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Certified Maintenance & Reliability Professional (CMRP) BOK Guidance Course

Presented by

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Pillar 4– Organization & Leadership

Concept & strategy
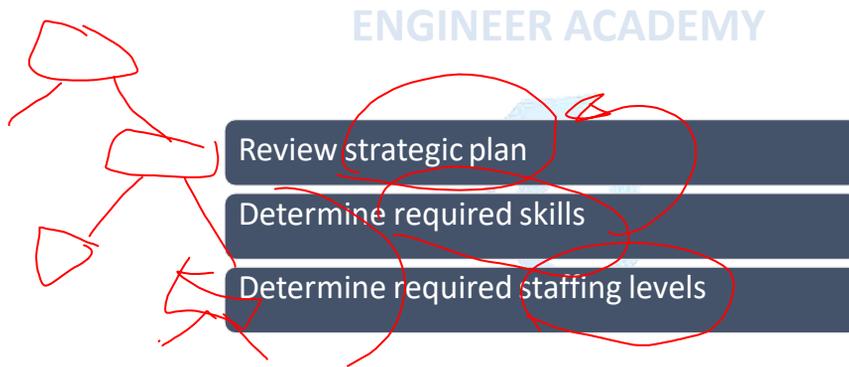
This subject area describes processes for assuring that the maintenance and reliability staff is the most qualified and best assigned to achieve the maintenance and reliability organization goals.

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Pillar 4– Organization & Leadership
4.1 Determine organizational requirements

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- Review strategic plan
- Determine required skills
- Determine required staffing levels

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4.1 Determine organizational requirements

It is important to identify the organizational requirements needed to align to the organizational strategic plan.

Organizational strategic plan → Organizational requirements

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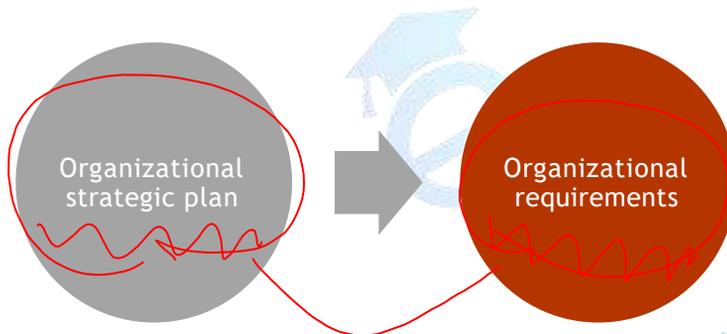
Pillar 4– Organization & Leadership
4.1 Determine organizational requirements
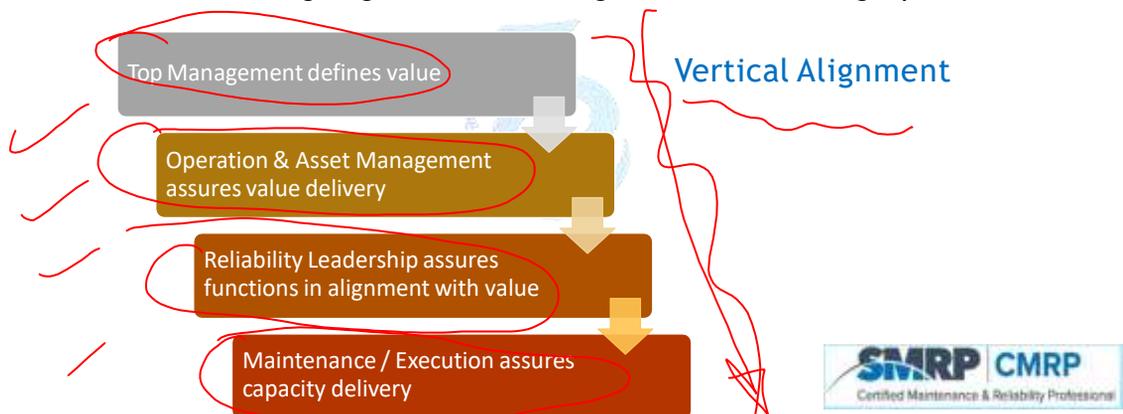
Requirements that need to be considered are:

- Analyzing the overall capability of the organization
- Understanding the business conditions in which the organization operates
- Understanding the capability and skills of personnel
- Evaluating industry trends, issues, and opportunities that might affect the organizational programs
- Developing strategic and tactical plans and communicating them to all levels of the organization.

(handwritten annotation: SWOT)

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4.1 Determine organizational requirements

Establishing and communicating these requirements early will provide direction and assist in maintaining alignment to the organizational strategic plan.

