Project Analyst Handbook

Overview

The purpose of this handbook is to describe the approach a Project Analyst (PA) should follow within the Lante Process framework. It is intended to serve as both a resource for Project Analyst training and an on-the-job reference. This handbook and the Project Analyst training intend the following outcomes:

- A comprehensive understanding of the PA role and responsibilities
- A facilitation of the internal work process in relationship to projects
- A means to enhance communications and information sharing
- A means for Project Analyst Leads to deliver coaching and/or training

The Lante Process Framework

The Lante Process Framework is based on the Rational Unified Process (RUP), a work method to develop systems that are effective, timely, and satisfying. The Lante Process Framework is a special adaptation of RUP making it relevant to the work that Lante does. In the descriptions of the Project Analyst's activities, references are made to useful resources in Rational Unified Process Tool 5.1 that provides guidance for these activities.

Topics covered in this handbook

The Project Analyst Handbook contains information about the following topics:

Topic	See Page
The Role of the Project Analyst	2
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The Roles of the Project Analyst

The hub of the project team

The Project Analyst plays a central role in making sure that all the work done on a project is in scope. Working with the client and the other team members, the PA identifies the key business requirements necessary to create an effective solution for the client and assumes many roles throughout the life of the project to ensure that the team's efforts realize that solution.
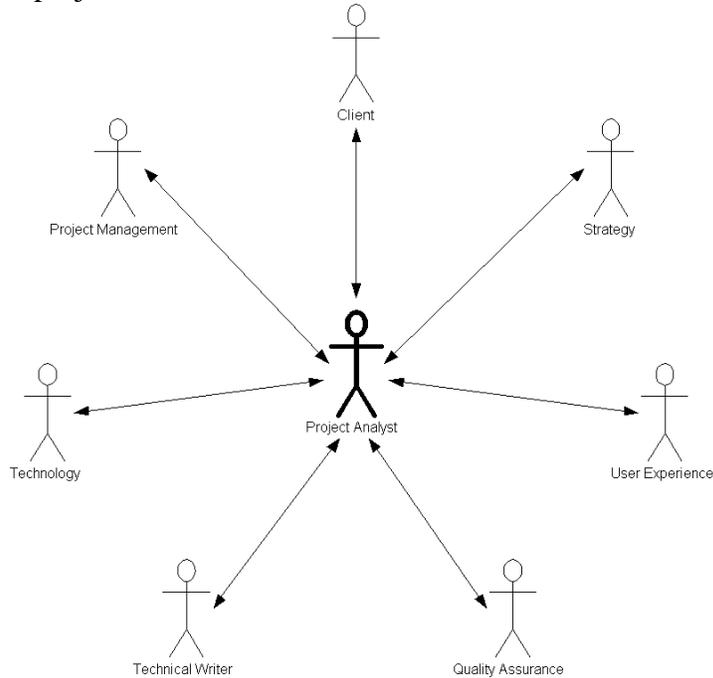
The roles of the Project Analyst

The Project Analyst performs these roles during the course of a project:

Role	Instances
Researcher	• Works with Strategy to conduct competitive and market information research. • Works with User Experience (UX) to conduct segment research.
Requirements Gatherer	• Works with client to obtain and document business requirements. • Works with client to identify core (priority) requirements. • Identifies business/service clusters within client's business. • Interviews domain experts.

|	
Requirements Developer	• Identifies use cases/scenarios. • Prioritizes scenarios. • Creates process flow diagram. • Writes detailed use cases. • Ensures traceability to business requirements. • Creates program specifications. • Creates class diagram/object models.
Review Facilitator/ Participant	• Facilitates use case reviews with UX, Strategy, Technology, and client. • Participates in the construction of site maps, storyboards, data/object models, and composites.
Domain Expert	• Works with UX as a content resource. • Works with client to close open issues. • Works with client to provide expert assurance for use case signoff. • Works with Technology to clarify system requirements. • Works with Project Manager to manage risk. • Works with Technical Writer to develop documentation.
Testing Coordinator	• Works with QA Lead to review/signoff OA test plans. • Functions as QA Lead. • Works with client to create User Acceptance Test Plans. • Works with Project Manager and client to prioritize bugs. • Works as functional/end user tester.

