, as described in the project communications plan.

II. Schedule Change Priorities

Schedule changes are rated at four priority levels:

Priority 0 (zero) — Priority-zero delays require an immediate action by the project manager, who shall immediately notify the sponsor for discussion and analysis, because it is an urgent issue with a strong impact on the project and with solutions initially not identified.
Priority 1 (one) — Because of the urgency, priority-one delays require immediate action, regardless of the planned control meetings. The project manager will implement available schedule recovery measures, such as fast tracking, crashing, overtime work, hour bank, and task force. The costs arising from these actions will be allocated to the management reserves, as described subsequently.
Priority 2 (two) — Priority-two delays require the replanning of future activities, because the project has not yet completed 25% of its scope.
Priority 3 (three) — Priority-three delays are small delays when compared to the project duration and may be replanned without the need to replan or activate any type of recovery mechanism.

III. Schedule Change Control System

All project schedule and delay or anticipation changes shall be dealt with according to the following flowchart, with its conclusions, priorities, and related actions presented in the weekly CCB meeting.

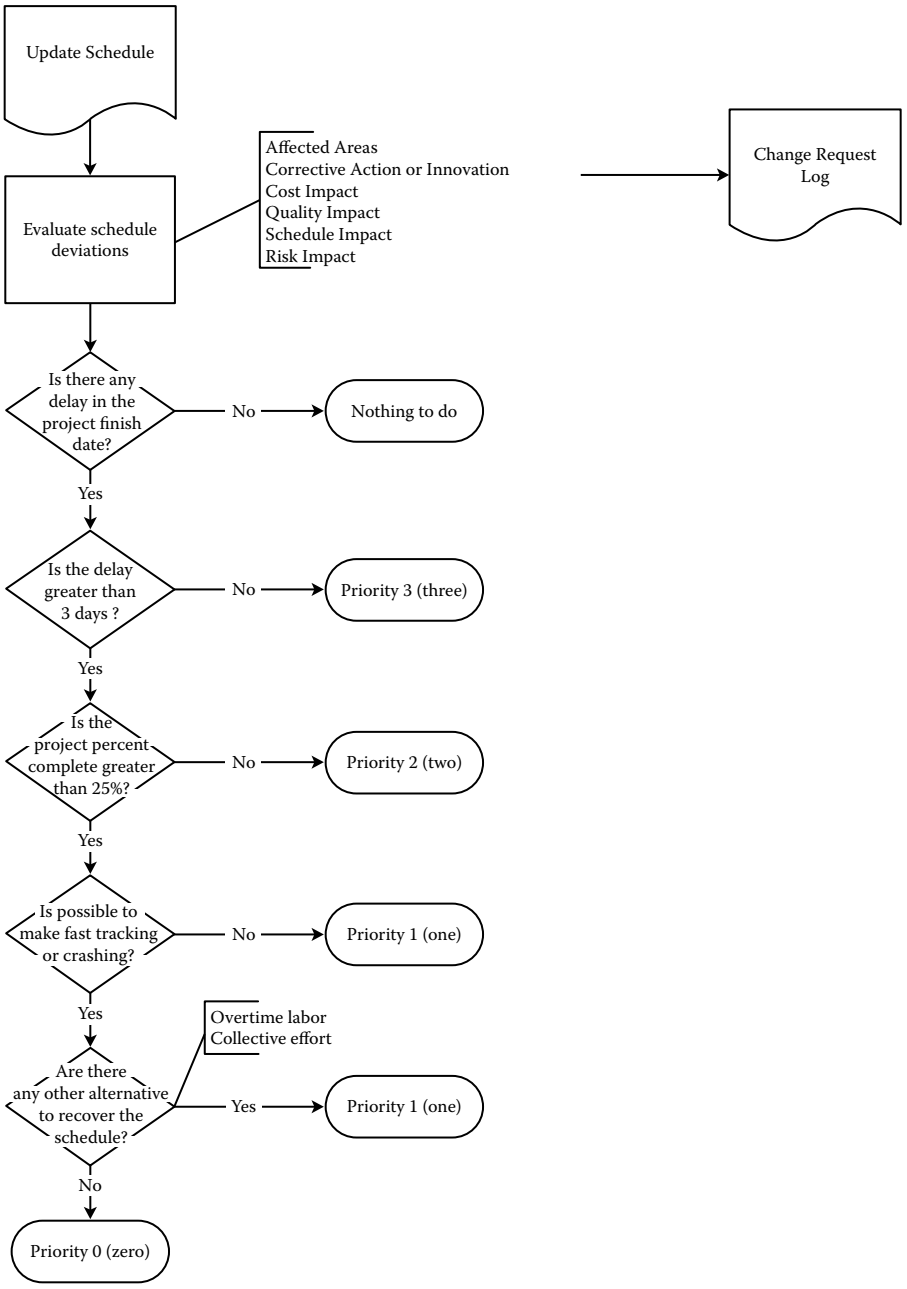


Figure 4.23

IV. Process Adopted for Resource Conflicts

The identification of overallocated resources will be accomplished after the calculation of the task duration, the resource allocation and the interrelationships between the activities. The process will check whether the quantity of any resource allocated is above the maximum available limit for that period.

The verification will be accomplished with the help of the Microsoft Office Project in the Leveling Gantt display mode, as part of the project schedule management.

In case of resource conflicts, the following flowchart will guide the project manager and the team to choose the best approach to be used.

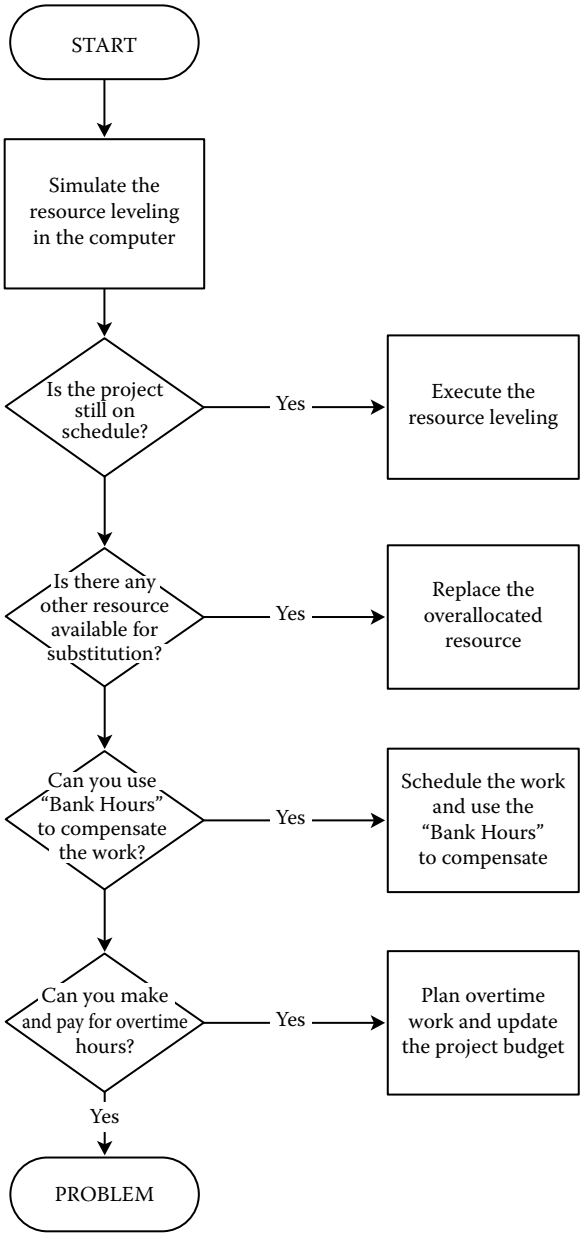


Figure 4.24

V. Project Schedule Buffer

The project does not include the establishment of a tolerance or delay margin at the project completion based on critical chain concepts, because the model adopted to build the schedules was based on the critical path concept and not on the critical chain concept (constraints theory).

VI. Frequency of Project Schedule Evaluation

The project schedules shall be updated and evaluated daily and the results published on the project Web site and presented in the weekly CCB meeting, included in the communications management plan.

VII. Cost Allocation for Schedule Changes

All the project delay recovery measures that require additional expenses shall be charged to the project reserves, as management reserves.

When priority schedule correction measures are beyond the project manager's authority or there is no management reserve available, the sponsor shall be notified, because the project manager does not have the necessary authority to decide about the use of the risk contingency reserve for delay recovery or to request the company's senior management for an increase in the management reserves.

VIII. Administration of the Schedule Management Plan

1. **Persons responsible for the plan:**
   - Tarik Brooks, project team member, will be the person directly responsible for the schedule management plan.
   - Nielsen Matsushita, project team member, will be the substitute for the person directly responsible for the schedule management plan.
2. **Frequency of updating the schedule management plan:**
   The schedule management plan will be reevaluated monthly in the first monthly CCB meeting, together with the other project management plans.

   The plan updating needs, before the first project CCB meeting, shall be dealt with according to the procedures described in the item *other issues not included in this plan*.

IX. Other Subjects Related to Project Time Management Not Included in Plan

All requests not included in this plan shall be submitted to the CCB meeting for approval. Immediately after its approval, the schedule management plan, including the log of the changes carried out, shall be updated.

CHANGE LOG		
Date	*Modified by*	*Change Description*
11/15/2010	Bob Goldman	Updating frequency details.

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 11/15/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

4.4 Project Cost Management

NEW FRONTIERS PROJECT		
COST BREAKDOWN STRUCTURE		
Prepared by	Nielsen Matsushita — team member	Version 2
Approved by	Bob Goldman — project manager	11/30/2010

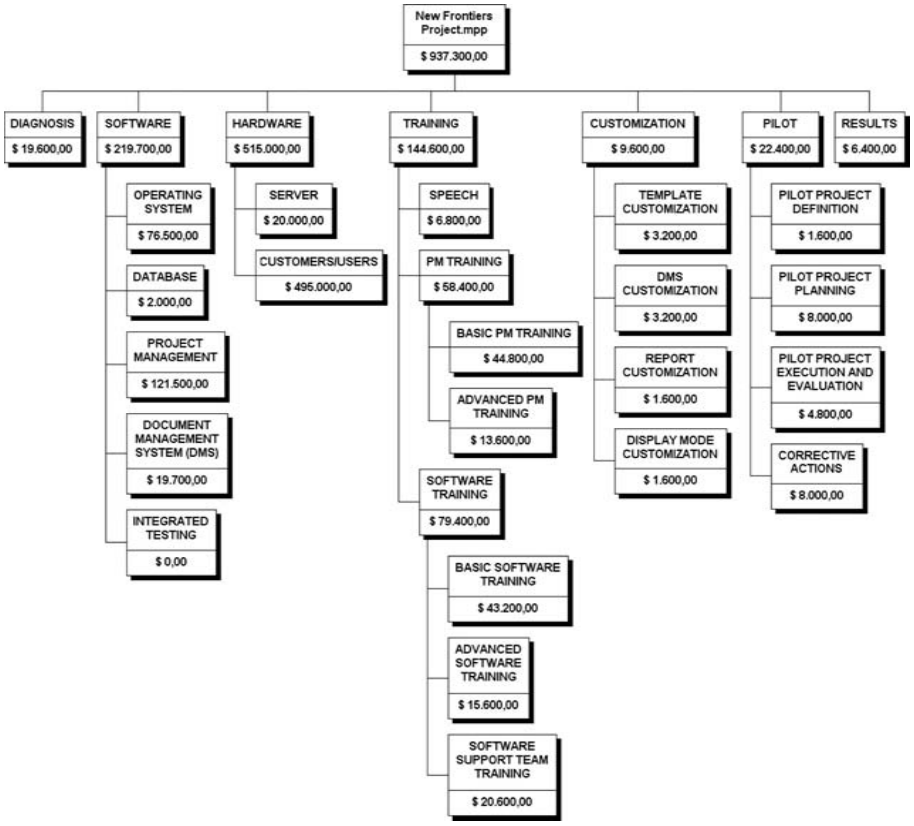


Figure 4.25

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 12/03/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
TASK BUDGET		
prepared by	NIelsen Matsushita — team member	version 2
approved by	Bob Goldman — project manager	11/30/2010

ID	Task Name	Total Cost
0	**NEW FRONTIERS PROJECT**	**$ 937.300,00**
1	**1 DIAGNOSIS**	**$ 19.600,00**
2	1.1 Have the project kick-off meeting	$ 1.600,00
3	1.2 Gather the project team and define the committee	$ 13.200,00
4	1.3 Prepare the work scope	$ 4.800,00
5	1.4 Create the responsible committee	$ 0,00
6	1.5 Approve the committee	$ 0,00
7	1.6 Approve the work scope	$ 0,00
8	1.7 Diagnosis completed	$ 0,00
9	**2 SOFTWARE**	**$ 219.700,00**
10	**2.1 OPERATING SYSTEM**	**$ 76.500,00**
11	2.1.1 Quote the operating system (Windows Vista)	$ 0,00
12	2.1.2 Purchase the software (Operating System)	$ 76.500,00
13	2.1.3 Install the operating system	$ 0,00
14	2.1.4 Test the operating system	$ 0,00
15	**2.2 DATABASE**	**$ 2.000,00**
16	2.2.1 Quote Microsoft SQL Server	$ 0,00
17	2.2.2 Purchase the software (database)	$ 2.000,00
18	2.2.3 Install the database	$ 0,00
19	2.2.4 Prepare the project data table	$ 0,00
20	2.2.5 Test the database	$ 0,00
21	**2.3 PROJECT MANAGEMENT**	**$ 121.500,00**
22	2.3.1 Quote Microsoft Office Project	$ 0,00
23	2.3.2 Purchase the software (Project Management)	$ 121.500,00
24	2.3.3 Install Microsoft Office Project on server and users	$ 0,00
25	2.3.4 Test the software (Project Management)	$ 0,00
26	**2.4 DOCUMENT MANAGEMENT SYSTEM (DMS)**	**$ 19.700,00**
27	2.4.1 Identify potential DMS application suppliers	$ 8.000,00
28	2.4.2 Request presentations on the products	$ 3.200,00
29	2.4.3 Define the DMS seller	$ 0,00
30	2.4.4 Purchase the software (DMS)	$ 8.500,00
31	2.4.5 Install the software (DMS)	$ 0,00
32	2.4.6 Test the software (DMS)	$ 0,00
33	**2.5 INTEGRATED TESTING**	**$ 0,00**
34	2.5.1 Perform the integrated test	$ 0,00
35	2.5.2 Evaluate the integrated test	$ 0,00
36	2.5.3 Perform the required corrections	$ 0,00
37	2.5.4 Software installed	$ 0,00
38	**3 HARDWARE**	**$ 515.000,00**
39	**3.1 SERVER**	**$ 20.000,00**
40	3.1.1 Purchase servers	$ 20.000,00
41	3.1.2 Install servers	$ 0,00
42	3.1.3 Test the servers physically and logically	$ 0,00
43	**3.2 CUSTOMERS/USERS**	**$ 495.000,00**
44	3.2.1 Purchase the users' computers	$ 495.000,00
45	3.2.2 Install the users' computers	$ 0,00
46	3.2.3 Test the users' computers physically and logically	$ 0,00
47	3.3 Hardware installed	$ 0,00
48	**4 TRAINING**	**$ 144.600,00**
49	**4.1 SPEECH**	**$ 6.800,00**
50	4.1.1 Schedule the awareness speech	$ 0,00
51	4.1.2 Perform the awareness speech	$ 4.000,00
52	4.1.3 Evaluate the speech results	$ 2.800,00
53	**4.2 PM TRAINING**	**$ 58.400,00**
54	**4.2.1 BASIC PM TRAINING**	**$ 44.800,00**
55	4.2.1.1 Schedule the basic PM training	$ 0,00
56	4.2.1.2 Perform the basic PM training	$ 40.000,00
57	4.2.1.3 Evaluate the basic PM training results	$ 4.800,00
58	**4.2.2 ADVANCED PM TRAINING**	**$ 13.600,00**
59	4.2.2.1 Schedule the advanced PM training	$ 0,00
60	4.2.2.2 Perform the advanced PM training	$ 12.000,00
61	4.2.2.3 Evaluate the advanced PM training results	$ 1.600,00
62	**4.3 SOFTWARE TRAINING**	**$ 79.400,00**
63	**4.3.1 BASIC SOFTWARE TRAINING**	**$ 43.200,00**
64	4.3.1.1 Schedule the basic software training	$ 0,00
65	4.3.1.2 Perform the basic software training	$ 40.000,00
66	4.3.1.3 Evaluate the basic software training results	$ 3.200,00
67	**4.3.2 ADVANCED SOFTWARE TRAINING**	**$ 15.600,00**
68	4.3.2.1 Schedule the advanced software training	$ 0,00
69	4.3.2.2 Perform the advanced software training	$ 14.000,00
70	4.3.2.3 Evaluate the advanced software training results	$ 1.600,00
71	**4.3.3 SOFTWARE SUPPORT TEAM TRAINING**	**$ 20.600,00**
72	4.3.3.1 Schedule the software support team training	$ 0,00
73	4.3.3.2 Perform the software support team training	$ 19.000,00
74	4.3.3.3 Evaluate the software support team training results	$ 1.600,00
75	4.4 Training completed	$ 0,00
76	**5 CUSTOMIZATION**	**$ 9.600,00**
77	**5.1 TEMPLATE CUSTOMIZATION**	**$ 3.200,00**
78	5.1.1 Define the template standards	$ 3.200,00
79	5.1.2 Prepare the templates	$ 0,00
80	5.1.3 Test the template operation	$ 0,00
81	5.1.4 Approve the templates	$ 0,00

Figure 4.26a

ID	Task Name	Total Cost
82	**5.2 DMS CUSTOMIZATION**	**$ 3.200,00**
83	5.2.1 Define the DMS standards	$ 3.200,00
84	5.2.2 Prepare the DMS parameters	$ 0,00
85	5.2.3 Test the DMS operation	$ 0,00
86	5.2.4 Approve the DMS	$ 0,00
87	**5.3 REPORT CUSTOMIZATION**	**$ 1.600,00**
88	5.3.1 Define the report standards	$ 1.600,00
89	5.3.2 Prepare the reports	$ 0,00
90	5.3.3 Test the report operation	$ 0,00
91	5.3.4 Approve the reports	$ 0,00
92	**5.4 DISPLAY MODE CUSTOMIZATION**	**$ 1.600,00**
93	5.4.1 Define the display mode standards	$ 1.600,00
94	5.4.2 Prepare the display mode	$ 0,00
95	5.4.3 Test the display mode operation	$ 0,00
96	5.4.4 Approve the display mode	$ 0,00
97	5.5 Standards estabilished	$ 0,00
98	**6 PILOT**	**$ 22.400,00**
99	**6.1 PILOT PROJECT DEFINITION**	**$ 1.600,00**
100	6.1.1 Define the pilot project theme	$ 1.600,00
101	6.1.2 Approve the pilot-project theme	$ 0,00
102	**6.2 PILOT PROJECT PLANNING**	**$ 8.000,00**
103	6.2.1 Prepare the pilot project global plan	$ 8.000,00
104	6.2.2 Approve the pilot project global plan	$ 0,00
105	**6.3 PILOT PROJECT EXECUTION AND EVALUATION**	**$ 4.800,00**
106	6.3.1 Execute the pilot project	$ 0,00
107	6.3.2 Evaluate the pilot project results	$ 4.800,00
108	**6.4 CORRECTIVE ACTIONS**	**$ 8.000,00**
109	6.4.1 Perform the corrective actions based on the pilot project results	$ 8.000,00
110	6.5 Pilot performed and evaluated	$ 0,00
111	**7 RESULTS**	**$ 6.400,00**
112	7.1 Present the results, customization and pilot	$ 6.400,00
113	7.2 Project Implementation approved	$ 0,00
114	7.3 Project close-out	$ 0,00

Figure 4.26b

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 12/03/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
RESOURCE BUDGET		
Prepared by	Nielsen Matsushita — team member	Version 2
Approved by	Bob Goldman — project manager	11/30/2010