- Top Management defines value
- Operation & Asset Management assures value delivery
- Reliability Leadership assures functions in alignment with value
- Maintenance / Execution assures capacity delivery

Vertical Alignment

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4.1 Determine organizational requirements

Establishing and communicating these requirements early will provide direction and assist in maintaining alignment to the organizational strategic plan.
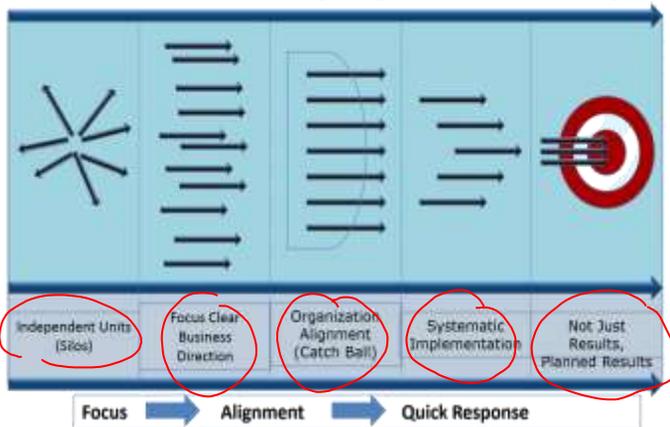
Horizontal Alignment

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4.2 Analyze organizational capability

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Inventory staff skills

Determine performance gaps

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Pillar 4– Organization & Leadership
4.2 Analyze organizational capability

Inventory Staff Skills

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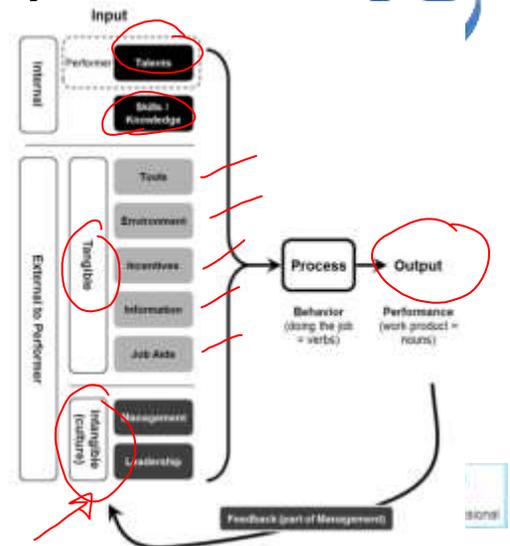| Establish a process for assessing and recording staff skills | Maintain this skill inventory in a database | Use this database for managing needed job-skill relationship | Also, Use this database in internal hiring, training & improvement. |

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4.2 Analyze organizational capability

Determine Performance Gap

Assessment of organizational capability begins with a performance analysis.

The organization needs to measure actual performance against desired performance by assessing personnel in order to identify any gaps..

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4.3 Develop the organization structure

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Establish reporting channels

Determine roles and responsibilities

RACI

Manage reorganization

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4.3 Develop the organization structure

Organizational structure development: ENGINEER ACADEMY

Identify the work functions needed to carry out the strategic plan

Structure these functions to facilitate effective organizational performance

Delineate functional interaction.

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4.3 Develop the organization structure

Factors Affecting Organizational Structure
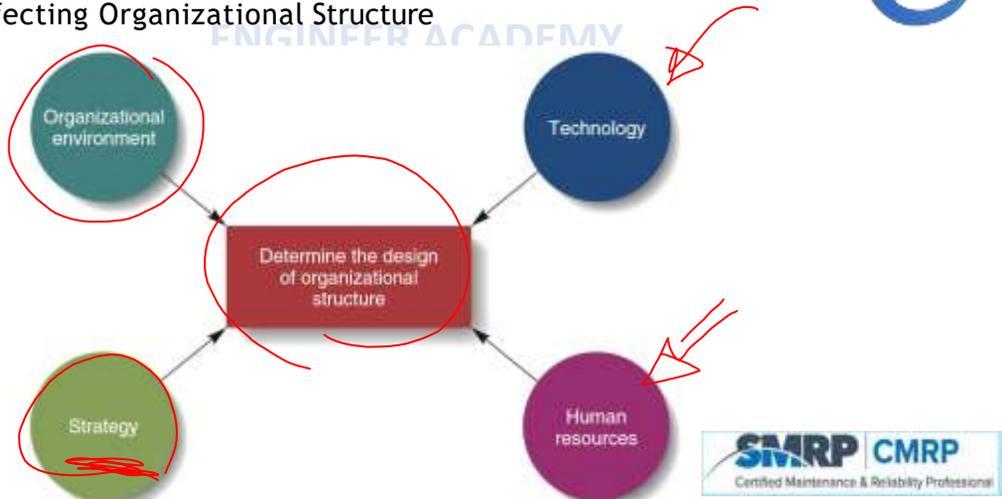
Pillar 4– Organization & Leadership
4.3 Develop the organization structure