The Activities of the Project Analyst

Overview

In the course of a project, the Project Analyst performs several essential activities to make sure that the resulting system will be efficient and effective. Each of the activities results in a document that becomes the guideline for the work done by the other members of the team. As with any creative endeavor, these activities are recursive rather than linear. As the project proceeds, new requirements may be discovered or the priorities assigned to identified requirements may change. The Project Analyst's abiding challenge is to maintain momentum while at the same time remaining adaptable to change.

The Project Analyst is responsible for the Business Requirements Document, which makes the PA an indispensable member of the project team. The Business Requirements Document identifies the key functional and substantive requirements necessary to develop a product or system. The requirements gathering process is key to developing this document, and the ability to perform this process well is crucial to completing a comprehensive and accurate requirements document. All other documentation (i.e. functional specifications, test cases, design documents, etc.) that lead to writing code for an actual system must ultimately be traced back to a specified requirement. If the requirements are incorrect, inconsistent, or incomplete, so too will be the newly developed system, ultimately resulting in a dissatisfied client.

Project Analyst work flow
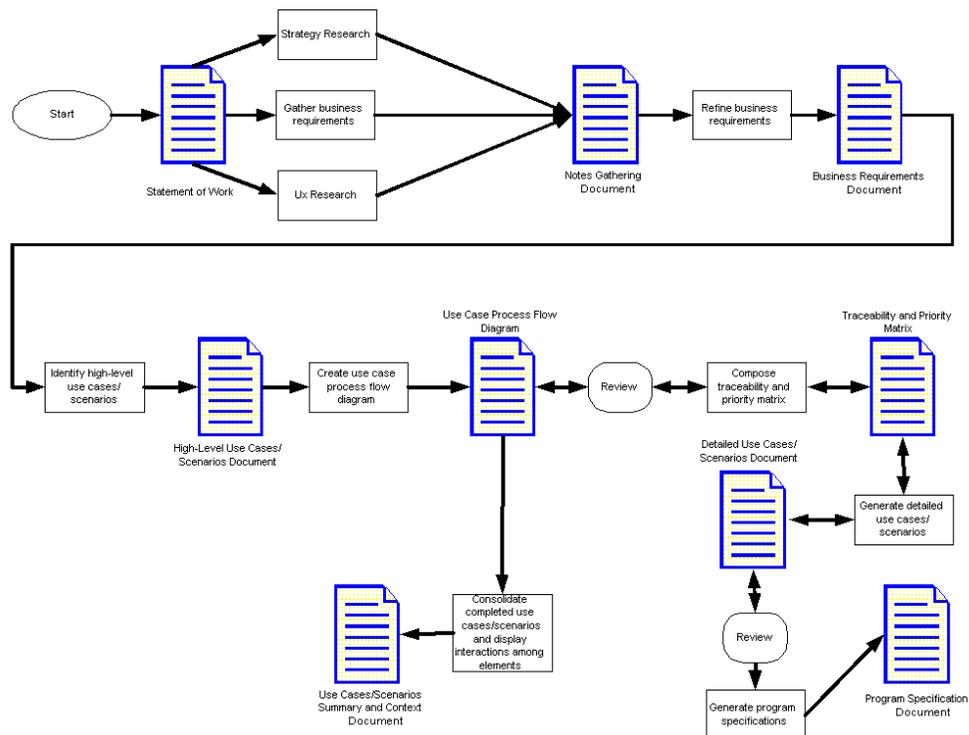
Activities described in this section

The activities described below are listed in sequential order:

Activity: Gather Business Requirements

Purpose　　　　　Gather relevant requirements to develop a product/system

Steps
1. Identify stakeholders
2. Conduct meetings with stakeholders
   - Publish agenda
   - Identify participants/roles
   - Manage discussions
   - Determine action items
   - Work with client to close open issues
   - Publish minutes of meetings

Input Artifacts　Statement of Work
Business Plan

Resulting Artifacts
- Meeting agendas
- Meeting minutes
- Issues list
- Parking lot list
- Notes Gathering Document

Artifact Customers
- Client
- Delivery Management
- User Experience
- Technology

Work Guidelines　RUP 5.1 Process Tool (http://www.technology.lante.com/)
Workers and Activities>System Analyst>Activity: Elicit Stakeholder Needs

Topic	Contains information about…
Determine Sources for Requirements	Identifying stakeholders and prioritizing sources for requirements
Gather Information	Formulating questions that need to be answered in interviews and questionnaires
Conduct Requirements Workshop	Gathering a comprehensive "wish list" from stakeholders