ID	Task Name	Units	Duration	Cost
0	**NEW FRONTIERS PROJECT**		**128 days**	**$ 937.300,00**
1	**1 DIAGNOSIS**		**10 days**	**$ 19.600,00**
2	1.1 Have the project kick-off meeting		1 day	$ 1.600,00
	Robert (Bob) Goldman - PM	*100%*		*$ 0,00*
	Ricardo Viana Vargas - Sponsor	*100%*		*$ 0,00*
	Allan Brown - Consultant	*100%*		*$ 1.600,00*
3	1.2 Gather the project team and define the committee		2 days	$ 13.200,00
	John Foster - IT	*50%*		*$ 0,00*
	Robert (Bob) Goldman - PM	*100%*		*$ 0,00*
	Ricardo Viana Vargas - Sponsor	*20%*		*$ 0,00*
	Allan Brown - Consultant	*100%*		*$ 3.200,00*
	Travel Global PMO	*1 Unit (s)*		*$ 10.000,00*
4	1.3 Prepare the work scope		3 days	$ 4.800,00
	John Foster - IT	*50%*		*$ 0,00*
	Robert (Bob) Goldman - PM	*100%*		*$ 0,00*
	Allan Brown - Consultant	*100%*		*$ 4.800,00*
5	1.4 Create the responsible committee		2 days	$ 0,00
	John Foster - IT	*50%*		*$ 0,00*
	Robert (Bob) Goldman - PM	*100%*		*$ 0,00*
6	1.5 Approve the committee		1 day	$ 0,00
	Robert (Bob) Goldman - PM	*100%*		*$ 0,00*
	Ricardo Viana Vargas - Sponsor	*20%*		*$ 0,00*
7	1.6 Approve the work scope		1 day	$ 0,00
	Robert (Bob) Goldman - PM	*100%*		*$ 0,00*
	Ricardo Viana Vargas - Sponsor	*20%*		*$ 0,00*
8	1.7 Diagnosis completed		0 days	$ 0,00
	Robert (Bob) Goldman - PM	*100%*		*$ 0,00*
9	**2 SOFTWARE**		**52 days**	**$ 219.700,00**
10	**2.1 OPERATING SYSTEM**		**19 days**	**$ 76.500,00**
11	2.1.1 Quote the operating system (Windows Vista)		2 days	$ 0,00
	Mark Case - Purchases	*20%*		*$ 0,00*
12	2.1.2 Purchase the software (Operating System)		2 days	$ 76.500,00
	Mark Case - Purchases	*20%*		*$ 0,00*
	Microsoft Windows Server	*1 Unit (s)*		*$ 1.500,00*
	Microsoft Windows Professional	*150 Unit (s)*		*$ 75.000,00*
13	2.1.3 Install the operating system		4 days	$ 0,00
	Caroline Smith - IT	*100%*		*$ 0,00*
	Louis Stone - IT	*100%*		*$ 0,00*
14	2.1.4 Test the operating system		2 days	$ 0,00
	Marcy Stanley - TI	*100%*		*$ 0,00*
	Julian Shelley - Team Member	*100%*		*$ 0,00*
15	**2.2 DATABASE**		**27 days**	**$ 2.000,00**
16	2.2.1 Quote Microsoft SQL Server		2 days	$ 0,00
	Mark Case - Purchases	*20%*		*$ 0,00*
17	2.2.2 Purchase the software (database)		2 days	$ 2.000,00
	Mark Case - Purchases	*20%*		*$ 0,00*
	Microsoft SQL Server	*1 Unit (s)*		*$ 2.000,00*
18	2.2.3 Install the database		4 days	$ 0,00
	Louis Stone - IT	*100%*		*$ 0,00*
	Marcy Stanley - TI	*100%*		*$ 0,00*
19	2.2.4 Prepare the project data table		2 days	$ 0,00
	Marcy Stanley - TI	*100%*		*$ 0,00*
20	2.2.5 Test the database		2 days	$ 0,00
	Caroline Smith - IT	*100%*		*$ 0,00*
21	**2.3 PROJECT MANAGEMENT**		**44 days**	**$ 121.500,00**
22	2.3.1 Quote Microsoft Office Project		2 days	$ 0,00
	Mark Case - Purchases	*20%*		*$ 0,00*
23	2.3.2 Purchase the software (Project Management)		2 days	$ 121.500,00
	Mark Case - Purchases	*20%*		*$ 0,00*
	Microsoft Office Project	*150 Unit (s)*		*$ 120.000,00*
	Microsoft Office Project Server	*1 Unit (s)*		*$ 1.500,00*
24	2.3.3 Install Microsoft Office Project on server and users		4 days	$ 0,00
	Caroline Smith - IT	*100%*		*$ 0,00*
25	2.3.4 Test the software (Project Management)		1 day	$ 0,00
	Caroline Smith - IT	*100%*		*$ 0,00*
26	**2.4 DOCUMENT MANAGEMENT SYSTEM (DMS)**		**32 days**	**$ 19.700,00**
27	2.4.1 Identify potential DMS application suppliers		5 days	$ 8.000,00
	Marcy Stanley - TI	*100%*		*$ 0,00*
	John Foster - IT	*50%*		*$ 0,00*
	Gianni River - Consultant	*100%*		*$ 8.000,00*
28	2.4.2 Request presentations on the products		2 days	$ 3.200,00
	Marcy Stanley - TI	*100%*		*$ 0,00*
	John Foster - IT	*50%*		*$ 0,00*
	Allan Brown - Consultant	*100%*		*$ 3.200,00*
29	2.4.3 Define the DMS seller		5 days	$ 0,00
	Mark Case - Purchases	*20%*		*$ 0,00*
	John Foster - IT	*50%*		*$ 0,00*
30	2.4.4 Purchase the software (DMS)		2 days	$ 8.500,00
	Mark Case - Purchases	*20%*		*$ 0,00*
	Document Management System	*1 Unit (s)*		*$ 8.500,00*
31	2.4.5 Install the software (DMS)		2 days	$ 0,00
	Caroline Smith - IT	*100%*		*$ 0,00*
	Louis Stone - IT	*100%*		*$ 0,00*
32	2.4.6 Test the software (DMS)		3 days	$ 0,00
	Magan Porter - IT	*100%*		*$ 0,00*
	Marcy Stanley - TI	*100%*		*$ 0,00*
33	**2.5 INTEGRATED TESTING**		**8 days**	**$ 0,00**
34	2.5.1 Perform the integrated test		2 days	$ 0,00

Figure 4.27a

ID	Task Name	Units	Duration	Cost
	Caroline Smith - IT	*100%*		*$ 0,00*
	Magan Porter - IT	*100%*		*$ 0,00*
	John Foster - IT	*100%*		*$ 0,00*
	Robert (Bob) Goldman - PM	*100%*		*$ 0,00*
35	2.5.2 Evaluate the integrated test		2 days	$ 0,00
	Caroline Smith - IT	*100%*		*$ 0,00*
	Louis Stone - IT	*100%*		*$ 0,00*
	Magan Porter - IT	*100%*		*$ 0,00*
	Robert (Bob) Goldman - PM	*100%*		*$ 0,00*
	Ann Goldsmith - Team Member	*100%*		*$ 0,00*
36	2.5.3 Perform the required corrections		4 days	$ 0,00
	Nielsen Matsushita - Team Member	*100%*		*$ 0,00*
37	2.5.4 Software installed		0 days	$ 0,00
	Robert (Bob) Goldman - PM	*100%*		*$ 0,00*
38	**3 HARDWARE**		**13 days**	**$ 515.000,00**
39	**3.1 SERVER**		**10 days**	**$ 20.000,00**
40	3.1.1 Purchase servers		2 days	$ 20.000,00
	Mark Case - Purchases	*20%*		*$ 0,00*
	Server	*2 Unit (s)*		*$ 20.000,00*
41	3.1.2 Install servers		2 days	$ 0,00
	Caroline Smith - IT	*100%*		*$ 0,00*
	Marcy Stanley - TI	*100%*		*$ 0,00*
42	3.1.3 Test the servers physically and logically		1 day	$ 0,00
	Caroline Smith - IT	*100%*		*$ 0,00*
43	**3.2 CUSTOMERS/USERS**		**13 days**	**$ 495.000,00**
44	3.2.1 Purchase the users' computers		2 days	$ 495.000,00
	Mark Case - Purchases	*20%*		*$ 0,00*
	Computer	*165 Unit (s)*		*$ 495.000,00*
45	3.2.2 Install the users' computers		5 days	$ 0,00
	Louis Stone - IT	*100%*		*$ 0,00*
	Magan Porter - IT	*100%*		*$ 0,00*
46	3.2.3 Test the users' computers physically and logically		1 day	$ 0,00
	Magan Porter - IT	*100%*		*$ 0,00*
	Marcy Stanley - TI	*100%*		*$ 0,00*
47	3.3 Hardware installed		0 days	$ 0,00
	Robert (Bob) Goldman - PM	*100%*		*$ 0,00*
48	**4 TRAINING**		**69 days**	**$ 144.600,00**
49	**4.1 SPEECH**		**3 days**	**$ 6.800,00**
50	4.1.1 Schedule the awareness speech		1 day	$ 0,00
	Robert (Bob) Goldman - PM	*100%*		*$ 0,00*
	Ann Goldsmith - Team Member	*100%*		*$ 0,00*
51	4.1.2 Perform the awareness speech		2 hrs	$ 4.000,00
	KeyNote Awareness Speech	*1 Unit (s)*		*$ 4.000,00*
52	4.1.3 Evaluate the speech results		14 hrs	$ 2.800,00
	Ann Goldsmith - Team Member	*100%*		*$ 0,00*
	Ricardo Viana Vargas - Sponsor	*20%*		*$ 0,00*
	Allan Brown - Consultant	*100%*		*$ 2.800,00*
53	**4.2 PM TRAINING**		**24 days**	**$ 58.400,00**
54	**4.2.1 BASIC PM TRAINING**		**19 days**	**$ 44.800,00**
55	4.2.1.1 Schedule the basic PM training		1 day	$ 0,00
	Robert (Bob) Goldman - PM	*100%*		*$ 0,00*
56	4.2.1.2 Perform the basic PM training		15 days	$ 40.000,00
	Basic PM Training	*5 Class (s)*		*$ 40.000,00*
57	4.2.1.3 Evaluate the basic PM training results		3 days	$ 4.800,00
	Ann Goldsmith - Team Member	*100%*		*$ 0,00*
	Mara Coopers - Team Member	*100%*		*$ 0,00*
	Allan Brown - Consultant	*100%*		*$ 4.800,00*
58	**4.2.2 ADVANCED PM TRAINING**		**5 days**	**$ 13.600,00**
59	4.2.2.1 Schedule the advanced PM training		1 day	$ 0,00
	Robert (Bob) Goldman - PM	*100%*		*$ 0,00*
60	4.2.2.2 Perform the advanced PM training		3 days	$ 12.000,00
	Advanced PM Training	*1 Class (s)*		*$ 12.000,00*
61	4.2.2.3 Evaluate the advanced PM training results		1 day	$ 1.600,00
	Ann Goldsmith - Team Member	*100%*		*$ 0,00*
	Mara Coopers - Team Member	*100%*		*$ 0,00*
	Allan Brown - Consultant	*100%*		*$ 1.600,00*
62	**4.3 SOFTWARE TRAINING**		**42 days**	**$ 79.400,00**
63	**4.3.1 BASIC SOFTWARE TRAINING**		**13 days**	**$ 43.200,00**
64	4.3.1.1 Schedule the basic software training		1 day	$ 0,00
	Robert (Bob) Goldman - PM	*100%*		*$ 0,00*
65	4.3.1.2 Perform the basic software training		10 days	$ 40.000,00
	Basic Microsoft Office Project Training	*5 Class (s)*		*$ 40.000,00*
66	4.3.1.3 Evaluate the basic software training results		2 days	$ 3.200,00
	Ann Goldsmith - Team Member	*100%*		*$ 0,00*
	Mara Coopers - Team Member	*100%*		*$ 0,00*
	Allan Brown - Consultant	*100%*		*$ 3.200,00*
67	**4.3.2 ADVANCED SOFTWARE TRAINING**		**4 days**	**$ 15.600,00**
68	4.3.2.1 Schedule the advanced software training		1 day	$ 0,00
	Robert (Bob) Goldman - PM	*100%*		*$ 0,00*
69	4.3.2.2 Perform the advanced software training		2 days	$ 14.000,00
	Advanced Microsoft Office Project Training	*1 Class (s)*		*$ 14.000,00*
70	4.3.2.3 Evaluate the advanced software training results		1 day	$ 1.600,00
	Ann Goldsmith - Team Member	*100%*		*$ 0,00*
	Mara Coopers - Team Member	*100%*		*$ 0,00*
	Allan Brown - Consultant	*100%*		*$ 1.600,00*
71	**4.3.3 SOFTWARE SUPPORT TEAM TRAINING**		**12 days**	**$ 20.600,00**
72	4.3.3.1 Schedule the software support team training		1 day	$ 0,00
	Robert (Bob) Goldman - PM	*100%*		*$ 0,00*
73	4.3.3.2 Perform the software support team training		10 days	$ 19.000,00

Figure 4.27b

ID	Task Name	Units	Duration	Cost
	Support Team Training	*1 Class (s)*		*$ 19.000,00*
74	4.3.3.3 Evaluate the software support team training results		1 day	$ 1.600,00
	John Foster - IT	*50%*		*$ 0,00*
	Ann Goldsmith - Team Member	*100%*		*$ 0,00*
	Allan Brown - Consultant	*100%*		*$ 1.600,00*
75	4.4 Training completed		0 days	$ 0,00
	Robert (Bob) Goldman - PM	*100%*		*$ 0,00*
76	**5 CUSTOMIZATION**		**15 days**	**$ 9.600,00**
77	**5.1 TEMPLATE CUSTOMIZATION**		**15 days**	**$ 3.200,00**
78	5.1.1 Define the template standards		2 days	$ 3.200,00
	John Foster - IT	*50%*		*$ 0,00*
	Gianni River - Consultant	*100%*		*$ 3.200,00*
79	5.1.2 Prepare the templates		10 days	$ 0,00
	Louis Stone - IT	*100%*		*$ 0,00*
	Mara Coopers - Team Member	*100%*		*$ 0,00*
80	5.1.3 Test the template operation		2 days	$ 0,00
	John Foster - IT	*100%*		*$ 0,00*
	Robert (Bob) Goldman - PM	*100%*		*$ 0,00*
81	5.1.4 Approve the templates		1 day	$ 0,00
	John Foster - IT	*50%*		*$ 0,00*
82	**5.2 DMS CUSTOMIZATION**		**15 days**	**$ 3.200,00**
83	5.2.1 Define the DMS standards		16 hrs	$ 3.200,00
	John Foster - IT	*50%*		*$ 0,00*
	Robert (Bob) Goldman - PM	*100%*		*$ 0,00*
	Allan Brown - Consultant	*100%*		*$ 3.200,00*
84	5.2.2 Prepare the DMS parameters		10 days	$ 0,00
	Magan Porter - IT	*100%*		*$ 0,00*
	Mary Smith Jonson - Team Member	*100%*		*$ 0,00*
85	5.2.3 Test the DMS operation		2 days	$ 0,00
	Magan Porter - IT	*100%*		*$ 0,00*
	Mary Smith Jonson - Team Member	*100%*		*$ 0,00*
86	5.2.4 Approve the DMS		1 day	$ 0,00
	John Foster - IT	*50%*		*$ 0,00*
87	**5.3 REPORT CUSTOMIZATION**		**7 days**	**$ 1.600,00**
88	5.3.1 Define the report standards		1 day	$ 1.600,00
	John Foster - IT	*50%*		*$ 0,00*
	Gianni River - Consultant	*100%*		*$ 1.600,00*
89	5.3.2 Prepare the reports		4 days	$ 0,00
	Ronald Balmer - Team Member	*100%*		*$ 0,00*
	Tarik Brooks - Team Member	*100%*		*$ 0,00*
90	5.3.3 Test the report operation		1 day	$ 0,00
	John Foster - IT	*100%*		*$ 0,00*
91	5.3.4 Approve the reports		1 day	$ 0,00
	John Foster - IT	*50%*		*$ 0,00*
92	**5.4 DISPLAY MODE CUSTOMIZATION**		**7 days**	**$ 1.600,00**
93	5.4.1 Define the display mode standards		1 day	$ 1.600,00
	John Foster - IT	*50%*		*$ 0,00*
	Allan Brown - Consultant	*100%*		*$ 1.600,00*
94	5.4.2 Prepare the display mode		4 days	$ 0,00
	Marcy Stanley - TI	*100%*		*$ 0,00*
	Julian Shelley - Team Member	*100%*		*$ 0,00*
	Ann Goldsmith - Team Member	*100%*		*$ 0,00*
	Nielsen Matsushita - Team Member	*100%*		*$ 0,00*
95	5.4.3 Test the display mode operation		1 day	$ 0,00
	Marcy Stanley - TI	*100%*		*$ 0,00*
	Robert (Bob) Goldman - PM	*100%*		*$ 0,00*
96	5.4.4 Approve the display mode		1 day	$ 0,00
	John Foster - IT	*50%*		*$ 0,00*
97	5.5 Standards estabilished		0 days	$ 0,00
	Robert (Bob) Goldman - PM	*100%*		*$ 0,00*
98	**6 PILOT**		**31 days**	**$ 22.400,00**
99	**6.1 PILOT PROJECT DEFINITION**		**2 days**	**$ 1.600,00**
100	6.1.1 Define the pilot project theme		1 day	$ 1.600,00
	John Foster - IT	*50%*		*$ 0,00*
	Robert (Bob) Goldman - PM	*100%*		*$ 0,00*
	Ricardo Viana Vargas - Sponsor	*100%*		*$ 0,00*
	Allan Brown - Consultant	*100%*		*$ 1.600,00*
101	6.1.2 Approve the pilot-project theme		1 day	$ 0,00
	Ricardo Viana Vargas - Sponsor	*20%*		*$ 0,00*
102	**6.2 PILOT PROJECT PLANNING**		**6 days**	**$ 8.000,00**
103	6.2.1 Prepare the pilot project global plan		5 days	$ 8.000,00
	Robert (Bob) Goldman - PM	*100%*		*$ 0,00*
	Ronald Balmer - Team Member	*100%*		*$ 0,00*
	Mara Coopers - Team Member	*100%*		*$ 0,00*
	Allan Brown - Consultant	*100%*		*$ 8.000,00*
104	6.2.2 Approve the pilot project global plan		1 day	$ 0,00
	Ricardo Viana Vargas - Sponsor	*20%*		*$ 0,00*
105	**6.3 PILOT PROJECT EXECUTION AND EVALUATION**		**18 days**	**$ 4.800,00**
106	6.3.1 Execute the pilot project		15 days	$ 0,00
	Robert (Bob) Goldman - PM	*100%*		*$ 0,00*
	Mara Coopers - Team Member	*100%*		*$ 0,00*
107	6.3.2 Evaluate the pilot project results		3 days	$ 4.800,00
	John Foster - IT	*50%*		*$ 0,00*
	Ricardo Viana Vargas - Sponsor	*20%*		*$ 0,00*
	Allan Brown - Consultant	*100%*		*$ 4.800,00*
108	**6.4 CORRECTIVE ACTIONS**		**5 days**	**$ 8.000,00**
109	6.4.1 Perform the corrective actions based on the pilot project results		5 days	$ 8.000,00
	Robert (Bob) Goldman - PM	*100%*		*$ 0,00*
	Julian Shelley - Team Member	*100%*		*$ 0,00*

Figure 4.27c

ID	Task Name	Units	Duration	Cost
	Ann Goldsmith - Team Member	*100%*		*$ 0,00*
	Allan Brown - Consultant	*100%*		*$ 8.000,00*
110	6.5 Pilot performed and evaluated		0 days	$ 0,00
	Robert (Bob) Goldman - PM	*100%*		*$ 0,00*
111	**7 RESULTS**		**3 days**	**$ 6.400,00**
112	7.1 Present the results, customization and pilot		2 days	$ 6.400,00
	John Foster - IT	*50%*		*$ 0,00*
	Robert (Bob) Goldman - PM	*100%*		*$ 0,00*
	Ronald Balmer - Team Member	*100%*		*$ 0,00*
	Ricardo Viana Vargas - Sponsor	*20%*		*$ 0,00*
	Allan Brown - Consultant	*100%*		*$ 3.200,00*
	Gianni River - Consultant	*100%*		*$ 3.200,00*
113	7.2 Project Implementation approved		0 hrs	$ 0,00
	Ricardo Viana Vargas - Sponsor	*100%*		*$ 0,00*
114	7.3 Project close-out		1 day	$ 0,00

Figure 4.27d

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 12/03/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
DISBURSEMENT SCHEDULE		
Prepared by	Nielsen Matsushita — team member	Version 2
Approved by	Bob Goldman — project manager	12/03/2010

