Project Organizations and Responsibilities: Line-of-Business Organizations, Project Organizations, evolution of Organizations.

Process Automation: Automation Building blocks, The Project Environment.

Project Organizations and Responsibilities:

- **Organizations** engaged in software Line-of-Business need to support projects with the infrastructure necessary to use a common process.
- **Project** organizations need to allocate artifacts & responsibilities across project team to ensure a balance of global (architecture) & local (component) concerns.
- The organization must evolve with the WBS & Life cycle concerns.
- Software lines of business & product teams have different motivation.
- **Software lines of business** are motivated by <u>return of investment</u> (ROI), <u>new business discriminators</u>, market diversification & profitability.
- Project teams are motivated by the cost, Schedule & quality of specific deliverables

1) Line-Of-Business Organizations:

The main features of default organization are as follows:

- Responsibility for process definition & maintenance is specific to a cohesive line of business.
- Responsibility for process automation is an organizational role & is equal in importance to the process definition role.
- Organizational role may be fulfilled by a single individual or several different teams.

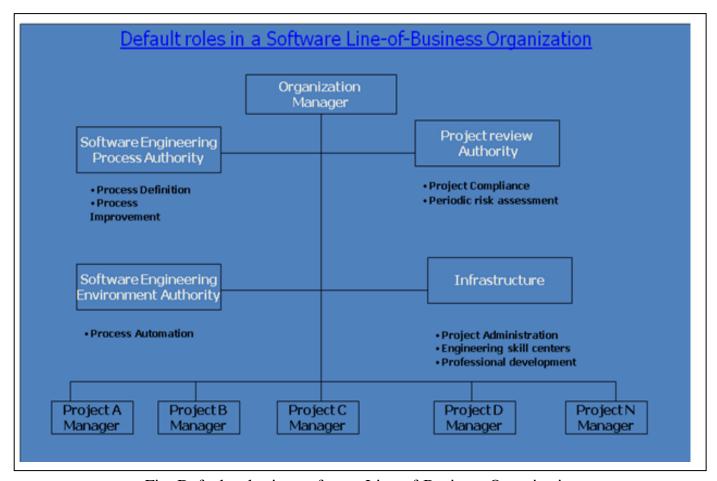


Fig: Default roles in a software Line-of-Business Organization.

Software Engineering Process Authority (SEPA)

The SEPA facilities the exchange of information & process guidance both to & from project practitioners

This role is accountable to General Manager for maintaining a current organization's process maturity & its plan for future improvement

Project Review Authority (PRA)

The PRA is the single individual responsible for ensuring that a software project complies with all organizational & business unit software policies, practices & standards

A software Project Manager is responsible for meeting the requirements of a contract or some other project compliance standard

Software Engineering Environment Authority (SEEA)

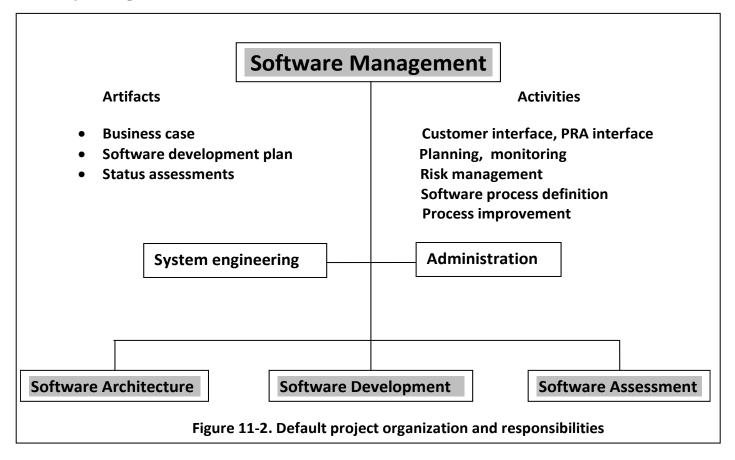
The SEEA is responsible for <u>automating the organization's process</u>, <u>maintaining the organization's standard environment</u>, <u>Training projects to use the environment</u> & <u>maintaining organization-wide</u> reusable assets

The SEEA role is necessary to achieve a significant ROI for common process.

Infrastructure

An organization's infrastructure provides <u>human resources support</u>, <u>project-independent research & development</u>, & <u>other capital software engineering assets.</u>

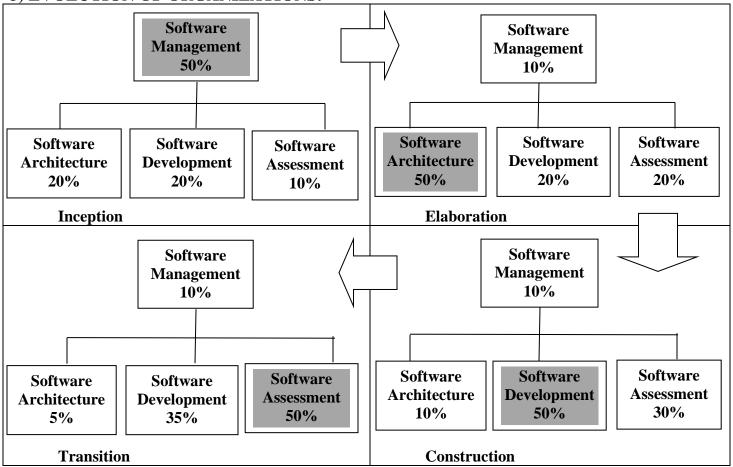
2) Project organizations:



- The above figure shows a default project organization and maps project-level roles and responsibilities.
- The main features of the default organization are as follows:
- The project management team is an active participant, responsible for producing as well as managing.

- The architecture team is responsible for real artifacts and for the integration of components, not just for staff functions.
- The development team owns the component construction and maintenance activities.
- The assessment team is separate from development.
- Quality is everyone's into all activities and checkpoints.
- Each team takes responsibility for a different quality perspective.

3) EVOLUTION OF ORGANIZATIONS:



Inception:	Elaboration:
Software management: 50%	Software management: 10%
Software Architecture: 20%	Software Architecture: 50%
Software development: 20%	Software development: 20%
Software Assessment	Software Assessment
(measurement/evaluation):10%	(measurement/evaluation):20%
Construction:	Transition:
Software management: 10%	Software management: 10%
Software Architecture: 10%	Software Architecture: 5%
Software development: 50%	Software development: 35%
Software Assessment	Software Assessment
(measurement/evaluation):30%	(measurement/evaluation):50%