Evaluate Your Results	Comparing the results from different sources and evaluating the gathered information

Template   Notes Gathering Template

Activity: Refine Business Requirements

Purpose	Identify key functional and substantive requirements necessary to develop a product/system

Steps	1. Review business requirements supplied by client
	    • Review requirements
	    • Transfer requirements information to Requirements Template
	    • Identify core (priority) requirements
	    • Identify business/service clusters
	    • Determine if requirements are complete enough (85%) to begin use case development
	2. Develop business requirements in absence of client-supplied requirements
	    • Capture notes of meetings in Notes Template
	    • Determine when the notes have reached a point where business requirements need to be developed
	    • Build requirements using Requirements Template
	    • Identify core (priority) requirements
	    • Identify business/service clusters
	    • Determine if requirements are complete enough (85%) to begin use case development

Input Artifacts	• Notes Gathering Document • Client Business Plan • Meeting Minutes

Resulting Artifacts	Business Requirements Document

Artifact Customers	• Client • User Experience • Strategy • Technology • Delivery Management

Work Guidelines	RUP 5.1 Process Tool (http://www.technology.lante.com/) Workers and Activities>System Analyst>Activity: Develop Vision

Topic	Contains information about…
Identify Stakeholders	Questions to ask when defining target market group
Define the System Boundaries	Defining the boundaries of the system
Identify Constraints to be Imposed on the System	Potential sources of constraints and questions to ask
Define Features of the system	Developing a list of features you want in the system
Evaluate Your Results	Verifying that your work is in scope

RUP 5.1 Process Tool (http://www.technology.lante.com/)
Workers and Activities>System Analyst>Activity: Capture a Common Vocabulary

Topic	Contains information about…
Find Common Terms	Defining a common vocabulary
Evaluate Your Results	Verifying that your work is in scope

Template   (Client Name) Requirements Document

Activity: Identify High-Level Use Cases/Scenarios

Purpose Determine the scope of functionality that the project will require.

Steps
1. Identify and define Actors and Roles
2. Identify high-level use cases and scenarios

Input Artifacts Business Requirements Document

Resulting Artifacts High-Level Use Cases/Scenarios Document

Artifact Customers
- Client
- Delivery Management

Work Guidelines RUP 5.1 Process Tool (http://www.technology.lante.com/)
Guidelines>Requirements Guidelines

Section	Contains information about…
Use Case	How to find use cases
Actor	How to find actors

Templates (Client Name) High-Level Use Cases/Scenarios Template

Activity: Create Use Case Process Flow Diagram

Purpose	Display the sequence of activities that link the identified use case scenarios

Steps

1. Analysts are assigned sets of use cases
   - If analyst is familiar with business process flow, begin to develop use case
   - If analyst is unfamiliar with business process flow, wait for domain discussion
2. Schedule domain discussion
   - If analyst is familiar with business process flow, meeting should occur within 5 days of high-level use case/scenario identification
   - If analyst is unfamiliar with business process flow, meeting should occur within 2 days of high-level use case/scenario identification
3. Create use case process flow diagram

Input Artifacts   High-Level Use Cases/Scenarios Document

Resulting Artifacts   Process Flow Diagram

Artifact Customers
- Client
- Delivery Management
- User Experience
- Technology

Work Guidelines   RUP 5.1 Process Tool (http://www.technology.lante.com/)
Guidelines>Requirements Guidelines>

Section	Contains information about…
Activity Diagram in the Use-Case Model	Displaying the flow of events of a use case

Templates   Refer to example in Project Analyst Training Binder

Activity: Compose Traceability and Priority Matrix

Purpose   Prioritize scenarios necessary to support core requirements and subsequent
iterations

Steps
1. List the high-level scenarios that have been identified
2. Map the scenarios to original business requirements
3. Prioritize the scenarios according to their importance in producing the
   first release and subsequent releases

Input Artifacts
- Business Requirements Document
- High-level Use Cases/Scenarios

**Resulting
Artifacts**   Traceability and Priority Matrix

**Artifact
Customers**
- Client
- Delivery Management
- Strategy
- User Experience
- Technology

**Work
Guidelines**   RUP 5.1 Process Tool (http://www.technology.lante.com/)
Workers and Activities>System Analyst>

Section	Contains information about…
Activity: Manage Dependencies	Making sure that the essential elements are identified and developed