	January	February	March	April	May	June	Total
NEW FRONTIERS PROJECT							
DIAGNOSIS							
Have the project kick-off meeting	$ 1.600,00						$ 1.600,00
Gather the project team and define the committee	$ 13.200,00						$ 13.200,00
Prepare the work scope	$ 4.800,00						$ 4.800,00
Create the responsible committee							
Approve the committee							
Approve the work scope							
Diagnosis completed							
SOFTWARE							
OPERATING SYSTEM							
Quote the operating system (Windows Vista)							
Purchase the software (Operating System)	$ 76.500,00						$ 76.500,00
Install the operating system							
Test the operating system							
DATABASE							
Quote Microsoft SQL Server							
Purchase the software (database)	$ 2.000,00						$ 2.000,00
Install the database							
Prepare the project data table							
Test the database							
PROJECT MANAGEMENT							
Quote Microsoft Office Project							
Purchase the software (Project Management)	$ 121.500,00						$ 121.500,00
Install Microsoft Office Project on server and users							
Test the software (Project Management)							
DOCUMENT MANAGEMENT SYSTEM (DMS)							
Identify potential DMS application suppliers	$ 8.000,00						$ 8.000,00
Request presentations on the products	$ 3.200,00						$ 3.200,00
Define the DMS seller							
Purchase the software (DMS)		$ 8.500,00					$ 8.500,00
Install the software (DMS)							
Test the software (DMS)							
INTEGRATED TESTING							
Perform the integrated test							
Evaluate the integrated test							
Perform the required corrections							
Software installed							
HARDWARE							
SERVER							
Purchase servers	$ 20.000,00						$ 20.000,00
Install servers							
Test the servers physically and logically							
CUSTOMERS/USERS							
Purchase the users' computers	$ 495.000,00						$ 495.000,00
Install the users' computers							
Test the users' computers physically and logically							
Hardware installed							
TRAINING							
SPEECH							
Schedule the awareness speech							
Perform the awareness speech	$ 4.000,00						$ 4.000,00
Evaluate the speech results	$ 2.800,00						$ 2.800,00
PM TRAINING							

Figure 4.28a

	January	February	March	April	May	June	Total
BASIC PM TRAINING							
Schedule the basic PM training							
Perform the basic PM training		$ 40.000,00					$ 40.000,00
Evaluate the basic PM training results		$ 4.800,00					$ 4.800,00
ADVANCED PM TRAINING							
Schedule the advanced PM training							
Perform the advanced PM training		$ 12.000,00					$ 12.000,00
Evaluate the advanced PM training results		$ 1.600,00					$ 1.600,00
SOFTWARE TRAINING							
BASIC SOFTWARE TRAINING							
Schedule the basic software training							
Perform the basic software training				$ 40.000,00			$ 40.000,00
Evaluate the basic software training results				$ 3.200,00			$ 3.200,00
ADVANCED SOFTWARE TRAINING							
Schedule the advanced software training							
Perform the advanced software training				$ 14.000,00			$ 14.000,00
Evaluate the advanced software training results				$ 1.600,00			$ 1.600,00
SOFTWARE SUPPORT TEAM TRAINING							
Schedule the software support team training							
Perform the software support team training			$ 19.000,00				$ 19.000,00
Evaluate the software support team training results			$ 1.600,00				$ 1.600,00
Training completed							
CUSTOMIZATION							
TEMPLATE CUSTOMIZATION							
Define the template standards				$ 3.200,00			$ 3.200,00
Prepare the templates							
Test the template operation							
Approve the templates							
DMS CUSTOMIZATION							
Define the DMS standards				$ 3.200,00			$ 3.200,00
Prepare the DMS parameters							
Test the DMS operation							
Approve the DMS							
REPORT CUSTOMIZATION							
Define the report standards				$ 1.600,00			$ 1.600,00
Prepare the reports							
Test the report operation							
Approve the reports							
DISPLAY MODE CUSTOMIZATION							
Define the display mode standards				$ 1.600,00			$ 1.600,00
Prepare the display mode							
Test the display mode operation							
Approve the display mode							
Standards established							
PILOT							
PILOT PROJECT DEFINITION							
Define the pilot project theme					$ 1.600,00		$ 1.600,00
Approve the pilot-project theme							
PILOT PROJECT PLANNING							
Prepare the pilot project global plan					$ 8.000,00		$ 8.000,00
Approve the pilot project global plan							
PILOT PROJECT EXECUTION AND EVALUATION							
Execute the pilot project							
Evaluate the pilot project results						$ 4.800,00	$ 4.800,00

Figure 4.28b

	January	February	March	April	May	June	Total
CORRECTIVE ACTIONS							
Perform the corrective actions based on the pilot project results						$ 8.000,00	$ 8.000,00
Pilot performed and evaluated							
RESULTS							
Present the results, customization and pilot						$ 6.400,00	$ 6.400,00
Project implementation approved							
Project close-out							
Total	$ 752.600,00	$ 66.900,00	$ 20.600,00	$ 68.400,00	$ 9.600,00	$ 19.200,00	$ 937.300,00

Figure 4.28c

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 12/06/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
S-CURVE (CUMULATIVE COSTS CURVE)		
Prepared by	Nielsen Matsushita — Team member	Version 2
Approved by	Bob Goldman — Project manager	12/03/2010

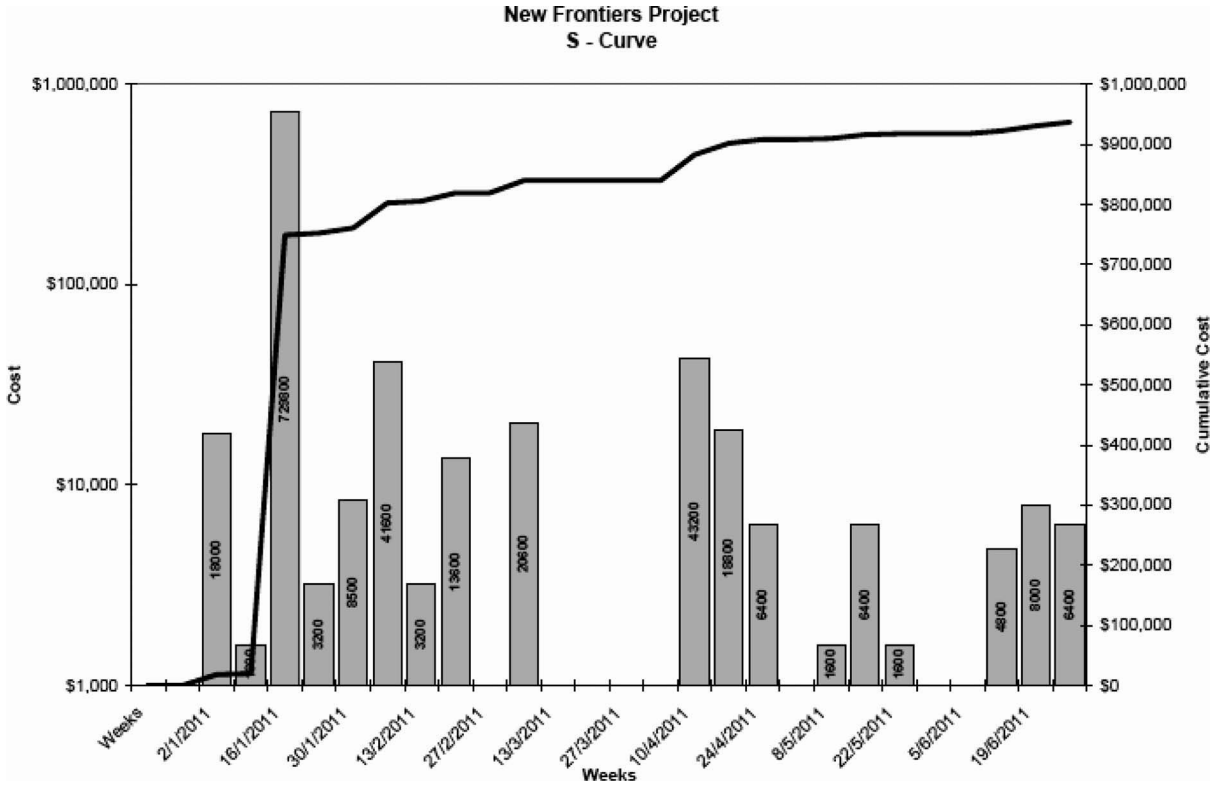


Figure 4.29

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 12/06/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
COST MANAGEMENT PLAN		
Prepared by	Nielsen Matsushita — team member	Version 3
Approved by	Bob Goldman — project manager	11/30/2010

I. Description of Cost Management Processes

- The project budget updating will be accomplished in Microsoft Office Project by publishing the budget tracking report on the project Web site.
- The project performance evaluation will be accomplished by means of the Earned Value Management System (EVMS), in which the project cost and schedule are tracked in a single control process.
- The project cost management will be accomplished based on the budget planned for the project (split per task and per resource), as well as through the project disbursement schedule.
- The cost management plan will acknowledge only additional expenses arising from procurement and external hiring. Costs regarding personnel and internal resources will not be accounted in the project.
- Issues of an inflationary and exchange rate nature will be ignored during the duration of the project.
- All changes to the initial project budget shall be evaluated and rated within the Cost Change Control System.
- Only corrective measures will be considered to be budget changes. Innovations and new product or project characteristics will not be covered by cost management and will be ignored.
- All funding requests shall be made in writing or through e-mail, as described in the project communications plan.

II. Evaluation Frequency of Project Budget and Management Reserves

The project budget shall be updated and evaluated daily and the results published on the project site and presented in the weekly CCB meeting, included in the communications management plan.

The reserves shall be evaluated weekly, and the results and balance presented in the weekly CCB meeting, included in the communications management plan.

III. Financial Reserves

The sponsor approved a total management reserve of $60,000 (sixty thousand dollars). The total reserves are split into contingency reserves and management reserves, which together with the project budget constitute the final cost. See Figure 4.30.

Contingency reserves — Contingency reserves are reserves provided exclusively for identified risks, as described in the risk management plan.
Management reserves — Management reserves are all the reserves provided for other events not considered as project risks.

The reserves will be spent based on change requests arising from other plans and within the project manager's and the sponsor's authority.

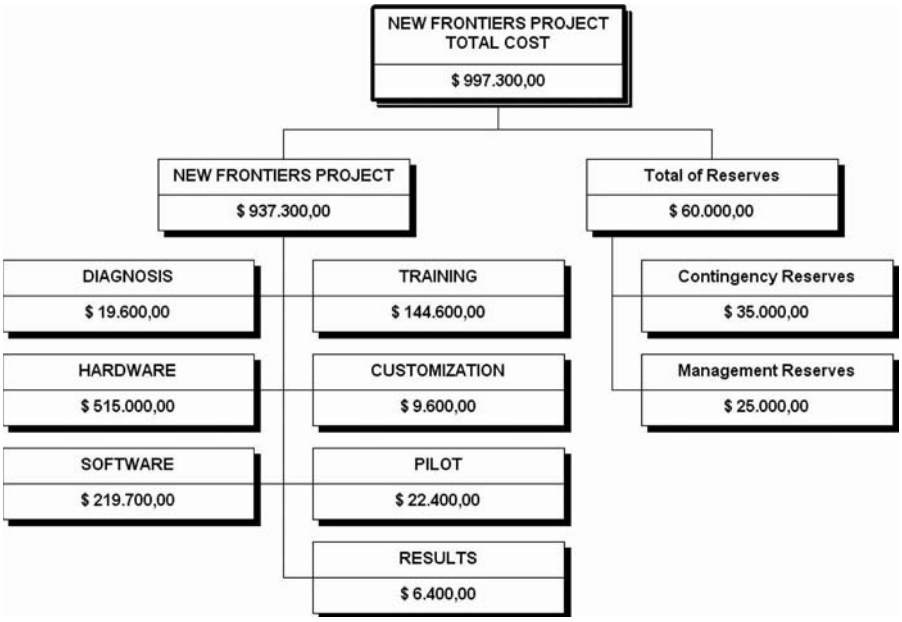


Figure 4.30

IV. Authority for Using Financial Reserves

The project manager and sponsor have the authority to use reserves as follows:

	Contingency Reserves	*Management Reserves*
Project manager only	Up to $3,500	Up to $5,000
Project manager with the sponsor's endorsement	Up to $7,000	Up to $10,000
Sponsor only	Above $7,000 and up to the limit of the reserves	Above $10,000 and up to the limit of the reserves

The authority is valid for each change request arising from other plans, and the project manager may spend all the reserves by making different change requests.

When the reserves are exhausted, only the sponsor may request and decide about the creation of new reserves, as will be further presented in this plan.

As described in the staff management plan, at the end of the project, 20% of the balance left in the reserves (total) will be allocated for distribution to all team members, including the project manager, equally, regardless of the position.

V. Cost Allocation for Budget Changes

Corrective-nature changes may be allocated to the project reserves, as management reserves.

When priority corrective changes are beyond the project manager's authority or when there is no management reserve available, the sponsor shall be notified, because the project manager does not have the necessary authority to request the company's senior management for an increase in the management reserves.

VI. Administration of Cost Management Plan

1. **Persons responsible for the plan:**
   - Nielsen Matsushita, project team member, will be the person directly responsible for the cost management plan.
   - Julian Shelley, project team member, will be the substitute for the person directly responsible for the cost management plan.

2. **Frequency of updating the cost management plan:**
   The cost management plan will be reevaluated monthly in the first CCB meeting of the month, together with other project management plans.

   The plan updating needs before the first project CCB meeting shall be dealt with according to the procedures described in the item *other issues not included in this plan*.

VII. Other Subjects Related to Project Cost Management Not Included in Plan

All requests not included in this plan shall be submitted to the CCB meeting for approval. Immediately after its approval, the cost management plan, including the log of the changes carried out, shall be updated.

CHANGE LOG		
Date	*Modified by*	*Change Description*
11/30/2010	Bob Goldman	Insertion of team bonus comments

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 11/30/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

4.5 Project Quality Management

NEW FRONTIERS PROJECT		
QUALITY MANAGEMENT PLAN		
Prepared by	Mara Coopers — team member	Version 3
Approved by	Bob Goldman — project manager	11/15/2010

I. Description of Quality Management Processes

- Quality management will be accomplished based on the ISO 9000/2000 standard, for which the company has been certified.
- The procedures specified by ISO for the company projects are not described in this plan because they belong to the company's quality procedures.
- All client complaints, as well as products and deliveries not in accordance with the scope statement shall be dealt with as corrective measures in the quality management plan.
- All changes to the initial project quality requirements shall be evaluated and rated within the Quality Change Control System.
- Only corrective measures will be considered as quality changes and, when affecting the project success, shall be integrated to the plan. Innovations and new quality levels will not be considered by the quality management process.
- All quality change requests shall be made in writing or through e-mail, as described in the project communications plan.

II. Quality Requirements

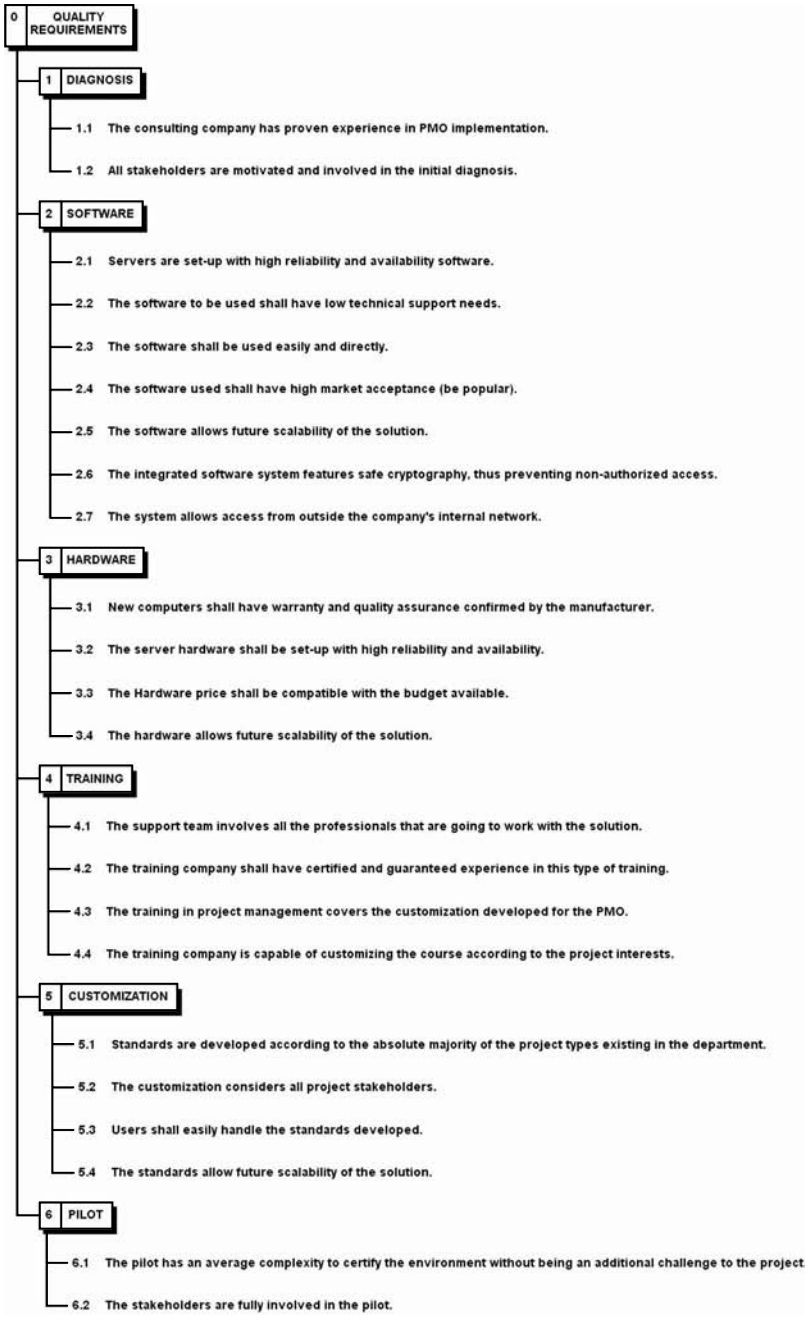


Figure 4.31

III. Quality Standards

Phase	Requirement	Standards
DIAGNOSIS	The consulting company has proven experience in PMO implementation.	• The company must be qualified as a Microsoft Gold Certified Partner in Enterprise Systems. • The company shall be a PMI partner classified as Registered Education Provider (REP). • The company shall present at least 5 (five) Technical Capacity Certificates in Projects of the same size.
DIAGNOSIS	All stakeholders are motivated and involved in the initial diagnosis.	• All summoned project team members shall participate in the diagnosis. • The sponsor shall participate directly.
SOFTWARE	Servers are set-up with high reliability and availability software.	• Server software, database and DMS applications shall feature 24/7 operational capacity with 99.9999% availability certified by the manufacturer.
SOFTWARE	The software to be used shall have low technical support needs.	• All software manufacturers shall confirm remote support. • All sellers shall make the user manual available electronically to all users.
SOFTWARE	The software shall be used easily and directly.	• After the training, at least 90% of the students will be able to operate the system directly, without need for support.
SOFTWARE	The software used shall have high market acceptance (be popular).	• The software market share in the country shall be above 50%. • Companies providing software service shall be found in the main capitals in the country.
SOFTWARE	The software allows future scalability of the solution.	• The software shall be used at less than 25% of the technical limit established by the manufacturer.
SOFTWARE	The integrated software system features safe cryptography, thus preventing non-authorized access.	• The login system shall have minimum cryptography of 256-bit RC4 for access.
SOFTWARE	The system allows access from outside the company's internal network.	• The system shall allow access via Virtual Private Network or VPN.
HARDWARE	New computers shall have warranty and quality assurance confirmed by the manufacturer.	• The equipment shall be warranted for 3 years on site. • The company manufacturing the hardware shall feature worldwide activity and complete infrastructure within the country.
HARDWARE	The server hardware shall be set-up with high reliability and availability.	• Servers shall feature 24/7 operational capacity with 99.9999% availability confirmed by the manufacturer.
HARDWARE	The Hardware price shall be compatible with	• The hardware cost shall not exceed 60% of the overall project budget.

