

Project Management

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Day 2: Project Planning

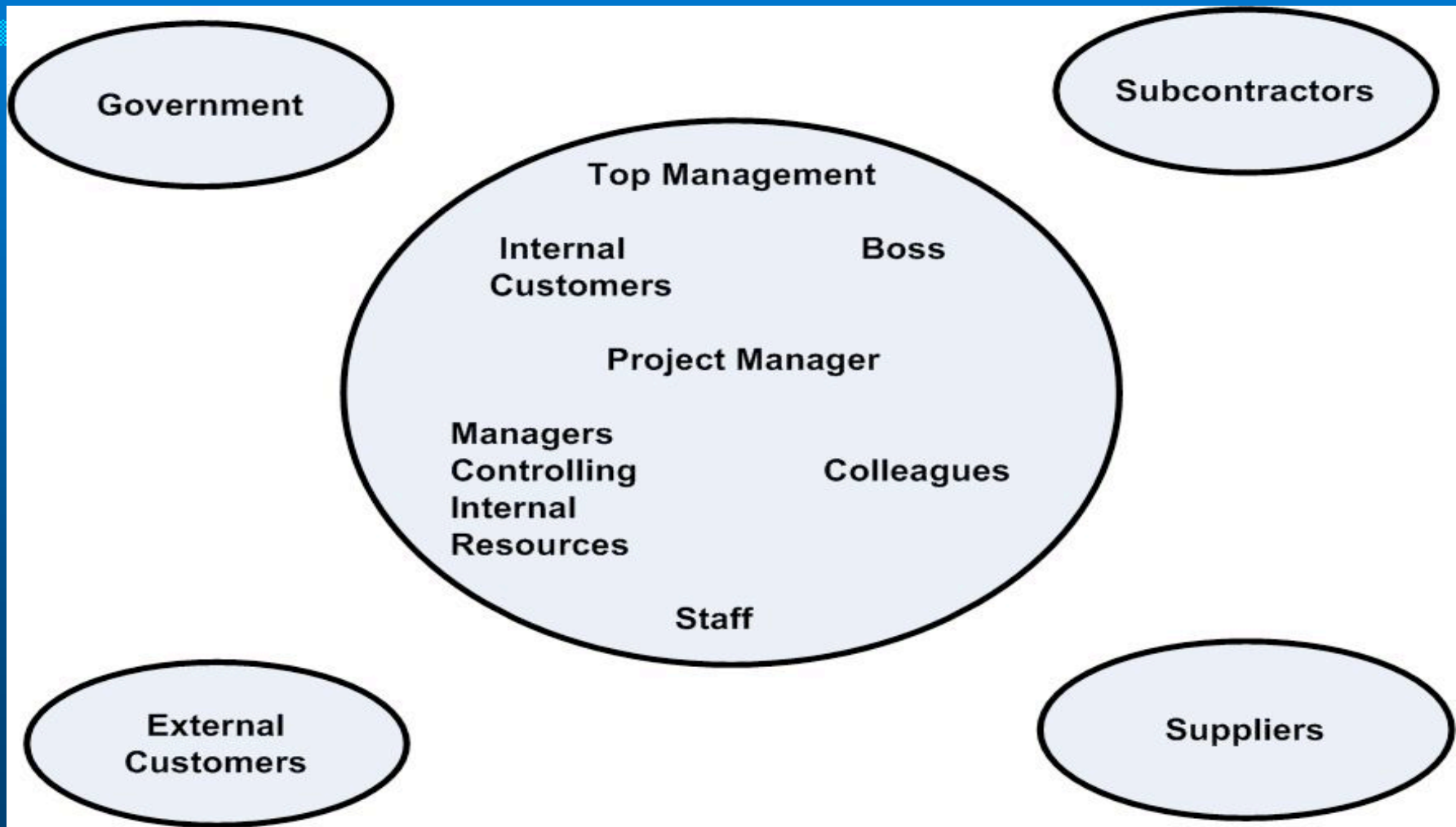
- **Recognize influences that effect project environment**
- **Understand the elements of projects politics**
- **Apply the needs-requirements life cycle**
- **Recognize and articulate a customer need**
- **Identify and specify project requirements**

Organizational Reality

The Divorce of Responsibility and Authority

Case Study 1-1
The Education of Jerry:

The Project Environment



Project Stakeholders

- Executive: (guys who pay the bills)
- End- User: (guys that are going to use your product)
- Expert: (experts in other fields; graphic designers, lawyers, database architect etc)

The Politics of Projects

- 1. Assess the environment**
- 2. Identify the goals of the principal actors**
- 3. Assess your capabilities**
- 4. Define the problem**
- 5. Develop solutions**
- 6. Test and refine the solutions**