RUP 5.1 Process Tool (http://www.technology.lante.com/)
Workers and Activities>Architect>

Section	Contains information about…
Activity: Prioritize Use Cases	Deciding which use cases should be selected for elaboration

Templates   Traceability and Priority Matrix

Activity: Generate Detailed Use Cases/Scenarios

Purpose   Describe the flow of events that constitutes each of the use case scenarios

Steps
1. Identify the high priority use case scenarios from the Traceability and Priority Matrix
2. Identify and list the component steps in each high priority scenario

Input Artifacts
- High-Level Use Cases/Scenarios Document
- Use Case Process Flow Diagram
- Traceability and Priority Matrix

Resulting Artifacts   Detailed Use Cases/Scenarios Document

Artifact Customers
- Client
- Delivery Management
- User Experience
- Technology

Work Guidelines   RUP 5.1 Process Tool (http://www.technology.lante.com/)
Guidelines>Requirements Guidelines>

Section	Contains information about…
Use-Case Storyboard	Using a storyboard to identify the elements of a scenario

Templates   (Client Name) Elaboration Use Case Specification

Activity: Consolidate Use Cases/Scenarios and Display Interactions Among Elements

Purpose	Consolidate all of the completed use cases/scenarios and display the relationships between the related use cases and the associated actors and systems
Steps	1. Consolidate all of the completed use cases/scenarios 2. Diagram the relationships among the elements in each related set of use cases
Input Artifacts	Detailed Use Cases/Scenarios Document
Resulting Artifacts	Use Cases/Scenarios Summary and Context Document
Artifact Customers	• Client • Delivery Management • Strategy • User Experience • Technology
Work Guidelines	RUP 5.1 Process Tool (http://www.technology.lante.com/) Guidelines>Requirements Guidelines>

Section	Contains information about…
Activity Diagram in the Use-Case Model	Using an activity diagram to identify the elements of a scenario

Templates	Use Cases/Scenarios Summary and Context Document

Activity: Generate Program Specifications

Purpose	Specify the programming requirements in order to realize the elaborated use cases
Steps	1. Abstract the data elements that the program will require to perform the steps in the elaborated use case 2. Define the functions the program will have to perform in order to carry out the steps in the elaborated use case
Input Artifacts	Detailed Use Cases/Scenarios Document
Resulting Artifacts	Program Specification Document
Artifact Customers	• Client • Delivery Management • User Experience • Technology
Work Guidelines	This activity is done with the Project Developer according to the needs of the project. The form of the document will depend on rapidly the project is being deployed and the specific information that Technology and UX will need to do their tasks.
Templates	Refer to examples in Project Analyst Training Binder

Resources for the Project Analyst

Overview

For those who are developing their expertise as Project Analysts, this section provides some advice about potential rough spots, information about on-the-job support, and recommendations for further training.

Risk Management

Two areas that provide challenges for Project Analysts are described below:

Area	Issue	Response
Multi-package integration environment	Incompatibility of components stalls progress	Plan gap analysis before problems arise to identify solutions before incompatibility becomes a problem
	UX and Technology cannot agree on work-around	Plan how you will resolve incompatibility issues before they arise
Dependency on Client	Limited participation	Prioritize issues and confer only on the most important in an at need/just in time manner
	Lack of domain knowledge	Be proactive: provide verbal and written information to help your client get up to speed
	Changing requirements	Explain the bottom-line impact of mid-project changes and use Change Request Form to ensure that all the stakeholders understand the impact

On-the-job support

Two provisions are made for on-the-job support after training:

Support Form	How it works
"Buddy" System	New analysts are partnered with experienced analysts—preferably on the same project—as a resource to review documentation and provide a source of information
Coach/Mentor	New analysts are mentored by Development, Project Manager, or Senior Project Analyst who provide the new analyst with an objective assessment of work and guidance when necessary

Recommended further training

The following courses are recommended to complete the in-house Project Analyst training:

When	What
Before your first project	Rational Overview (a two-day introduction the Rational Unified Process
	Use Case Development (a one-week course in developing use cases)
After your first project	Java Training (a one week class offered by Sun for non-programmers)
	Object Oriented Analysis/Design (a three day course in creating object models)