Figure 4.32a

Phase	Requirement	Standards
	shall be compatible with the budget available.	60% of the overall project budget.
HARDWARE	The hardware allows future scalability of the solution.	• The hardware shall be used at less than 25% of the technical limit established by the manufacturer.
TRAINING	The support team involves all the professionals that are going to work with the solution.	• The entire IT team allocated to the project shall participate in the training.
TRAINING	The training company shall have certified and guaranteed experience in this type of training.	• The company shall be a Microsoft Gold Certified Partner in Enterprise Systems. • The company shall be a PMI partner classified as Registered Education Provider (REP). • The company shall present at least 5 (five) Technical Capacity Certificates for training of the same magnitude using the Microsoft Platform. • The company shall bear the ISO 9000 certification for training. • The company shall have its own infrastructure to train the support team.
TRAINING	The training in project management covers the customization developed for the PMO.	• All the standards developed during the standardization phase shall be presented as tools in the project management training. • All the standards developed during the standardization phase shall be used in the software and in the support team training.
TRAINING	The training company is capable of customizing the course according to the project interests.	• The company shall prove, by means of one (1) certificate, that it has already accomplished content customization in clients with the same size and complexity.
CUSTOMIZATION	Standards are developed according to the absolute majority of the project types existing in the department.	• The standard established shall be employed in at least 90% of the department projects without any need for additional customization.
CUSTOMIZATION	The customization considers all project stakeholders.	• The human resources to be used in the customization shall represent all the project stakeholders. • The project manager shall participate in the customization validation process.
CUSTOMIZATION	Users shall easily handle the standards developed.	• After the training, at least 90% of the students will be able to operate the system directly, without need for support.
CUSTOMIZATION	The standards allow	• The document standards use popular

Figure 4.32b

Phase	Requirement	Standards
	future scalability of the solution.	market tools (MS Office) and can be easily changed.
PILOT	The pilot has an average complexity to certify the environment without being an additional challenge to the project.	• The pilot shall use all the standards developed. • The pilot project shall be a project fully within the department control. • The pilot shall involve few stakeholders.
PILOT	The stakeholders are fully involved in the pilot.	• The project manager and the sponsor shall participate directly in the pilot. • The participation of the strategic users in the process shall be confirmed through minutes of meeting.

Figure 4.32c

IV. Priority of Quality Requirement Changes

Quality requirement changes are rated at four priority levels:

Priority 0 (zero) — Priority-zero changes require immediate action by the project manager, who shall immediately notify the sponsor, because the change is urgent and has significant impact on the project and on other areas over which the project manager has no authority.

Priority 1 (one) — Priority-one changes require immediate action by the project manager, regardless of the control meetings planned, because of the urgency, and the sponsor shall be immediately notified when financial authorizations beyond the scope of the project manager are needed.

Priority 2 (two) — Priority-two changes require an action plan by third parties or by teams that, in principle, have availability, because they add value to the project success and are urgent, but have no significant impact on costs and on the project schedule.

Priority 3 (three) — Priority-three changes can be implemented as they have an influence on the project success, but they do not require urgent action because they have no immediate impact.

V. Quality Change Control System

All project quality changes shall be treated according to the flowchart presented below with their conclusions presented in the weekly CCB meeting with its conclusions, priorities, and related actions.

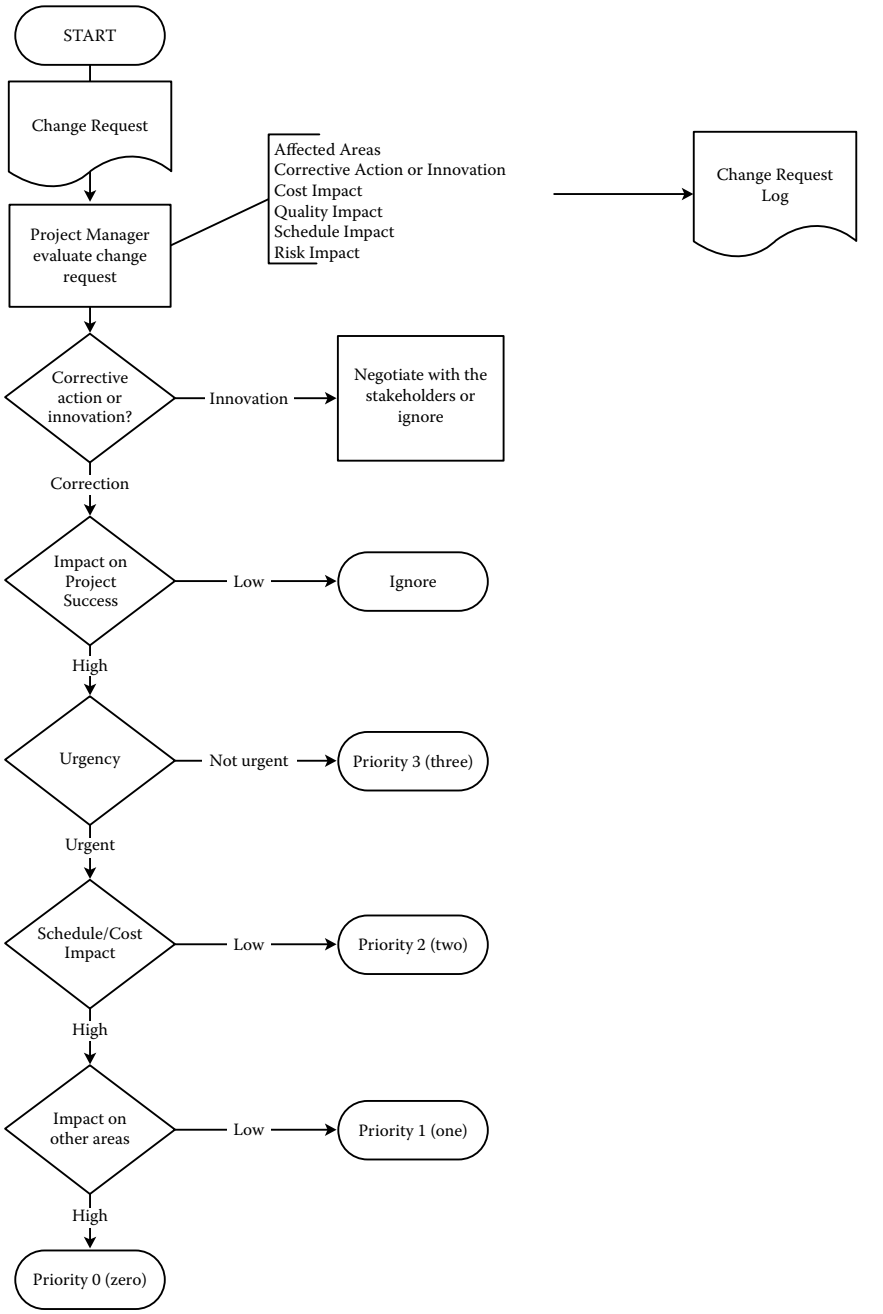


Figure 4.33

VI. Frequency of Project Quality Processes Evaluation

The project quality processes shall be evaluated weekly at the CCB meeting, included in the communications management plan.

VII. Cost Allocation for Quality Changes

Quality changes may be allocated to the project reserves, as management reserves.

When priority quality changes are beyond the project manager's authority or when there is no management reserve available, the sponsor shall be notified, because the project manager does not have the necessary authority to decide about the use of the risk contingency reserve for quality changes or to ask the company's senior management for an increase in management reserves.

VIII. Administration of Quality Management Plan

1. **Persons responsible for the plan:**
   - Mara Coopers, project team member, will be the person directly responsible for the quality management plan.
   - Ann Goldsmith, project team member, will be the substitute for the person directly responsible for the quality management plan.

2. **Frequency of updating the quality management plan:**
   The quality management plan will be reevaluated *monthly* in the first monthly CCB meeting, together with the other project management plans.

   The plan updating needs before the first project CCB meeting shall be dealt with according to the procedures described in the item *other issues not included in this plan*.

IX. Other Subjects Related to Project Quality Management Not Included in Plan

All requests not included in this plan shall be submitted to the CCB meeting for approval. Immediately after its approval, the quality management plan, including the log of the changes carried out, shall be updated.

CHANGE LOG		
Date	*Modified by*	*Change Description*
11/15/2010	Bob Goldman	Insertion of new priorities for project quality requirements changes

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 11/15/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

4.6 Project Human Resources Management

NEW FRONTIERS PROJECT		
HUMAN RESOURCES LIST		
Prepared by	Bob Goldman — project manager	Version 3
Approved by	Bob Goldman — project manager	11/18/2010

Name	Group	Initials	Material Label	Max Units	Standard Rate	Accrue At	Base Calendar
Allan Brown - Consultant	Consulting Services	Allan		100%	$ 200,00/hr	Prorated	Standard
Ann Goldsmith - Team Member	Team Member	Ann		100%	$ 0,00/hr	Prorated	Standard
Caroline Smith - IT	IT	Caroline		100%	$ 0,00/hr	Prorated	Standard
Gianni River - Consultant	Consulting Services	Gianni		100%	$ 200,00/hr	Prorated	Standard
John Foster - IT	IT	John		100%	$ 0,00/hr	Prorated	Standard
Julian Shelley - Team Member	Team Member	Julian		100%	$ 0,00/hr	Prorated	Standard
Louis Stone - IT	IT	Louis		100%	$ 0,00/hr	Prorated	Standard
Magan Porter - IT	IT	Magan		100%	$ 0,00/hr	Prorated	Standard
Mara Coopers - Team Member	Team Member	Mara		100%	$ 0,00/hr	Prorated	Standard
Marcy Stanley - TI	IT	Márcia		100%	$ 0,00/hr	Prorated	Standard
Mark Case - Purchases	Purchases	Mark		100%	$ 0,00/hr	Prorated	Standard
Mary Smith Jonson - Team Member	Team Member	Maria Sônia		100%	$ 0,00/hr	Prorated	Standard
Nielsen Matsushita - Team Member	Team Member	Nielsen		100%	$ 0,00/hr	Prorated	Standard
Ricardo Viana Vargas - Sponsor	Sponsor	Ricardo		100%	$ 0,00/hr	Prorated	Standard
Robert (Bob) Goldman - PM	Project Manager	Bob		100%	$ 0,00/hr	Prorated	Standard
Ronald Balmer - Team Member	Team Member	Ronald		100%	$ 0,00/hr	Prorated	Standard
Tarik Brooks - Team Member	Team Member	Tarik		100%	$ 0,00/hr	Prorated	Standard

Figure 4.34

APPROVALS		
Bob Goldman Project manager	Bob Goldman	Date 12/06/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
WHO DOES WHAT REPORT		
Prepared by	Bob Goldman — project manager	Version 3
Approved by	Bob Goldman — project manager	11/18/2010

WBS	Resource Name
	Unassigned
	Allan Brown - Consultant
5.4.1	*Define the display mode standards*
5.2.1	*Define the DMS standards*
6.1.1	*Define the pilot project theme*
4.2.2.3	*Evaluate the advanced PM training results*
4.3.2.3	*Evaluate the advanced software training results*
4.2.1.3	*Evaluate the basic PM training results*
4.3.1.3	*Evaluate the basic software training results*
6.3.2	*Evaluate the pilot project results*
4.3.3.3	*Evaluate the software support team training results*
4.1.3	*Evaluate the speech results*
1.2	*Gather the project team and define the committee*
1.1	*Have the project kick-off meeting*
6.4.1	*Perform the corrective actions based on the pilot project results*
6.2.1	*Prepare the pilot project global plan*
1.3	*Prepare the work scope*
7.1	*Present the results, customization and pilot*
2.4.2	*Request presentations on the products*
	Ann Goldsmith - Team Member
4.2.2.3	*Evaluate the advanced PM training results*
4.3.2.3	*Evaluate the advanced software training results*
4.2.1.3	*Evaluate the basic PM training results*
4.3.1.3	*Evaluate the basic software training results*
2.5.2	*Evaluate the integrated test*
4.3.3.3	*Evaluate the software support team training results*
4.1.3	*Evaluate the speech results*
6.4.1	*Perform the corrective actions based on the pilot project results*
5.4.2	*Prepare the display mode*
4.1.1	*Schedule the awareness speech*
	Caroline Smith - IT
2.5.2	*Evaluate the integrated test*
2.3.3	*Install Microsoft Office Project on server and users*
3.1.2	*Install servers*
2.1.3	*Install the operating system*
2.4.5	*Install the software (DMS)*
2.5.1	*Perform the integrated test*
2.2.5	*Test the database*
3.1.3	*Test the servers physically and logically*
2.3.4	*Test the software (Project Management)*
	Gianni River - Consultant
5.3.1	*Define the report standards*
5.1.1	*Define the template standards*
2.4.1	*Identify potential DMS application suppliers*
7.1	*Present the results, customization and pilot*
	John Foster - IT
5.4.4	*Approve the display mode*
5.2.4	*Approve the DMS*
5.3.4	*Approve the reports*
5.1.4	*Approve the templates*
1.4	*Create the responsible committee*
5.4.1	*Define the display mode standards*
2.4.3	*Define the DMS seller*
5.2.1	*Define the DMS standards*
6.1.1	*Define the pilot project theme*
5.3.1	*Define the report standards*
5.1.1	*Define the template standards*
6.3.2	*Evaluate the pilot project results*
4.3.3.3	*Evaluate the software support team training results*
1.2	*Gather the project team and define the committee*
2.4.1	*Identify potential DMS application suppliers*
2.5.1	*Perform the integrated test*
1.3	*Prepare the work scope*
7.1	*Present the results, customization and pilot*
2.4.2	*Request presentations on the products*
5.3.3	*Test the report operation*
5.1.3	*Test the template operation*
	Julian Shelley - Team Member
6.4.1	*Perform the corrective actions based on the pilot project results*
5.4.2	*Prepare the display mode*
2.1.4	*Test the operating system*
	Louis Stone - IT
2.5.2	*Evaluate the integrated test*
2.2.3	*Install the database*
2.1.3	*Install the operating system*
2.4.5	*Install the software (DMS)*
3.2.2	*Install the users' computers*
5.1.2	*Prepare the templates*
	Magan Porter - IT
2.5.2	*Evaluate the integrated test*
3.2.2	*Install the users' computers*
2.5.1	*Perform the integrated test*
5.2.2	*Prepare the DMS parameters*
5.2.3	*Test the DMS operation*
2.4.6	*Test the software (DMS)*

Figure 4.35a

WBS	Resource Name
3.2.3	*Test the users' computers physically and logically*
	Mara Coopers - Team Member
4.2.2.3	*Evaluate the advanced PM training results*
4.3.2.3	*Evaluate the advanced software training results*
4.2.1.3	*Evaluate the basic PM training results*
4.3.1.3	*Evaluate the basic software training results*
6.3.1	*Execute the pilot project*
6.2.1	*Prepare the pilot project global plan*
5.1.2	*Prepare the templates*
	Marcy Stanley - TI
2.4.1	*Identify potential DMS application suppliers*
3.1.2	*Install servers*
2.2.3	*Install the database*
5.4.2	*Prepare the display mode*
2.2.4	*Prepare the project data table*
2.4.2	*Request presentations on the products*
5.4.3	*Test the display mode operation*
2.1.4	*Test the operating system*
2.4.6	*Test the software (DMS)*
3.2.3	*Test the users' computers physically and logically*
	Mark Case - Purchases
2.4.3	*Define the DMS seller*
3.1.1	*Purchase servers*
2.2.2	*Purchase the software (database)*
2.4.4	*Purchase the software (DMS)*
2.1.2	*Purchase the software (Operating System)*
2.3.2	*Purchase the software (Project Management)*
3.2.1	*Purchase the users' computers*
2.3.1	*Quote Microsoft Office Project*
2.2.1	*Quote Microsoft SQL Server*
2.1.1	*Quote the operating system (Windows Vista)*
	Mary Smith Jonson - Team Member
5.2.2	*Prepare the DMS parameters*
5.2.3	*Test the DMS operation*
	Nielsen Matsushita - Team Member
2.5.3	*Perform the required corrections*
5.4.2	*Prepare the display mode*
	Ricardo Viana Vargas - Sponsor
1.5	*Approve the committee*
6.2.2	*Approve the pilot project global plan*
6.1.2	*Approve the pilot-project theme*
1.6	*Approve the work scope*
6.1.1	*Define the pilot project theme*
6.3.2	*Evaluate the pilot project results*
4.1.3	*Evaluate the speech results*
1.2	*Gather the project team and define the committee*
1.1	*Have the project kick-off meeting*
7.1	*Present the results, customization and pilot*
7.2	*Project Implementation approved*
	Robert (Bob) Goldman - PM
1.5	*Approve the committee*
1.6	*Approve the work scope*
1.4	*Create the responsible committee*
5.2.1	*Define the DMS standards*
6.1.1	*Define the pilot project theme*
1.7	*Diagnosis completed*
2.5.2	*Evaluate the integrated test*
6.3.1	*Execute the pilot project*
1.2	*Gather the project team and define the committee*
3.3	*Hardware installed*
1.1	*Have the project kick-off meeting*
6.4.1	*Perform the corrective actions based on the pilot project results*
2.5.1	*Perform the integrated test*
6.5	*Pilot performed and evaluated*
6.2.1	*Prepare the pilot project global plan*
1.3	*Prepare the work scope*
7.1	*Present the results, customization and pilot*
4.2.2.1	*Schedule the advanced PM training*
4.3.2.1	*Schedule the advanced software training*
4.1.1	*Schedule the awareness speech*
4.2.1.1	*Schedule the basic PM training*
4.3.1.1	*Schedule the basic software training*
4.3.3.1	*Schedule the software support team training*
2.5.4	*Software installed*
5.5	*Standards established*
5.4.3	*Test the display mode operation*
5.1.3	*Test the template operation*
4.4	*Training completed*
	Ronald Balmer - Team Member
6.2.1	*Prepare the pilot project global plan*
5.3.2	*Prepare the reports*
7.1	*Present the results, customization and pilot*
	Tarik Brooks - Team Member
5.3.2	*Prepare the reports*

Figure 4.35b

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 12/06/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
STAFF MANAGEMENT PLAN		
Prepared by	Bob Goldman — project manager	Version 3
Approved by	Bob Goldman — project manager	11/20/2010

I. Project's Organizational Chart

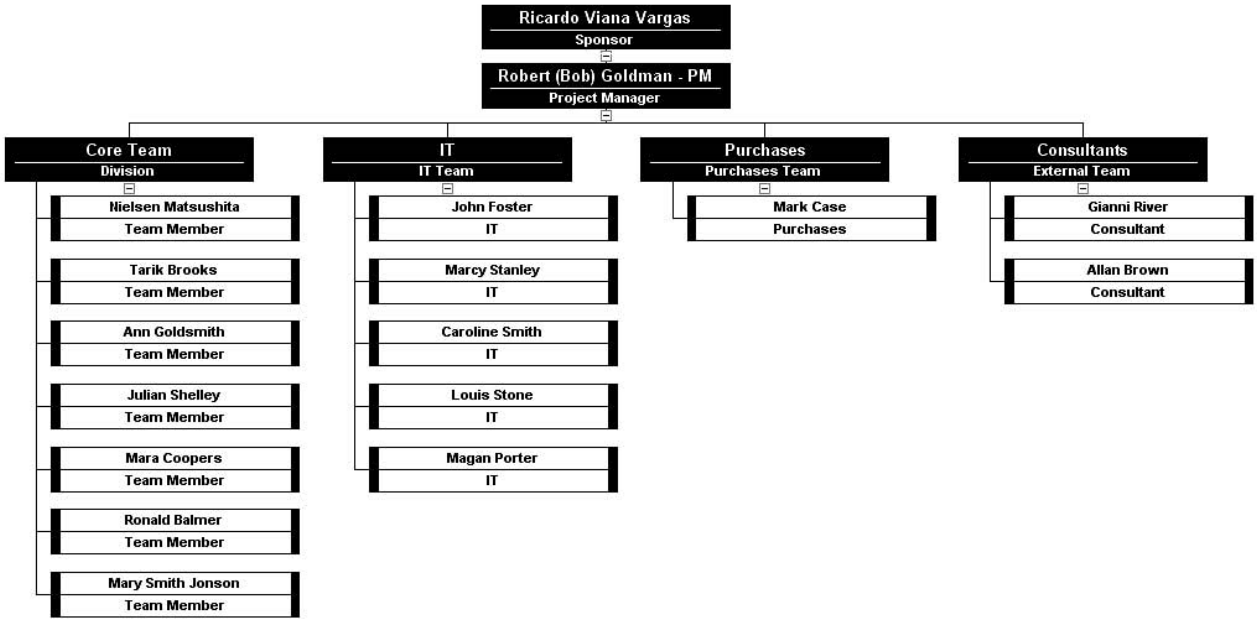


Figure 4.36

II. Project Team Directory

No	Name	Area	e-mail	Phone
1	Allan Brown	Consultant	allan.brown@ricardovargas.com.br	(212) 311-0000
2	Caroline Smith	IT	caroline.smith@ricardovargas.com.br	(212) 311-0001
3	Ann Goldsmith	Team Member	ann.goldsmith@ricardovargas.com.br	(212) 311-0002
4	Gianni River	Consultant	gianni.river@ricardovargas.com.br	(212) 311-0003
5	John Foster	IT	john.foster@ricardovargas.com.br	(212) 311-0004
6	Julian Shelley	Team Member	julian.shelley@ricardovargas.com.br	(212) 311-0005
7	Louis Stone	IT	louis.stone@ricardovargas.com.br	(212) 311-0006
8	Magan Porter	IT	magan.porter@ricardovargas.com.br	(212) 311-0007
9	Mara Coopers	Team Member	mara.coopers@ricardovargas.com.br	(212) 311-0008
10	Marcy Stanley	TI	marcy.stanley@ricardovargas.com.br	(212) 311-0009
11	Mark Case	Purchases	mark.case@ricardovargas.com.br	(212) 311-0010
12	Mary Smith Jonson	Team Member	mary.jonson@ricardovargas.com.br	(212) 311-0011
13	Nielsen Matsushita	Team Member	nielsen.matsushita@ricardovargas.com.br	(212) 311-0012
14	Ricardo Viana Vargas	Sponsor	ricardo.vargas@ricardovargas.com.br	(212) 311-0013
15	Robert (Bob) Goldman	PM	bob.goldman@ricardovargas.com.br	(212) 311-0014
16	Ronald Balmer	Team Member	ronald.balmer@ricardovargas.com.br	(212) 311-0015
17	Tarik Brooks	Team Member	tarik.brooks@ricardovargas.com.br	(212) 311-0016

Figure 4.37

III. Responsibility Matrix

No	Name	Area	Diagnosis	Software	Hardware	Training	Customization	Pilot	Results	Plans							
										Scope	Time	Cost	Quality	HR	Communications	Risks	Procurement
1	Allan Brown	Consultant	A			R		R	R								
2	Caroline Smith	IT		A	R												
3	Ann Goldsmith	Team Member				A	R	R					S				
4	Gianni River	Consultant		R					R								
5	John Foster	IT	R	R		R	R	S	R								
6	Julian Shelley	Team Member		R				R		A		S				A	S
7	Louis Stone	IT		S	R												
8	Magan Porter	IT		R	S												
9	Mara Coopers	Team Member				S	S	R					A				
10	Marcy Stanley	TI		R	A												
11	Mark Case	Purchases		R	R												
12	Mary Smith Jonson	Team Member					A			S						S	
13	Nielsen Matsushita	Team Member					R				S	A			S		A
14	Ricardo Viana Vargas	Sponsor	R						R								
15	Robert (Bob) Goldman	PM	S			R	R		A					A			
16	Ronald Balmer	Team Member						A	S					S			
17	Tarik Brooks	Team Member					R				A				A		

A - Accountable for successful completion of task (Final Authority) R - Responsible for the task execution S - Substitute (Second Accountable for the task)

Figure 4.38

IV. New Resources, Reallocation, and Replacement of Team Members

The project manager will demonstrate personal commitment to keep all team members together during the project, and will therefore coordinate the staff management plan.