Needs-Requirements Life Cycle

- Needs Emergence
- Needs Recognition
- Needs Articulation
- Establishment of Functional Requirements
- Articulation of Technical Requirements

Case Study 2-1
Ralph's Drugstore

Customers Don't Know What They Need

- Customers know what they *don't* need, after they see it
- Even if customers say they know exactly what they need, they probably don't
- As the deliverable develops and takes on a tangible form, customers see new possibilities and try to change the project accordingly
- Customers must be taken seriously- a project fails if the deliverable is **not used**, **underused**, or **misused** by the customer

Recognizing and Articulating Customer Needs

- **Entails an in-depth scrutiny of the recognized need**
- **Serves as the basis for developing functional requirements**

Five Steps of Articulation

1. **Ask customers to define their needs as clearly as possible**
2. **Query all aspects of the need**
3. **Research the need to ensure it is thoroughly understood**
4. **Formulate the need as accurately as possible**
5. **Ask customers to respond to the formulation of the need, and revise it accordingly.**

Project Requirements and Specifications

- Requirements answer the following questions regarding the AS IS and TO BE states of the business
(who, what, where, when, how much, how does a business process work)
- Specifications answer the question:
How will we solve the problem *this time*?
(technologically and /or procedurally)

Rules of Requirements

- **Rule 1: State the requirement explicitly, and have customers sign off on it**
- **Rule 2: Assume that if a requirement can be misinterpreted, it will be misinterpreted**
- **Rule 3: Recognize that there will be changes to the project**
- **Rule 4: Document, Document, Document**

Types of Requirements

- **Regulatory:** Internal and external; usually non negotiable
- **Business:** needs of the sponsoring organization; always from a management perspective
- **User:** What the users need to do with the system or product
- **Functional and Non Functional :** What the system needs to be able to do to satisfy the business and user needs in terms of function and functionality
- **Technical:** How the system needs to be designed and implemented to provide required functionality and fulfill required operational characteristics.

Sample Application:

Automated Banking

ATM Regulatory Requirements

Regulators include:

- Federal government
- Banking Industry Standards and Practices organizations
- Internal regulations within the bank

“All ATM’s shall connect to standard utility power sources within their civic jurisdiction, and be supplied with an Uninterruptible Power Source approved by said company.”

ATM Business Requirement

Focus on the needs of the sponsoring organization always from a management perspective.

“By providing superior service to our retail customers, Monumental Bank’s ATM network will allow us to increase associated service fee revenue by 10% annually on an ongoing basis, using a baseline of December 2005.”

ATM User Requirement

User requirements focus on the experience users need to have with the system, with no concern for the inner workings of the system.

“The system shall complete a standard withdrawal from a personal account, from login to cash, in less than two minutes for a first time user.”

ATM Functional Requirement

Functional requirements focus on what the system does geared towards the production of a business result or deliverable.

“The system shall provide users with the ability to select whether or not to produce a hardcopy transaction receipt before completing a transaction.”

ATM Non-functional Requirement

- **Non-functional requirements focus on any and all requirements not specifically related to functions**
- **They are a critical part of usability studies**

“All displays shall be in white 14 point Arial text on black background.”

SMART Objectives

- **Specific** (get into the details)
- **Measurable** (use quantitative language so that you know when you are finished)
- **Acceptable** (to Stakeholders)
- **Realistic** (given project constraints)
- **Time Based** (deadlines, not durations)

Assignment: Opening a Movie Theatre

Each team will be assigned a type of requirement; Regulatory, Business, User, Functional and Non Functional

Each team will be required to identify two requirements and present to the class.

You have 15 minutes.

Key Messages

- **The project environment involves a wide range of contributors, such as customers, subcontractors, and organizational personnel**
- **Project managers must understand the effect that politics has on their projects**
- **Projects are generated from needs in the environment, organization, or work unit**
- **The needs-requirement life cycle focuses on needs emergence, needs recognition, and needs articulation; needs assessment is used to identify project requirements**
- **There are a wide range of requirements including Regulatory, Business, User, Functional and Non Functional and Technical.**

Case Study 2-2

The Future CDI Corporate Cruiseline Restaurants

Team Objectives

1. Document at least “10 unknowns”, representing requirements you need to discover to more fully understand the nature of this project. Imagine that you have a project sponsor who believes that all requirements have been documented here and that it is safe to proceed with design and development. Your job is to show the sponsor why this is not so.
2. Defining the Requirements: Each team will be assigned a user role of the ConsumeMate system (manager, bartenders, servers, head chef, pastry chef and maitre'd). Each team must identify a minimum of 4 requirements for the ConsumeMate system. (each person on the team should identify one requirements) Be prepared to identify the requirement type.

The Busser: Functional Requirement

The ConsumeMate system will provide a paging capability to notify the busser of the priority of tables to be cleaned.