In case of reallocation of a team member, it will be the manager's duty to identify and select, together with the Human Resources department, another professional in general agreement with the project guidelines and the functions to be performed, in which case the project manager will make the final decision.

The sponsor shall previously authorize new resources requested for the team, which will be fully funded by the project reserves (management reserves), even if they are the company's internal resources.

V. Training

There is no training planned for the project team besides the training described in its scope. The project manager shall previously approve any extraordinary training needs, and their costs will be allocated to the management reserves.

VI. Resource Performance Review

The team work results will be evaluated monthly by the project manager in individual meetings with each project team member and in joint meetings with the managers of project members who report to other company areas, such as the IT and procurement professionals.

The project manager will also be evaluated monthly by the project sponsor in the same way as the team members are evaluated.

At the end of the project, an evaluation meeting of each project member will take place, when the final evaluation compiled for each professional will be listed and sent to the Human Resources department for the company's annual performance review.

Such final compiled evaluation will be conducted using 360° performance evaluation as follows:

- The project manager will evaluate himself and will be evaluated by the sponsor as well as all team members.
- Each team member will accomplish a self-evaluation and will be evaluated by the project manager and at least three other members chosen at random.
- All results will be compiled in a single form, which will show the perception of each person involved in the evaluation process;
- Resources hired externally by supplies will not be evaluated through this process (consultants, instructors, etc.). See Figure 4.39.

VII. Bonus

At the end of the project, 20% of the reserve balance will be used for distribution to all the team members, including the project manager, equally, regardless of the position.

The bonus will be paid only after the project completion and to the team members who had full participation in it (refer to the project directory), performing the activities planned when they were initially allocated to the project. Reallocated or replaced team members will not be entitled to the bonus. The sponsor and the externally hired resources (consultants, instructors, etc.) will not participate in the bonus.

VIII. Frequency of Team Performance Review

The team's monthly evaluation results shall be compiled and presented in the last CCB monthly meeting, included in the communications management plan.

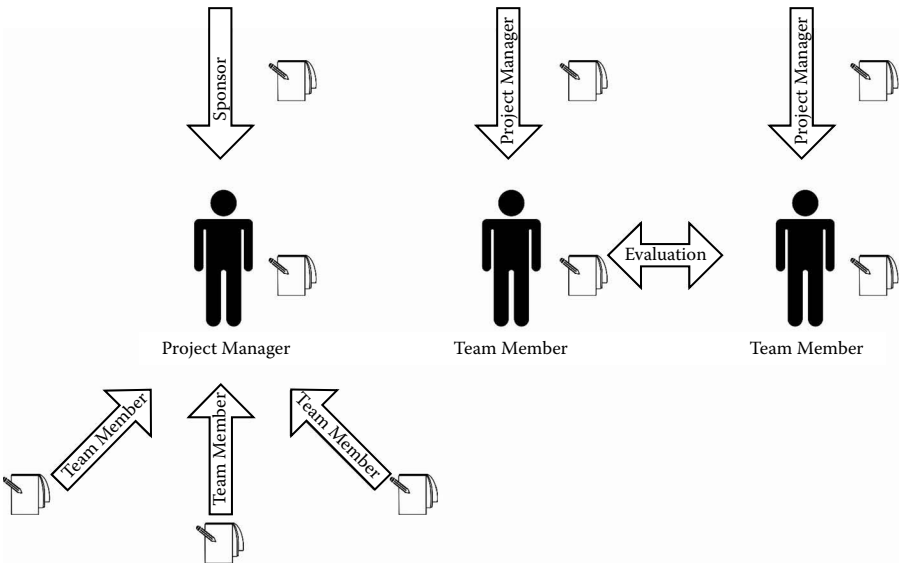


Figure 4.39

IX. Cost Allocation for Extraordinary Human Resources Needs

All the project's human resources management measures that require additional expenses shall be allocated to the project reserves, as management reserves.

When priority or urgent team management measures are beyond the project manager's authority or when there is no management reserve available, the sponsor shall be notified, because the project manager does not have the necessary authority to decide about the use of the risk contingency reserve for team management or to ask the company's senior management for an increase in management reserves.

X. Administration of Staff Management Plan

1. **Persons responsible for the plan:**
   - Bob Goldman, project manager, will be the person directly responsible for the staff management plan.
   - Ronald Balmer, project team member, will be the substitute for the person directly responsible for the staff management plan.

2. **Frequency of updating the staff management plan:**
   The staff management plan will be reevaluated monthly in the first monthly CCB meeting, together with other project management plans.

   The plan updating needs before the first project CCB meeting shall be dealt with according to the procedures described in the item *other issues not included in this plan*.

XI. Other Subjects Related to Project's Human Resources Management Not Included in Plan

All requests not included in this plan shall be submitted to the CCB meeting for approval. Immediately after its approval, the staff management plan, including the log of changes carried out, shall be updated.

CHANGE LOG		
Date	*Modified by*	*Change Description*
11/01/2010	Bob Goldman	Insertion of organization chart
11/20/2010	Bob Goldman	Insertion of responsibility matrix

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 11/20/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

4.7 Project Communications Management

NEW FRONTIERS PROJECT		
COMMUNICATIONS MANAGEMENT PLAN		
Prepared by	Tarik Brooks — team member	Version 2
Approved by	Bob Goldman — project manager	11/01/2010

I. Description of Communications Management Processes

- The project's communications management will be accomplished by formal communication processes. The project will consider the following formal tools and techniques:
  - E-mails
  - Web publishing
  - Memorandums
  - Printed documents
  - Meetings with written minutes

- All formal meetings will be held on Mondays to make available free time for the project works on the subsequent days.
- All the project information shall be constantly updated at the project site, including the daily cost and schedule updating.
- All change requests in the communications processes shall be made in writing or through e-mail and approved by the project manager.

II. Communication Events

The project will have the following communication events:

1. Kick-off meeting:
   a. Purposes — To start the project, presenting information regarding its purpose and its importance to the company, its schedules, its costs, etc. The main project deliverables and the high-level WBS elements shall also be presented. Another objective of the event is to motivate and provide executive support to the project manager and to his team to build a collaborative and integrated environment.
   b. Process — Presentation in an auditorium with the help of projector, computers, and sound systems.
   c. Responsible — Bob Goldman, project manager.
   d. People involved — The whole project team, the sponsor, and guests (company executives).
   e. Date and time — 01/03/11 at 09:00 a.m.
   f. Duration — 4 hr.
   g. Place — Auditorium A.
   h. Others — Attendance list required.
2. CCB meeting:
   a. Purposes — To evaluate all the project indicators, including the partial results obtained and the evaluation of schedule, budget, reserves, risks, quality standards, scope changes, and all the procurement processes. The CCB meeting focuses on the fulfillment of the project plan

and is also the main approval process for the change requests submitted to the Integrated Change Control System.
   b. Process — Meeting with the use of projector and computers connected to the project information system (Web).
   c. Responsible — Bob Goldman, project manager.
   d. People involved — Executive committee members (CCB).
   e. Frequency — Weekly on Mondays, starting on 01/10/11 and completing on 06/27/2011.
   f. Extraordinary meetings — Extraordinary CCB meetings may be requested through a formal request of the project manager based on the flow of the project's Integrated Change Control System.
   g. Duration — 2 hr, starting at 09:00 a.m.
   h. Place — Meeting room I, building C.
   i. Others — Minutes of meeting (including attendance list) required.
3. Team evaluation meeting:
   a. Purposes — To evaluate the project team performance, as included in the human resources management plan, in the results evaluation category. The agenda of the 06/27/11 meeting will contain the final team evaluation, when all the individual performance results of each team member, including the project managers, will be sent to the Human Resources department.
   b. Process — Individual meetings between the project team members and the Human Resources department professionals to fill in the professionals' performance evaluation, as described in the human resources plan.
   c. Responsible — Bob Goldman, project manager.
   d. People involved — Professionals of the Human Resources department and the project team members.
   e. Frequency — Monthly, every last Monday of the month, starting on 01/31/2011 and ending on 06/27/2011.
   f. Duration — 2 hr, starting at 11:00 (immediately after the CCB meeting).
   g. Place — Professional interview room — building B (Human Resources department).
   h. Others — Minutes of meeting (including attendance list) required.
4. Suppliers evaluation meeting:
   a. Purposes — To evaluate and anticipate potential issues regarding sellers and the delivery of supplies to the project, as presented in the procurement management plan.
   b. Process — Individual meetings with sellers to show the schedule and quality fulfillment indicators established in the agreements, as well as get feedback about possible difficulties found by sellers when performing their work. No project-specific information shall be provided, unless it is directly related to the supplied object.
   c. Responsible — Nielsen Matsushita, responsible for the procurement management plan.
   d. People involved — Tarik Brooks, responsible for the schedule and communications management plan, Nielsen Matsushita, responsible for the cost management plan and the reserves, and the sellers invited to provide clarifications.
   e. Frequency — Monthly, every second Monday of the month starting on 01/10/11 and ending on 13/06/2011.
   f. Duration — 2 hr, starting on 11:00 (immediately after the CCB meeting).
   g. Place — Meeting room II, building A (procurement department).
   h. Other — Minutes of meeting (including attendance list) required.
5. Meeting for project plans evaluation meeting:
   a. Purposes — To evaluate the effectiveness of the project management plans and check whether the specific objectives established in each plan are as a rule being achieved and whether the plan needs updating.
   b. Process — Meetings in which the plans and project rules, including issues, misspellings, and other problems, are evaluated one by one, with comments and suggestions allowed, so as to

make sure that the documents fulfill the project needs. All changes must be approved by the project manager.

c. Responsible — Tarik Brooks, responsible for the communications management plan.
d. People involved — All the project team members.
e. Frequency — Monthly, every first Monday of the month starting on 02/07/11 and ending on 06/06/2011.
f. Duration — 2 hr, starting at 11:00 a.m. (immediately after the CCB meeting).
g. Place — Meeting room I, building C.
h. Other — Minutes of meeting (including attendance list) required.

6. Project closure:
   a. Purposes — To present the project results as well as discuss the failures and issues that have occurred, so as to provide reliable lessons learned.
   b. Process — Presentation of results by the project manager, as well as a direct discussion using mindmaps about all possible questions and improvements for future projects.
   c. Responsible — Bob Goldman, project manager.
   d. People involved — The whole project team, the sponsor, and guests (company executives).
   e. Date and time — 06/30/2011 at 9:00.
   f. Duration — 4 hr.
   g. Place — Auditorium A.
   h. Other — Attendance list required.

III. Communication Events Schedule

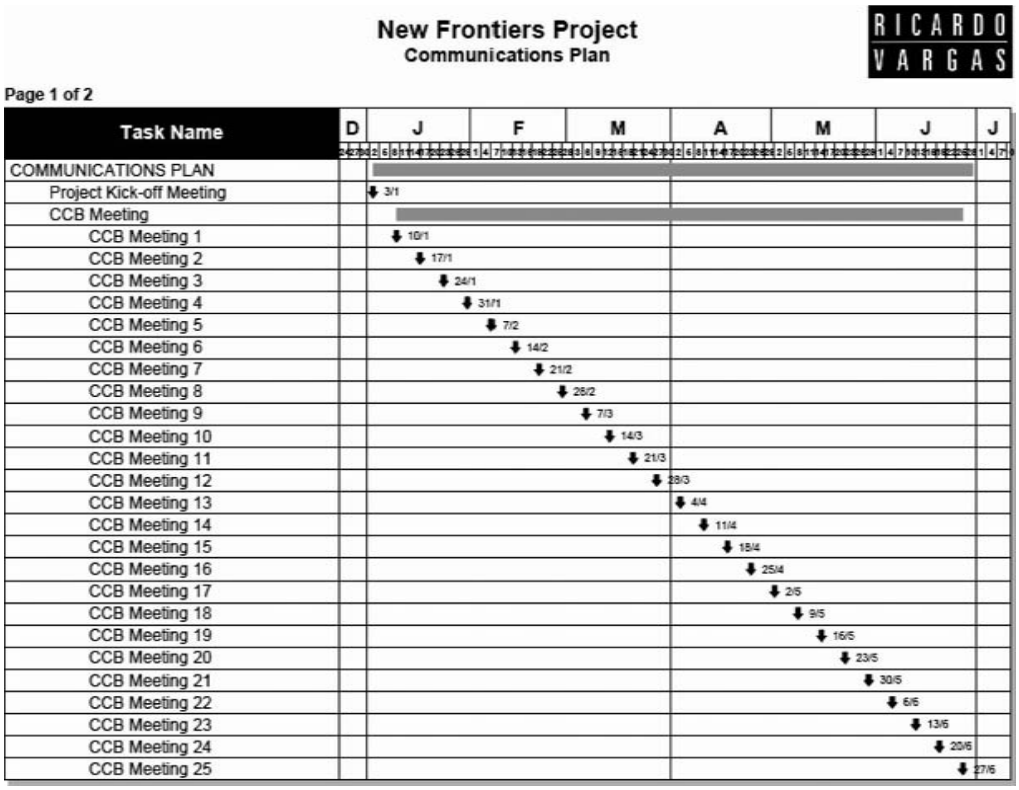


Figure 4.40

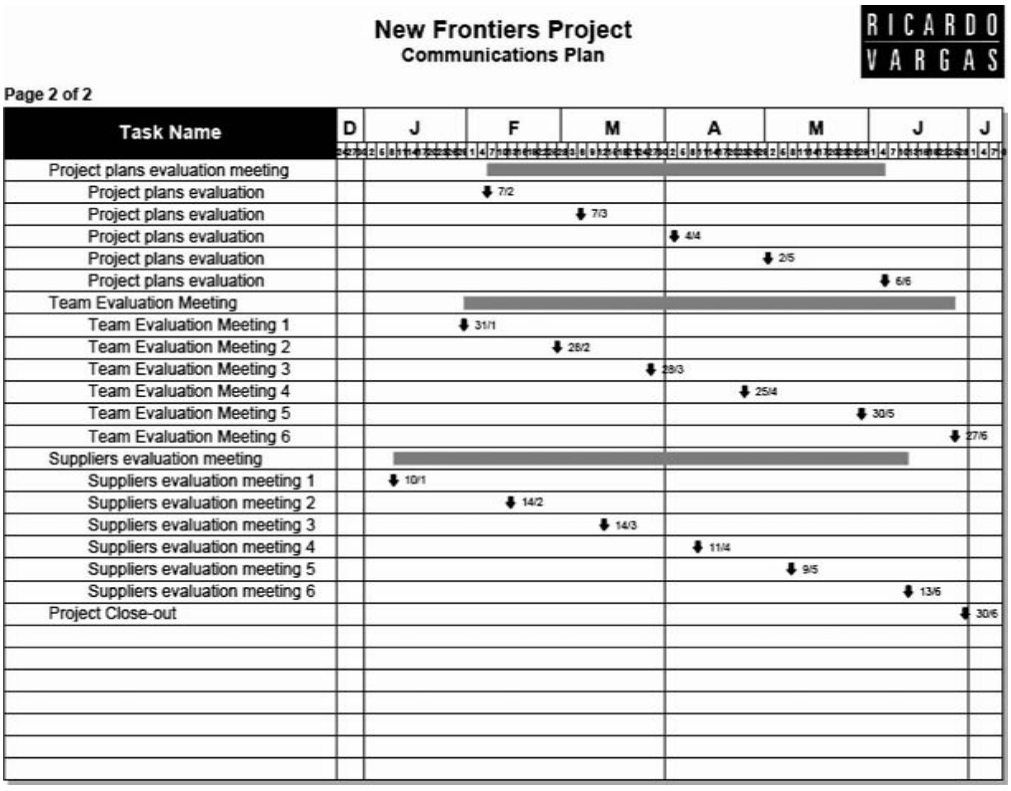


Figure 4.41

IV. Meeting Minutes

All project events, except the kick-off meeting and the project closure, shall present minutes with at least the following data:

- Attendance list
- Agenda
- Decisions held
- Pending issues not solved
- Approvals

V. Project Reports

The main reports to be published in the project information system are presented by the following templates. The templates have only the purpose of characterizing the report layout. The data presented in this plan is only illustrative.

All these reports will be generated daily by the responsible persons and published on the project Web site. Any other progress reports required for the planned CCB meetings shall be requisitioned 48 hr in advance in writing with the project managers' authorization.

1. *Work Breakdown Structure (WBS) Report Template*

The following figure is the standard for the WBS display during the progress of the project. The completed activities are shown with white border and an "X" crossing the box (progress marks). The activities in progress are shown with borders in light gray and a "\" crossing the box (progress marks). The activities not yet started are shown with borders in black and no progress marks. The percentage complete must be shown inside the box for all activities.

Responsible: Julian Shelley
Area: Scope management

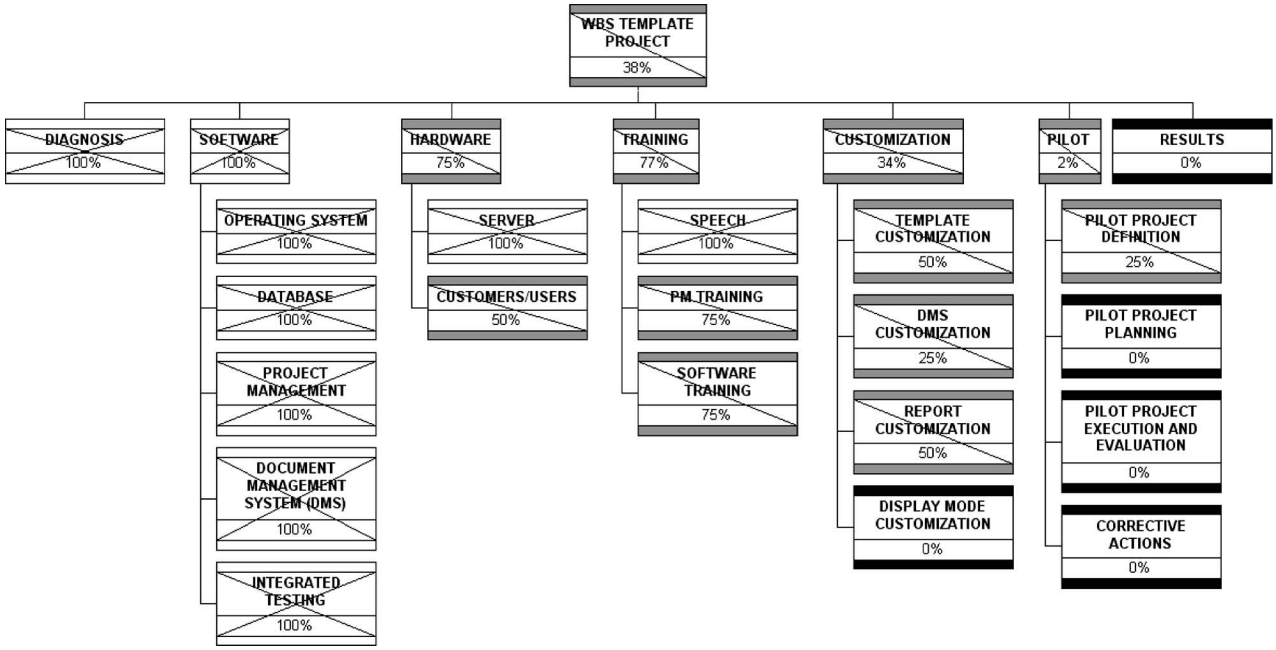
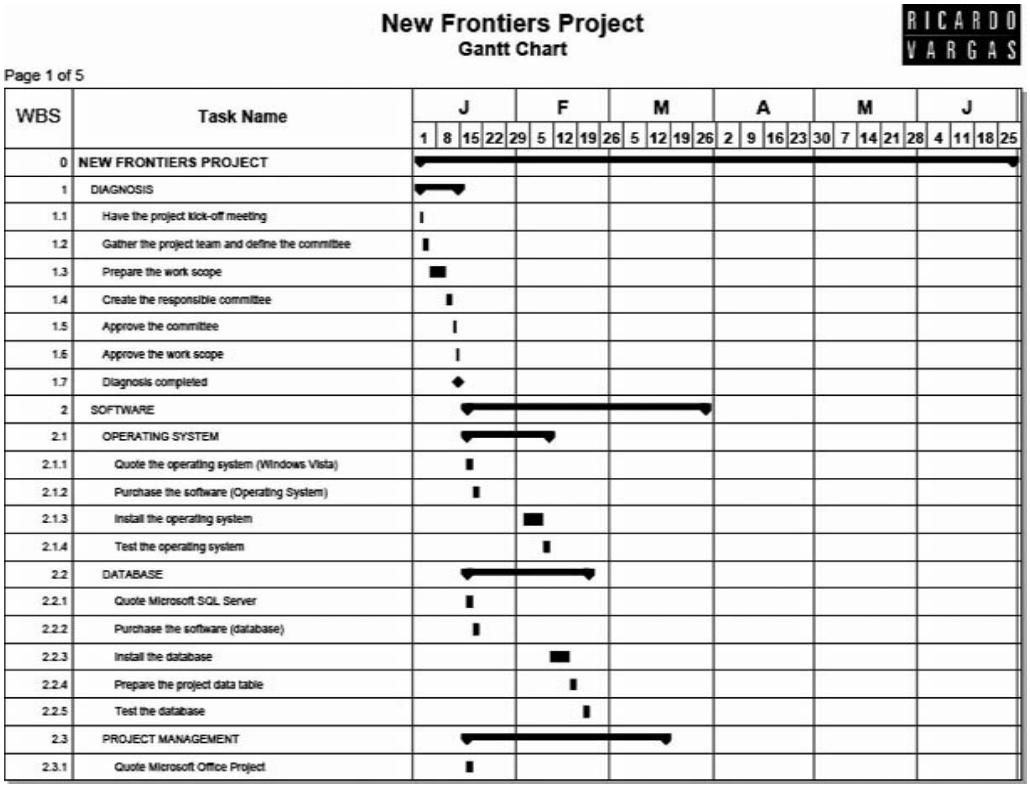


Figure 4.42

2. Gantt Chart Template

The project's Gantt chart will present all project tasks through their execution.

Responsible: Tarik Brooks
Area: Time management



New Frontiers Project
Gantt Chart

RICARDO VARGAS

Page 1 of 5

WBS	Task Name	J				F				M				A				M				J			
		1	8	15	22	29	5	12	19	26	5	12	19	26	2	9	16	23	30	7	14	21	28	4	11	18	25
0	NEW FRONTIERS PROJECT																										
1	DIAGNOSIS																										
1.1	Have the project kick-off meeting																										
1.2	Gather the project team and define the committee																										
1.3	Prepare the work scope																										
1.4	Create the responsible committee																										
1.5	Approve the committee																										
1.6	Approve the work scope																										
1.7	Diagnosis completed																										
2	SOFTWARE																										
2.1	OPERATING SYSTEM																										
2.1.1	Quote the operating system (Windows Vista)																										
2.1.2	Purchase the software (Operating System)																										
2.1.3	Install the operating system																										
2.1.4	Test the operating system																										
2.2	DATABASE																										
2.2.1	Quote Microsoft SQL Server																										
2.2.2	Purchase the software (database)																										
2.2.3	Install the database																										
2.2.4	Prepare the project data table																										
2.2.5	Test the database																										
2.3	PROJECT MANAGEMENT																										
2.3.1	Quote Microsoft Office Project																										

Figure 4.43

3. *Network Diagram Template*

The network diagram will be represented with tasks inside the top-level WBS and also inside a specific timeline. The completed tasks are shown with white border and an "X" crossing the box (progress marks). The tasks in progress are shown with borders in light gray and a "\" crossing the box (progress marks). The tasks not yet started are shown with borders in black and no progress marks. Each box represents a task with its name and start and completion date.

Responsible: Tarik Brooks
Area: Time management

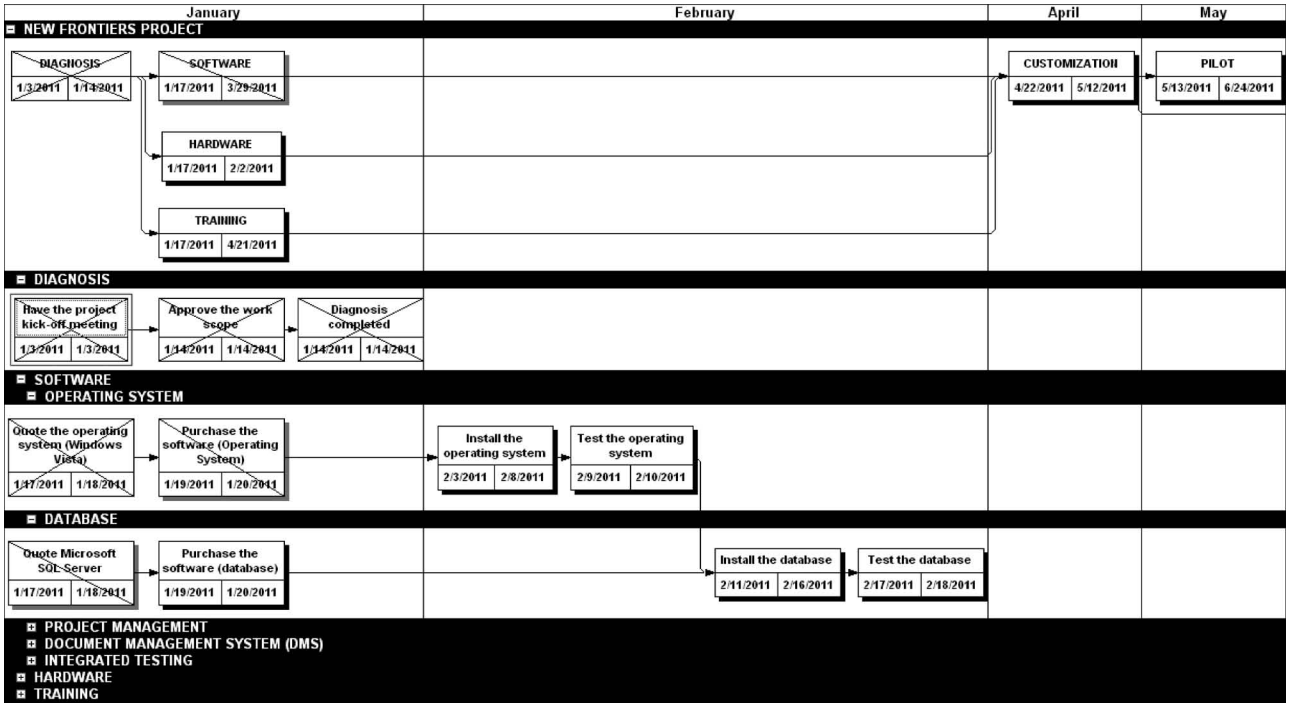


Figure 4.44

4. *Project Budget Tracking Template*

The project budget will be tracked through the budget of each task and its updated cost, with this information summarized in a spotlight, in which the black status indicates that the expenditure is below the budget, the gray status that the actual cost is equal to the budget, and the white status that the actual cost is above the budgeted one.

Responsible: Nielsen Matsushita
Area: Cost management

New Frontiers Project
Project Budget Tracking

RICARDO VARGAS

Page 1 of 6

Task Name	January				February					Budget $	Actual $	Stoplight
	1	8	15	22	29	36	43	50	57			
NEW FRONTIERS PROJECT										937300	232280	●
DIAGNOSIS										19600	20560	○
Have the project kick-off meeting										1600	1760	○
Gather the project team and define the										13200	13520	○
Prepare the work scope										4800	5280	○
Create the responsible committee										0	0	◉
Approve the committee										0	0	◉
Approve the work scope										0	0	◉
Diagnosis completed										0	0	◉
SOFTWARE										219700	211720	●
OPERATING SYSTEM										76500	76500	◉
Quote the operating system (Windows										0	0	◉
Purchase the software (Operating										76500	76500	◉
Install the operating system										0	0	◉
Test the operating system										0	0	◉
DATABASE										2000	2000	◉
Quote Microsoft SQL Server										0	0	◉
Purchase the software (database)										2000	2000	◉
Install the database										0	0	◉
Prepare the project data table										0	0	◉
Test the database										0	0	◉

○ Actual greater than Budget ● Budget greater than Actual ◉ Budget equal to Actual

Figure 4.45

5. *Percent Complete Report Template*

This report presents the percentage of each one of the planned tasks done (from 0 to 100), identifying the completed activities, those in progress, and the activities to be started. The data presented in the report is the data projected for the completion of the project.

Responsible: Tarik Brooks
Area: Time management

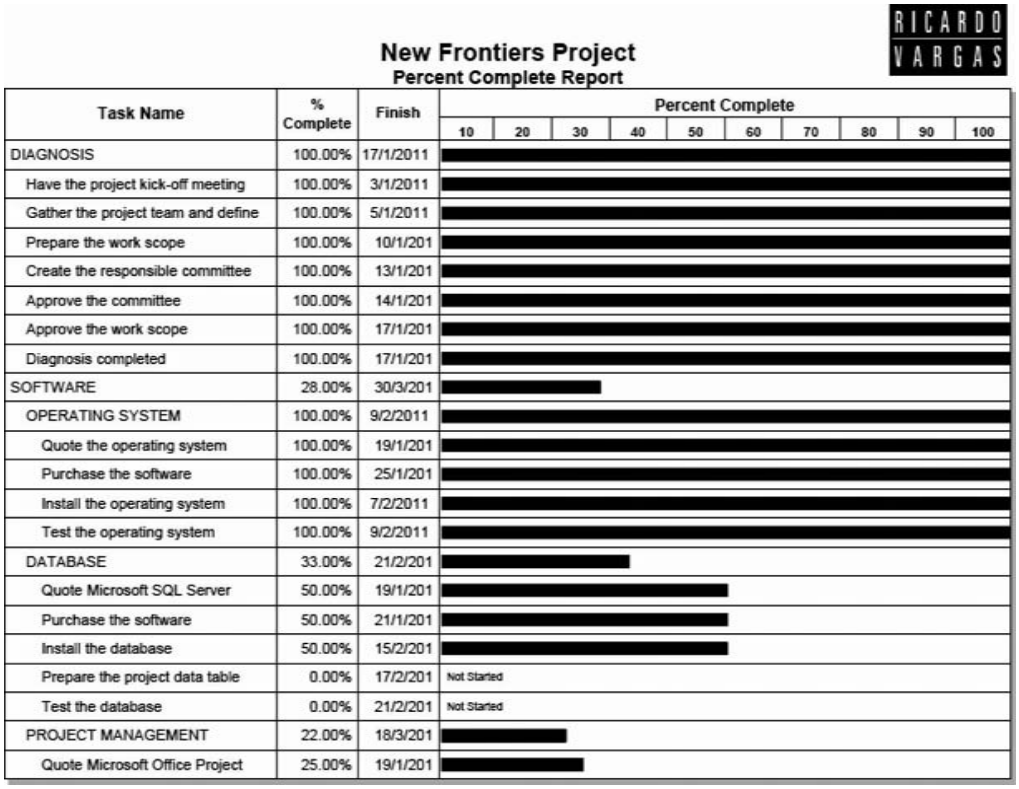


Figure 4.46

6. *Milestone Chart Template*

This report presents the completion dates of each task with their respective deviations, showing the task's delay or anticipation, as well as the status of each activity against time through a spotlight, in which the black status indicates work anticipation, the gray status indicates that the schedule matches the baseline, and the white status indicates a task delay.

Responsible: Tarik Brooks
Area: Time and scope management

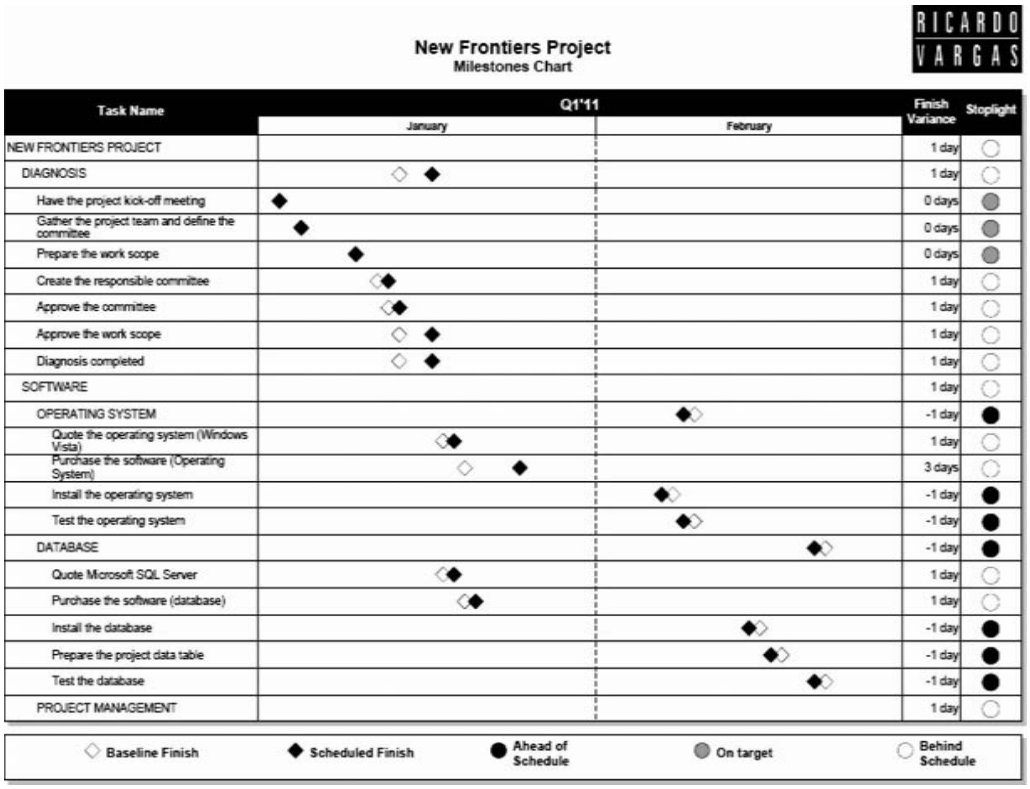


Figure 4.47

VI. Technical Environment and Information Storage and Distribution Framework (EPM)

The information storage and distribution framework will be fully accomplished through the Internet on the Web site www.ricardovargas.com.br.

The work environment is featured by a server dedicated to support the company's corporate characteristics, including a consolidated project database, resource pool, dynamic report management tool (portfolio analysis), as well as the project document management.

The users will update and access project information through the Internet (Web page), thus allowing collaboration between team members, the project managers, and others involved, making information exchange easier. The site presents the following access architecture:

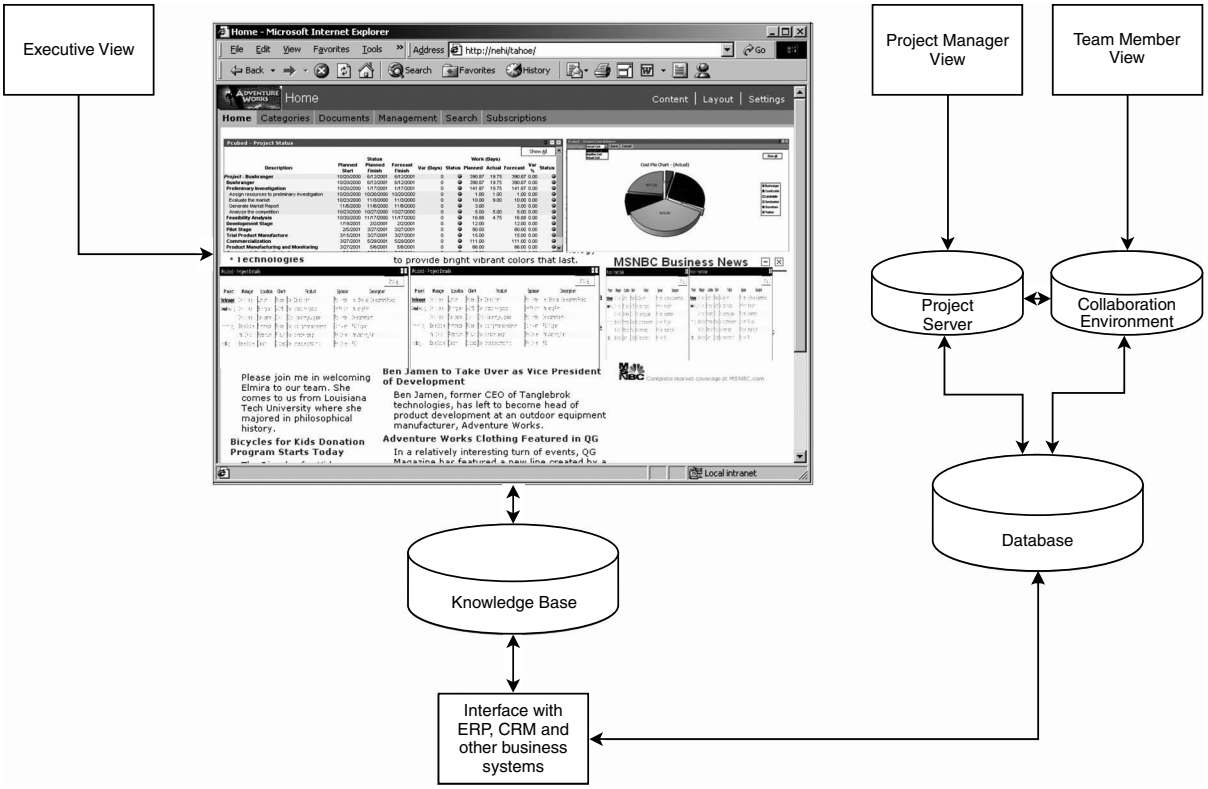


Figure 4.48

The entire information environment is already available, contracted and paid for through a company's global contract with an information management service provider, without additional costs for the project.

VII. Cost Allocation for Extraordinary Communications Needs

The costs regarding communications management will be considered, for the project purposes, as administrative expenses and will not be included in the project costs, because the cost management plan includes only additional project expenses.

In case expenses are needed in the communication process, such expenses may be allocated to the project reserves as management reserves.

When priority needs are beyond the project manager's authority or when there is no management reserve available, the sponsor shall be notified, because the project manager does not have the necessary

authority to decide about the use of the risk contingency reserve for communications management or to request the company's senior management for an increase in the management reserves.

VIII. Administration of Communications Management Plan

1. **Persons responsible for the plan:**
   - Tarik Brooks, project team member, will be the person directly responsible for the communications management plan.
   - Nielsen Matsushita, project team member, will be the substitute for the person directly responsible for the communications management plan.

2. **Frequency of updating the communications management plan:**
   The communications management plan will be reevaluated monthly in the first CCB meeting of the month, together with the other project management plans.

   The plan updating needs, before the first project CCB meeting, shall be dealt with according to the procedures described in the item *other issues not included in this plan*.

IX. Other Subjects Related to Project's Communications Management Not Included in Plan

All requests not included in this plan shall be submitted to the CCB meeting for approval. Immediately after its approval, the communications management plan, including the log of changes carried out, shall be updated.

CHANGE LOG		
Date	*Modified by*	*Change Description*
11/01/2010	Bob Goldman	New process for supplier review

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 11/01/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

4.8 Project Risk Management

NEW FRONTIERS PROJECT		
RISK MANAGEMENT PLAN		
Prepared by	Julian Shelley — team member	Version 2
Approved by	Bob Goldman — project manager	11/10/2010

I. Description of Risk Management Processes

- The project risk management will be accomplished based on the risks previously identified, as well as on the monitoring and control of new risks that might not have been identified during the planning phase.
- All risks not included in the plan shall be incorporated into the project within the Risk Change Control System.
- The risks to be identified will be only the project's internal risks and the risks originated by monetary variations. Risks related to the market, the company's macroenvironment, or the society will be automatically accepted without analysis and without an expected answer (passive acceptance).
- The possible answers to the risks identified by the project will be the passive and active acceptance (through contingencies) and the mitigation and transfer through insurance. The act of avoiding a risk (*avoidance*) will not be accepted as a possible answer to the risk, because no scope changes in the project's final product other than those of a corrective nature will be accepted.
- The identification, evaluation, and monitoring of risks shall be made in writing or through e-mail, as described in the project communications plan.

II. Identified Risks

The identified risks, according to the project WBS, are listed in the following framework:

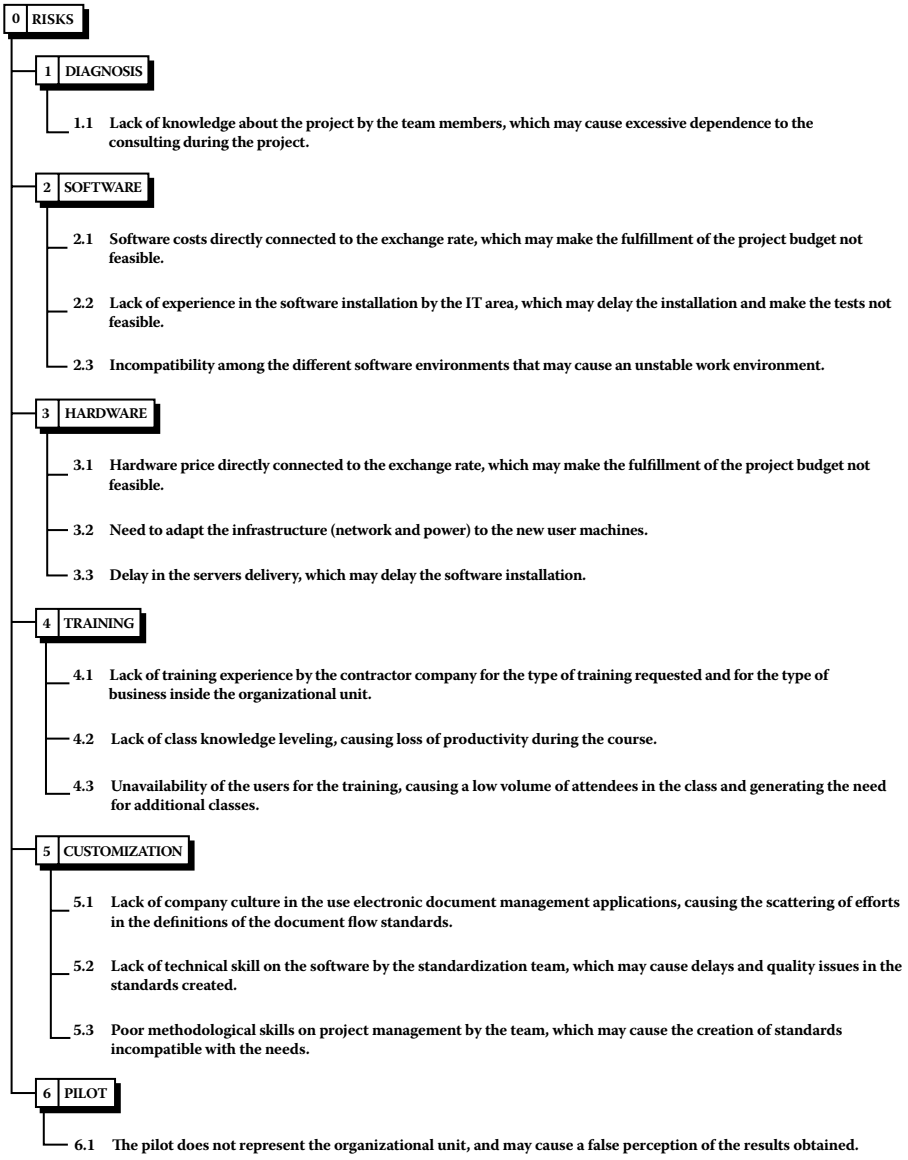


Figure 4.49

The project team identified the previous risks (including the procurement and IT areas) through the brainstorming technique of the nominal group technique (NGT) and, in some cases, the Crawford slip.

III. Qualitative Risk Analysis

The identified risks will be qualified according to their occurrence probability and the impact or importance of their results

Probability:

- Low — The probability of the risk occurrence can be considered small or not visible (lower than 20 percent).
- Medium — There is a reasonable probability of the risk occurrence (probability between 20 and 60 percent).
- High — The risk is imminent (probability higher than 60 percent).

Importance:

- Low — The impact of the risk event is irrelevant for the project, both in terms of cost and schedules, and can be easily solved or accepted.
- Medium — The impact of the risk event is relevant for the project and needs a more accurate management, under the penalty of impairing its results.
- High — The impact of the risk event is extremely high and, in case there is not a direct, immediate, and accurate interference of the project team, the results will get seriously compromised.

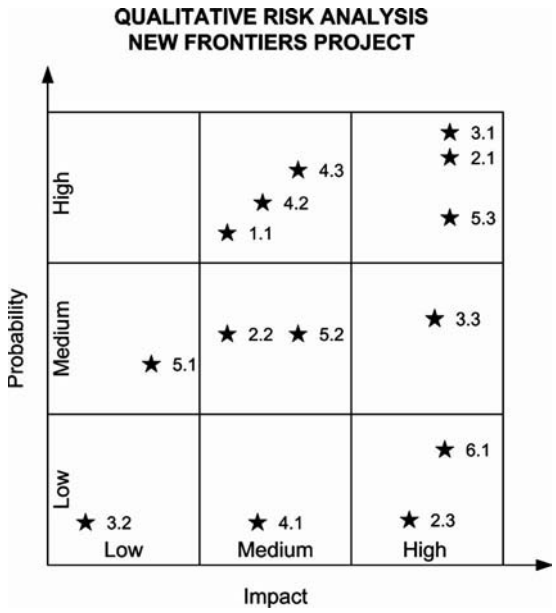


Figure 4.50

The risks were rated according to the comparative risk rank model (CCR) through mindmaps, as presented in the following text. The answers to the risks will be planned according to the order presented in the previous chart, in which the main risk events are those with high probability and importance.

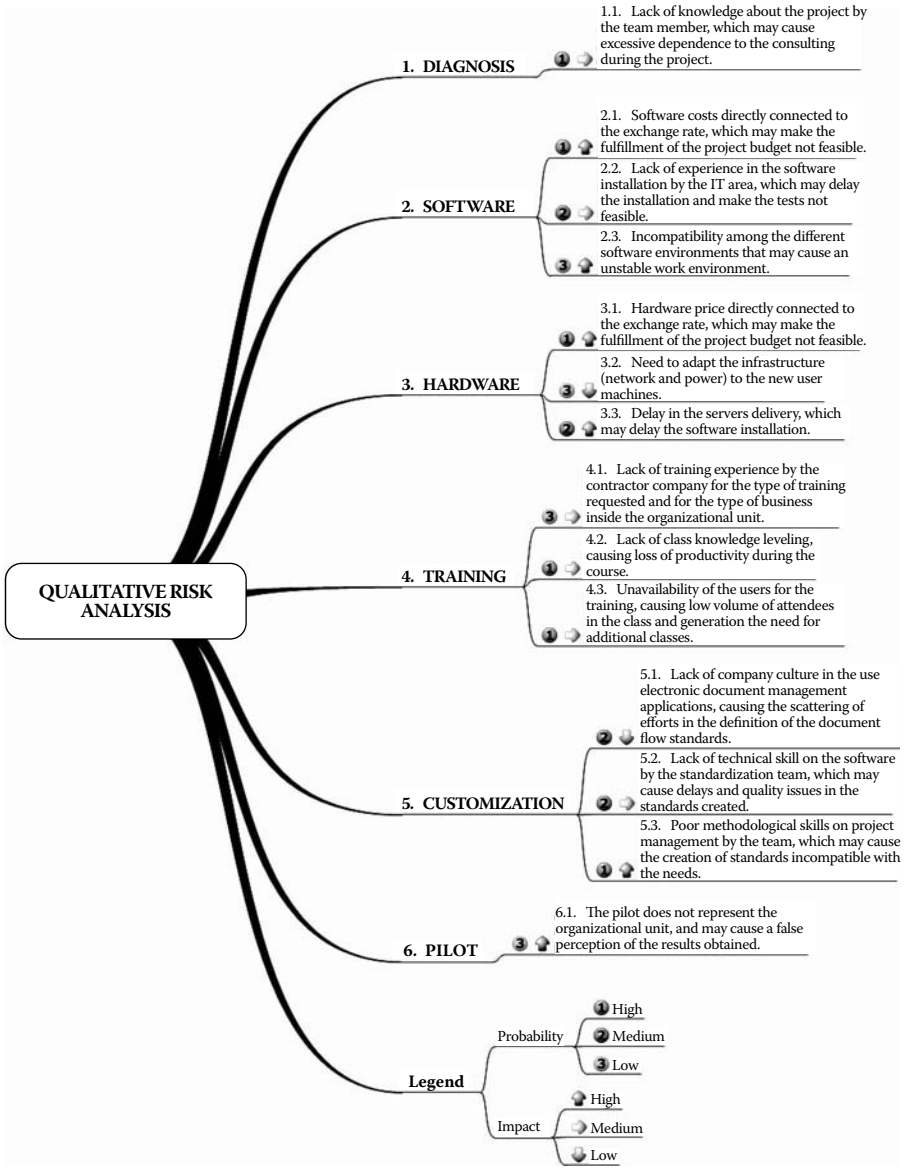


Figure 4.51

IV. Quantitative Risk Analysis

Because this is a project in which only the internal risks will be evaluated, we opted for analyzing the risks only according to qualitative aspects, using the qualitative expected value concept, previously presented for the identified risks. Therefore, we will not conduct the quantitative risk analysis in this plan.

V. Risk Change Control System

All risk identification and changes to the risks already identified (probability variations and risk impacts shall be treated according to the flowchart in the following text and presented in the weekly CCB meeting with its conclusions, priorities, and related actions).

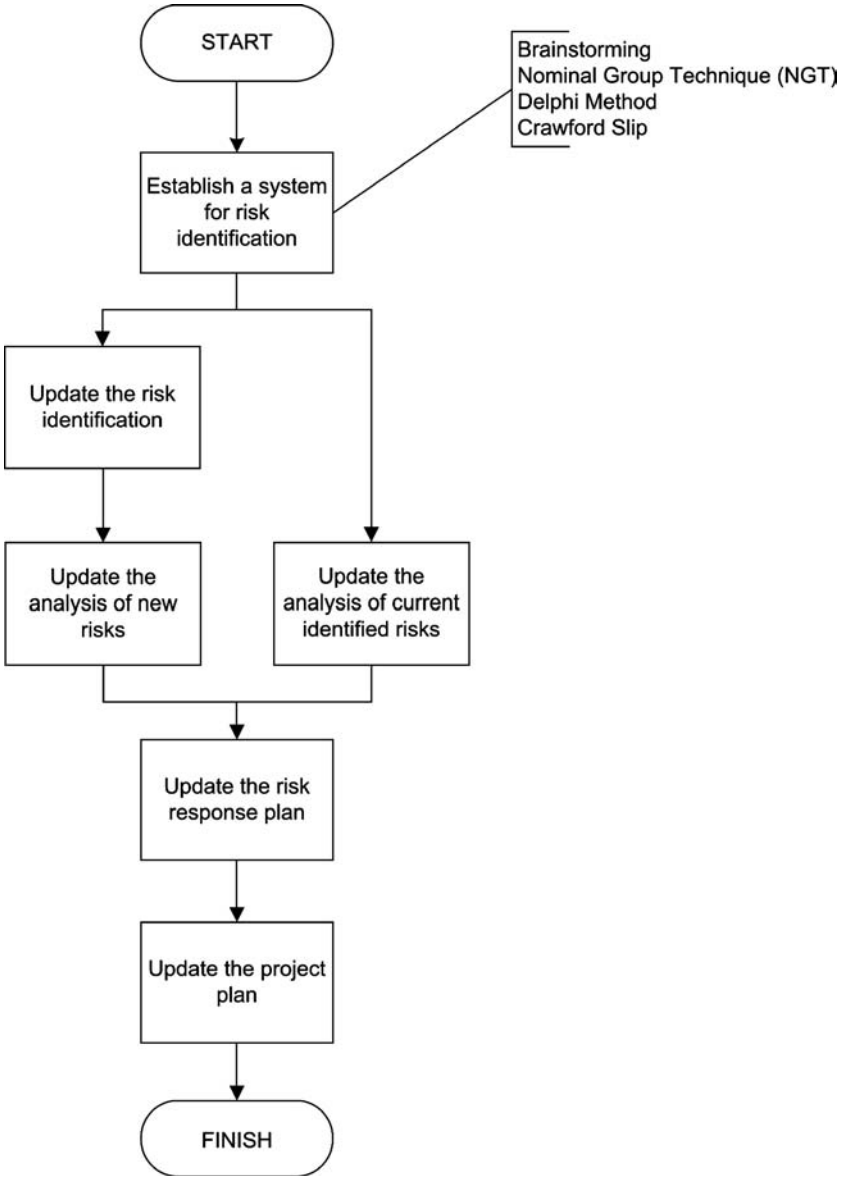


Figure 4.52

VI. Risk Response Plan

For the risks identified and qualified, we opted for different strategies for each risk, according to the following table.

Item	*Phase*	*Risk*	*Probability*	*Impact*	*Response*	*Description*	*Cost*	*Tendency*
1.1	Diagnosis	Lack of knowledge about the project by the team members, which may cause excessive dependence on the consultant during the project.	High	Medium	Mitigate	Project management training for the Project manager before the project start.	Covered by the company training department and not included in the project budget.	Constant
2.1	Software	Software costs directly connected to the exchange rate, which may make the fulfillment of the project budget not feasible.	High	High	Transfer	Hedge operation to cover currency variation.	$3.273,00 coming from the contin-gency reserves.	Deteriorate
2.2	Software	Lack of experience in the software installation by the IT area, which may delay the installation and make the tests not feasible.	Medium	Medium	Mitigate	Train the support team before the project management software installation.	–	Deteriorate
2.3	Software	Incompatibility among the different software environments that may cause an unstable work environment.	Low	High	Acceptance	Use contingency budget to cover the accepted risk consequences.	–	Reduces
3.1	Hardware	Hardware price directly connected to the exchange rate, which may make the fulfillment of the project budget not feasible.	High	High	Transfer	Hedge operation to cover currency variation.	$5,150.00 coming from the contin-gency reserves.	Deteriorate
3.2	Hardware	Need to adapt the infrastructure (network and power) to the new user machines.	Low	Low	Acceptance	Use contingency budget to cover the accepted risk consequences.	–	Reduces
3.3	Hardware	Delay in the servers' delivery, which may delay the software installation.	Medium	High	Mitigate	Compel the proponents to provide technical certificates that prove experience in accomplishing timelines in projects of this size.	–	Reduces

Figure 4.53

Item	*Phase*	*Risk*	*Probability*	*Impact*	*Response*	*Description*	*Cost*	*Tendency*
4.1	Training	Lack of training experience by the contractor company for the type of training requested and for the type of business inside the organizational unit.	Low	Medium	Mitigate	Compel the proponents to provide technical certificates that prove experience in preparing and teaching this kind of class.	–	Constant
4.2	Training	Lack of class knowledge leveling, causing loss of productivity during the course.	High	Medium	Mitigate	Evaluate each student's knowledge before the class to make sure that each class will have approximately the same level of student.	Included in the training company bid.	Constant
4.3	Training	Unavailability of the users for the training, causing a low volume of attendees in the class and generating the need for additional classes.	High	Medium	Mitigate	Full time course in 2 and 3 days to all students, outside the company.	–	Deteriorate
5.1	Customi-zation	Lack of company culture in the use electronic document management applications, causing the scattering of efforts in the definition of the document flow standards.	Medium	Low	Mitigate	Hire a consultant with document management systems experience.	Included in the project budget.	Constant
5.2	Customi-zation	Lack of technical skill on the software by the standardization team, which may cause delays and quality issues in the standards created.	Medium	Medium	Mitigate	Compel all the team of the customization work to participate in the software training.	–	Constant
5.3	Customi-zation	Poor methodological skills on project management by the team, which may cause the creation of standards incompatible with the needs.	High	High	Mitigate	Compel all the team of the customization work to participate in the project management training.	–	Constant
6.1	Pilot	The pilot does not represent the organizational unit, and may cause a false perception of the results obtained.	Low	High	Mitigate	Include the consulting team, the sponsor, and the project manager in the pilot definition.	–	Constant

Figure 4.53 (continued)

VII. Contingency Reserves

As described in the cost management plan, the contingency reserves are destined exclusively for the identified risks.

The workarounds (answers not planned to the risks) shall use exclusively the project contingency reserves. The reserves will be spent based on change requests arising from other plans and within the project manager's and the sponsor's authority.

The contingency reserves amount to $25,000, and the authority of project manager and sponsor in respect to its utilization is as follows:

	Contingency Reserves
Project manager only	Up to $3500
Project manager with the sponsor's endorsement	Up to $7000
Sponsor only	Above $7000 and up to the limit of the reserves

The authority is valid for each risk event, and the project manager may spend the entire reserve in different risks responses.

When the reserves are used up, only the sponsor may request the creation of new reserves, as will be presented later in this plan.

VIII. Frequency of Evaluation of Project Risk Management

The risks identified in the project shall be evaluated weekly at the CCB meeting, included in the communications management plan.

IX. Cost Allocation for Risk Management

The needs regarding the identification, qualification, quantification, and development of answers to the risks not listed in this document shall be allocated to the project reserves, in the contingency reserves category.

For priority actions not within the project manager's authority, or when there is no contingency reserve available, the sponsor shall be notified, because the project manager does not have the necessary authority to use the capital available in the management reserves to manage risks or to request the company's senior management for an increase in the management reserves.

X. Administration of Risk Management Plan

1. **Persons responsible for the plan:**
   - Julian Shelley, project team member, will be the person directly responsible for the risk management plan.
   - Mary Smith Jonson, project team member, will be the substitute for the person directly responsible for the risk management plan.

2. **Frequency of updating the risk management plan:**
   The risk management plan will be reevaluated monthly in the first CCB meeting of the month, together with the other project management plans.

   The plan updating needs before the first project CCB meeting of the month shall be dealt with according to the procedures described in the item *other issues not included in this plan*.

XI. Other Subjects Related to Project Risk Management Not Included in Plan

All requests not included in this plan shall be submitted to the CCB meeting for approval. Immediately after its approval, the risk management plan, including the log of changes carried out, shall be updated.

CHANGE LOG		
Date	*Modified by*	*Change Description*
11/20/2010	Bob Goldman	Update in the risk control system details
11/30/2010	Bob Goldman	Update in the risk response plan

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 11/30/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

4.9 Project Procurement Management

NEW FRONTIERS PROJECT		
STATEMENT OF WORK — CONSULTING SERVICES		
Prepared by	Nielsen Matsushita — team member	Version 2
Approved by	Bob Goldman — project manager	11/10/2010

I. Purpose of Document

This document has the purpose of detailing the needs of the consulting work to be applied in the New Frontiers project, as well as the standards required by the company and by the contracted consultants.

II. Description of Consulting Activities

The activities to be accomplished by consulting are the following:

- Support to define the committee during the project diagnosis
- Creation of the scope of the works to be accomplished by the committee on the project diagnosis
- Support for the request and identification of the potential document management systems (DMSs) available
- Evaluation, together with the project team, of the entire training process to be accomplished by the training company
- Definition of the report standards to be created, of the display modes, of the DMS document flow and of the project models (*templates*)
- Support for the pilot project's definition, planning, execution, and corrective actions to be accomplished by the project, as well as for the presentation of the pilot results to the sponsor

III. Contracting Hours for Consulting Work

A total of 400 consulting work hours are estimated for the project, to be distributed according to the schedule of activities with the help of two consultants.

The work will not be continuous through the whole project and, therefore, a full time participation of the consultants in the project is not necessary.

IV. Qualification of Consultants Allocated to the Project

The consultants assigned to the project shall have the following mandatory qualifications:

- Full university graduation in administration, computing sciences, or engineering.
- MBA or master's degree in engineering, administration, computing sciences, or project management.
- Certification by the Project Management Institute (PMI) as Project Management Professional® (PMP).
- A minimum of five years of experience in the implementation of PMOs.
- Certified experience in projects within the company's business branch (minimum of three certificates).
- Certified experience in the implementation of document management systems.

- Certified experience in large-scale projects during at least the last year, using the Microsoft Project platform. Large-scale is understood as projects that involve a direct team of at least 15 professionals and 500 work schedules.
- Knowledge of applied information technology.
- Skill in the use of e-mail.
- Fluency in English.

V. Qualification of Consulting Company

The company contracted for the project consulting services shall present the following mandatory qualifications:

- Microsoft Gold Certified Partner in Enterprise Systems, to ensure that the contractor company can count on constant support and partnership from Microsoft for the solution of the platform-related issues.
- PMI partner classified as Registered Education Provider (REP), evidencing the practice and use of PMI project management standards established in the PMBOK Guide®.
- The company shall submit the consultants' résumés before starting the work, thus certifying the qualification stated in the previous item of this work statement.
- The company shall submit five technical capacity certificates for projects of the same size using the Microsoft platform to assure that the provider company is capable of successfully implementing this type of solution.

VI. Contract

The contract to be signed will be fixed and nonadjustable unit price type, in which the cost per hour of the services will be defined in the contract and the number of hours included will be based on the needs estimated for the project.

The person responsible for the authorization and measurement of the consulting works will be Nielsen Matsushita, procurement management coordinator.

VII. Performance Review of Consulting Company

An internal project meeting will be held monthly for the evaluation of consulting work results, on the second Monday of every month, after the CCB meeting. The purpose of the meeting will be to check the fulfillment of schedules, prices, and the quality of consulting services.

In the event of nonfulfillment of the contract items by the consulting company, the following measures may be taken:

- Warning — for slight deviations that do not impair success in the fulfillment of schedules and the project scope
- Suspension — for medium deviations that partially impair the project scope or for sellers already previously warned
- Canceling — for severe deviations that impair the project and that require the direct intervention of the project manager and sponsor, or for previous suspension

CHANGE LOG		
Date	*Modified by*	*Change Description*
11/10/2010	Bob Goldman	Update in the consulting performance review

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 11/10/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
STATEMENT OF WORK — MATERIAL AND EQUIPMENT		
Prepared by	Nielsen Matsushita — team member	Version 1
Approved by	Bob Goldman — project manager	11/28/2010

I. Purpose of Document

The purpose of this document is to detail the material and equipment procurement needs for the New Frontiers project.

II. Specification of Material and Equipment to Be Procured

The material and equipment to be procured by the project are the following:

Hardware

- A total of 165 Dell® Pentium Duo Core microcomputers with 2 GB of RAM memory, 500 GB hard drive and network (15 backup computers)
- Two Dell® Dual Pentium servers with 4 GB RAM memory, 2 mirrored hard drives with 500 GB each

Software

- One copy of an electronic document management system to be defined by the project with 150 access licenses included
- A total of 150 licenses of Microsoft Office Project Professional®
- One copy of Microsoft Office Project Server®
- One copy of Microsoft SQL Server®
- Two copies of the Microsoft Windows Server®
- A total of 150 licenses of the Microsoft Windows Vista®

III. Supply Conditions

The seller shall meet the following supply conditions for equipment and materials:

- Minimum warranty of 3 years for all the procured equipment
- On-site support for the servers
- Maintenance assurance for all the procured software, for 2 years

IV. Proponent Qualifications

The contracted seller shall meet the following mandatory qualifications:

- Certificates shall be provided by all proponents with a history of deliveries to other projects; the seller to be contracted should submit certificates (a minimum of three) attesting to the requested equipment and material delivery history.
- The proponents shall submit together with their proposals at least three technical capacity certificates for projects of the same size.

- The proponents shall submit an audited and registered balance sheet certifying the financial capacity for the supply (to be submitted to the contracting party's auditing department).
- Only companies with at least 2 years of existence will be considered.

V. Contract

The contract to be signed with the selected proponent will be of the fixed and nonadjustable unit price type, with per unit price of procured material and equipment specified.

The person responsible for authorizing payment of the material received will be Nielsen Matsushita, procurement management coordinator.

VI. Supplier Performance Review

An internal project meeting will be held monthly for the evaluation of the supply of material and equipment results, on the second Monday of every month after the CCB meeting. The purpose of the meeting will be to check the fulfillment of schedules, prices, and quality of the supplier.

In the event of nonfulfillment of the contract items by the company, the following measures may be taken:

- Warning — for slight deviations that do not impair success in the fulfillment of schedules and the project scope
- Suspension — for medium deviations that partially impair the project scope or for sellers already previously warned
- Canceling — for severe deviations that impair the project and that require the direct intervention of the project manager and the sponsor, or for cases of previous suspension.

CHANGE LOG		
Date	*Modified by*	*Change Description*

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 11/28/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
STATEMENT OF WORK — TRAINING		
Prepared by	Nielsen Matsushita — team member	Version 1
Approved by	Bob Goldman — project manager	11/28/2010

I. Purpose of Document

The purpose of this document is to detail the training and qualification needs for the New Frontiers project.

II. Training Needs Specification

The project team will need the following training:

1. Basic PM training:
   a. Purpose — To qualify the students on the basic project management concepts, presenting in a practical and direct way the main components of a successful project, discussing the main areas, processes and tools for the projects to be accomplished within the planned schedules, costs, and quality.
   b. Agenda — Defining project management, the life cycle of a project, the main project management areas, the project manager and his interfaces, and the general project management model.
   c. Methodology — Classes with audiovisual resources and electronic projection, as well as computerized presentations and simulations, teamwork and problem-solving dynamics, real cases simulation and group discussion.
   d. Attendees — All division members will participate directly or indirectly in projects.
   e. Students per class — Maximum of 30 attendees per class.
   f. Equipment — Computer system with Microsoft Office PowerPoint, including high-resolution projector, sound system, digital telephone line, flip chart, and white board.
   g. Date and time — To be defined in the project schedule.
   h. Duration — 24 hr (full-time class).
   i. Location — training center (out of the work environment).
   j. Other — The students will do an assessment test with the purpose of achieving a leveling of the class.
2. Advanced PM training:
   a. Purpose — To qualify the division's key users in advanced project management concepts, allowing such users to act as local support and knowledge multipliers for the other division members.
   b. Agenda — PMO (Project Management Office), portfolio management, configuration management, risk management, earned value management systems (EVMS), simulations, project feasibility studies, and portfolio management.
   c. Methodology — Classes with audiovisual resources and electronic projection, as well as computerized presentations and simulations, teamwork and problem-solving dynamics, real cases simulation, and group discussion.
   d. Attendees — Division key users, who will act as multipliers.
   e. Students per class — Maximum of 30 attendees per class.
   f. Equipment — Computer system with Microsoft PowerPoint, including high-resolution liquid crystal projector, sound system, digital telephone line, flip chart, and white board.
   g. Date and time — To be defined in the project schedule.
   h. Duration — 24 hr (full-time class).
   i. Location — Training center (out of the work environment).
   j. Other — All attendees should have attended at least the basic project management course.

3. Basic Microsoft Office Project training:
   a. Purpose — To qualify the students on the basic utilization of the software to be used in project management, presenting in a practical and direct way how to plan and control a project using the tool.
   b. Agenda — Creating a new project, working with calendars, creating project activities, creating a work breakdown structure (WBS), inserting project activity durations, interrelationships among activities, critical path determination, resources, solving resource allocation issues, costs, accomplishing the project control, formatting, rating, filters, reports, printing and publishing on the Web.
   c. Methodology — Demonstration classes with the utilization of audiovisual resources and electronic projection, as well as computerized presentations and simulations by all students.
   d. Attendees — All division members that will participate directly or indirectly in projects.
   e. Students per class — Maximum of 30 attendees per class.
   f. Equipment — 1 IBM PC Pentium microcomputer with 1 GB of RAM memory, 50 GB free disk space and a CD Rom Unit for every 2 students, minimum operating system Microsoft Windows Vista in all machines, Microsoft Office Project in all machines (complete installation), Microsoft Office Professional in all machines (complete installation), Microsoft Visio installed in all machines (complete installation), computer network, 1 high-resolution liquid crystal projector for the instructor, sound system to be connected to the instructor computer to show videos during the training, digital telephone line, flip chart and white Formica board.
   g. Date and time — To be defined in the project schedule.
   h. Duration — 16 hr (full-time class).
   i. Location — Training center (out of the work environment).
   j. Other — All attendees should have attended at least the basic project management course.
4. Advanced Microsoft Office Project training:
   a. Purpose — To qualify the division's key users on the use of the advanced tool resources, allowing such users to act as local support and knowledge multipliers for the other division members.
   b. Agenda — Multiple projects, resource sharing (pool), project export and import wizards, macros, table customization, display mode customization, custom fields, copy of elements and customization, simultaneous tracking, progress lines, earned value management systems (earned value), analyzing schedule scale data in Excel, creating and customizing filters, working with groups (grouping), creating and customizing groups, strategies to organize a master project and subproject files, inserting and deleting an individual subproject within an existing project, consolidating projects, establishing dependence relationships among different projects, saving a project in the database format.
   c. Methodology — Demonstration classes with the utilization of audiovisual resources and electronic projection, as well as computerized presentations and simulations by all students.
   d. Attendees — Division key users, who will act as multipliers.
   g. Students per class — Maximum of 30 attendees per class.
   h. Equipment — 1 IBM PC Pentium microcomputer with 2 GB of RAM memory, 100 GB free disk space and a CD Rom unit for every 2 students, minimum operating system Microsoft Windows Vista in all machines, Microsoft Office Project in all machines (complete installation), Microsoft Office Professional in all machines (complete installation), Microsoft Visio installed in all machines (complete installation), computer network, 1 high-resolution projector for the instructor, sound system to be connected to the instructor computer to show videos during the training, digital telephone line, flip chart and white Formica board.
   i. Date and time — To be defined in the project schedule.
   j. Duration — 24 hr (full-time class).
   k. Location — Training center (out of the work environment).
   l. Other — All attendees should have attended at least the advanced project management course and the basic software course.

5. Support team training:
   a. Purpose — To familiarize the company support team with the installed technical environment so as to make the environment supportive and maintenance effective.
   b. Agenda — Microsoft SQL Server, Microsoft Internet Information Server, Olap Server, Microsoft Project Server, Microsoft Windows.net, and Microsoft SharePoint Portal Server.
   c. Methodology — Practical classes in the environment.
   d. Attendees — IT area support team.
   e. Students per class — Maximum of 30 attendees per class.
   f. Equipment — 1 IBM PC Pentium microcomputer with 2 GB of RAM memory, 50 GB free disk space and a CD Rom unit for every 2 students, minimum operating system Windows Vista in all machines, MS Office Project in all machines (complete installation), Microsoft Office Professional in all machines (complete installation), Microsoft Visio installed in all machines (complete installation), computer network, digital telephone line, flip chart, white board, 1 project server with MS SQL Server, MS Project Server, MS SharePoint Portal Server, 1 high-resolution liquid crystal projector for the instructor, sound system to be connected to the instructor's computer for the exhibition of videos during the training, digital telephone line, flip chart, white board.
   g. Date and time — To be defined in the project schedule.
   h. Duration — 40 hr (part-time class, maximum of 4 hr/day).
   i. Location — Training company facilities.
   j. Other — All attendees should have attended at least the basic project management course and have previous experience in information systems and information technology.
6. Keynote awareness speech:
   a. Purpose — Approach the use of the project management techniques as a competitive advantage for the organizations, enabling the managers to better administer their schedules, costs, and resources of their companies, defining the project as a complex task that involves people and organizations, elements under constant evolution.
   b. Agenda — What is project management, why has project management grown significantly, and which are the project management motivators? Some results obtained by companies worldwide in the application of project management, project management myths, why it is important to motivate and request the continuous use of project management methodology and tools, how to demand and motivate project management.
   c. Methodology — Presentation in an auditorium with the help of projector, computers, and sound systems.
   d. Attendees — All the people involved in the project team, the sponsor, and guests (company executives).
   e. Equipment — Computer system with Microsoft PowerPoint, including high-resolution liquid crystal projector and sound system.
   f. Date and time — To be defined in the project schedule.
   g. Duration — 4 hr.
   h. Location — Ballroom A, Citytime convention center.

III. Training Center Qualification

The contracted seller shall meet the following mandatory qualifications:

- Be capable of providing full service for all the requested training.
- Be qualified by Microsoft as Microsoft Gold Certified Partner in Enterprise Systems to ensure experience in the platform.
- Be qualified by PMI as Registered Education Provider (REP), as evidence of knowledge in the practice and use of PMI project management standards.

- The company shall submit the instructors' résumés before the beginning of the work, certifying the qualification submitted.
- The company shall submit five technical capacity certificates as proof of having conducted training of the same type using the Microsoft platform and that the provider company is capable of successfully implementing this type of solution.
- The company shall bear the ISO 9000 certificate regarding training.
- The company shall have its own infrastructure to train the support team.

IV. Contract

The contract to be signed with the selected proponent will be of the fixed and nonadjustable unit price type, per class accomplished.

The person responsible for authorizing the payment of the material received will be Nielsen Matsushita, procurement management coordinator.

V. Training Center Performance Review

As included in the project communications plan, an internal project meeting will be held monthly for the evaluation of training results on the 2nd Monday of every month, after the CCB meeting. The purpose of the meeting will be to check the fulfillment of schedules, prices, and quality of consulting services.

In the event of nonfulfillment of the contract items by the consulting company, the following measures may be taken:

- Warning — for slight deviations that do not impair success in fulfillment of schedules and the project scope
- Suspension — for medium deviations that partially impair the project scope or for sellers already warned previously
- Canceling — for severe deviations that impair the project and that require the direct intervention of the project manager and sponsor, or for cases of previous suspension.

CHANGE LOG		
Date	*Modified by*	*Change Description*

APPROVALS		
Bob Goldman Project manager	*Bob Goldman*	Date 11/28/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

NEW FRONTIERS PROJECT		
PROCUREMENT MANAGEMENT PLAN		
Prepared by	Nielsen Matsushita — team member	Version 2
Approved by	Bob Goldman — project manager	12/01/2010

I. Description of Procurement Management Processes

- Procurement management will have basically three main focuses, as follows:
  - Hardware and software procurement to implement the solution
  - Contracting and administration of contracts with consultants
  - Contract management regarding the team training
- The procurement process shall directly follow the work progress (information provided by the time management), including eventual variations.
- The authority for contracts is within the exclusive competence of the project manager, who will sign all service contracts and measurements included in the budget.
- The ethical aspects of the procurement process will be strictly tracked, pursuant to the following principles:
  - Legality
  - Equality
  - Publicity
  - Impersonality
  - Impartiality
  - Morality
  - Administrative honesty
  - Loyalty to the company
- The project manager, the sponsor, and the company will consider any offense in these aspects as extremely serious faults.
- The procurement management will only consider procurement directly related to the project scope. The procurement management will not consider innovations and new resources, which will be subject to new negotiations.
- Any change request to the procurement process or to the objects to be procured (previously defined) shall be made in writing or through e-mail, as described in the project communications plan.

II. Contract Management

- All the contracts must be evaluated by the company's legal area.
- All the contract articles agreed upon shall be strictly observed, mainly with respect to compliance to the delivery deadlines and fulfillment of the requested requirements.
- The preparation of contracts is the responsibility of the company's legal area, under the project manager's supervision.
- All contracts in this project are of the fixed and nonadjustable unit price type, where the unit values of the goods and the cost per hour of the services will be established in the contract, and the number of hours planned will be based on the budgeted project needs.

III. Evaluation Criteria for Proposals

- Will be considered based on quotes for procurement of several goods available with many sellers and fully replaceable. In this case, the decision process is based on the lower price.
- For goods that need specification or for the contracting of services of any nature, the creation of a qualified proposal by the proponent will be necessary, and the decision process will be based on the price and technique concept. The relative weight of each item will be defined in the project's weekly meeting.

IV. Supplier Performance Review

An internal meeting will be held monthly for the evaluation of the sellers' results on the second Monday of every month, after the CCB meeting. The purpose of the meeting will be to check the fulfillment of schedules, prices, and the quality of the products procured and supplied to the project.

In the event of nonfulfillment of the contract items by the seller, the following measures may be taken:

- Warning to seller — for slight deviations that do not impair the success in fulfillment of schedules and the project scope
- Seller suspension — for medium deviations that partially impair the project scope or for sellers already warned previously
- Canceling of the contract — for severe deviations that impair the project and that require the direct intervention of the project manager and sponsor, or for cases of previous suspension.

V. Frequency of Evaluation of Project Procurement Management

The procurement processes shall be evaluated weekly at the CCB meeting, included in the communications management plan.

VI. Cost Allocation for the Procurement Process

Any procurement not included in the budget and requiring additional project expenditure shall be allocated to the project reserves, as management reserves.

For urgent procurement beyond the project manager's authority, or when there is no management reserve available, the sponsor shall be notified, because the project manager does not have the necessary authority to use the risk contingency reserve for procurement, or to request the company's senior management for an increase in the management reserves.

VII. Administration of Procurement Management Plan

1. **Persons responsible for the plan:**
   - Nielsen Matsushita, project team member, will be the person directly responsible for the procurement management plan.
   - Julian Shelley, project team member, will be the substitute for the person directly responsible for the procurement management plan.

2. **Frequency of updating the procurement management plan:**
   The procurement management plan will be reevaluated monthly in the first monthly CCB meeting, together with the other project management plans.

   The plan updating needs before the first project CCB meeting shall be dealt with according to the procedures described in the item *other issues not included in this plan*.

VIII. Other Subjects Related to Project's Procurement Management Not Included in Plan

All requests not included in this plan shall be submitted to the CCB meeting for approval. Immediately after its approval, the procurement management plan, including the log of changes carried out, shall be updated.

CHANGE LOG		
Date	*Modified by*	*Change Description*
12/04/2010	Bob Goldman	Updates in the contract evaluation

APPROVALS		
Bob Goldman Project manager	Bob Goldman	Date 12/04/2010
Note: Changes to this document shall be submitted to the project manager for approval before being incorporated into this document.		

Project Managment

PRACTICAL GUIDE TO PROJECT PLANNING

Ricardo Viana Vargas

Encouraging managers and planners to apply its hands-on advice to immediate tasks, the **Practical Guide to Project Planning** is filled with documents and ready-to-use templates to initiate and facilitate the smooth running of both large and small projects. Written by international project management specialist Ricardo Viana Vargas, winner of the 2005 PMI Distinguished Award, this work provides complete explanations of project analysis and modeling techniques that can be readily implemented. In addition, the book is also a guide to best practices that comply with the PMI's PMBOK® 3.0.

A real-world practical example is referred to throughout the text to illustrate the implementation of a project management office (PMO) within a company division. The author details each specific step you will encounter, from diagnosis up through the realization of results. Every project document that is presented and discussed can be downloaded from the attached CD, thus allowing readers to track and develop their own projects as they work through the book.

Filled with experiential insight and practical tips, the **Practical Guide to Project Planning**—

- Shows how to make the best use of popular planning and reporting tools, including Mindmanager, Milestone Project Companion, and Microsoft Project
- Discusses project scoping and risk assessment
- Covers budgeting, staffing, scheduling, and quality assurance
- Provides project-planning templates that can be customized to any type of project

Born out of a true market need, this book is designed to enhance the efforts of those already engaged or preparing to engage in projects. Both seasoned planners and novices will find the guidance that will allow them to elevate the effectiveness of their project planning.

Ricardo Viana Vargas IPMA-B, PMP® is the author of eight books published in Brazil and in the United States. In 2005 he received both the PMI Distinguished Contribution Award and the PMI Product of the Year Award for his PMDome Workshop, considered the best training solution for project management. A member of the PMI Board of Directors, he was the first professional worldwide to be a Microsoft Certified Office User Specialist in MS Project 2002. He participated in the revision of *A Guide to the Project Management Body of Knowledge* (PMBOK® Guide), and was member of the PMBOK® Guide update project team in 2004. He was also chair of the Translation Verification Committee for the Brazilian Portuguese translation of the 2004 PMBOK® Guide. Mr. Vargas currently serves as chair of Macrosolutions, a project management consulting company serving clients worldwide.

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