The organizational structure defines:

| Roles | Responsibilities | Relationships | Governance |
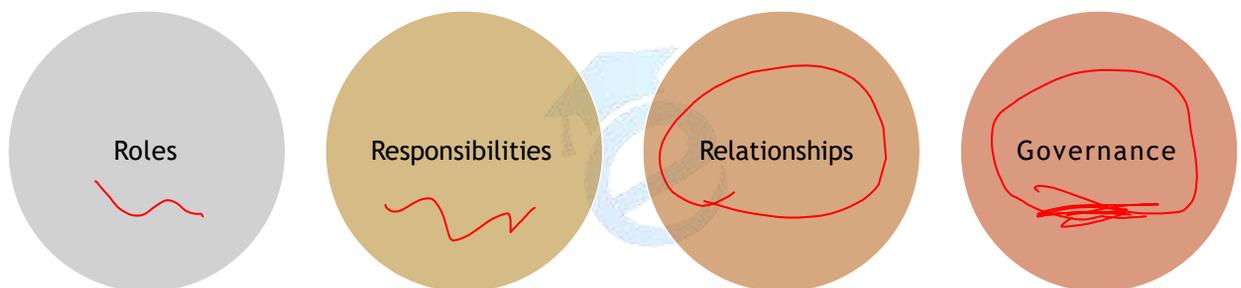
In addition to other organizational characteristics that, when effectively communicated, facilitate work by the people and teams to which the various functions are assigned.

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4.3 Develop the organization structure

Defining Roles and Responsibilities

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Responsible	Accountable	Consulted	Informed
• "The doer"	• "The buck stops here"	• "In the loop"	• Keep in the picture
• Person who completes a particular process step or leads the people who do	• Person who is held accountable by top management for implementation	• Person whose advice is sought before a final decision is made and / or implementation takes place	• Person or persons who are notified once a final decision has been made or after implementation takes place
• Position working on the activity & responsible for implementation	• Position with Yes / No authority	• Position involved prior to decisions or action	• Position that needs to know of the decision or action
• Responsibility level determined by individual with the "A"	• Only one A per function	• Two-way communication.	• Informed after and only one-way communication

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4.3 Develop the organization structure

Example RACI Chart for failure KPI data

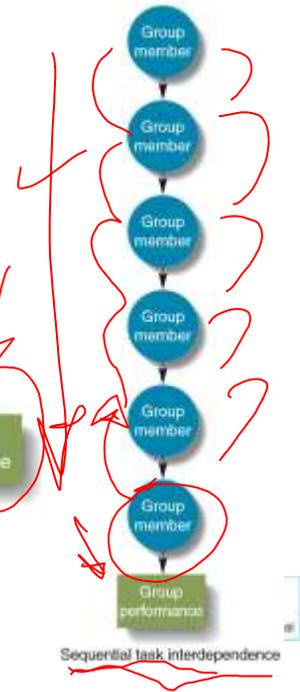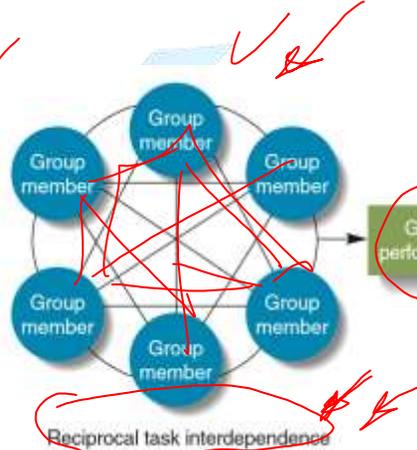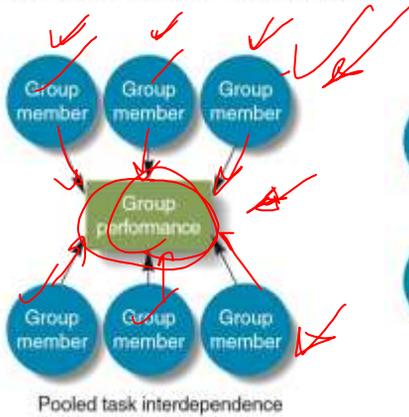| Task:	Maint Supervisors	Maint Analyst	Maint Planner	Maint Technician	Maint Manager	Rel Specialist	CMMS Proj Engr
Inputting Failure Data	A	C	I	R		C	C
Work Order Completion	R	C	C	C	A	I	I
Work Order Close Out	C	R	C		I	I	A
QA of Failure Data Input	C	R	I	C	I	C	A
Analyze Failure Records	C	C	I	C	A	R	I
Maintenance Strategy Adjustments	C	I	I	C	A	R	R
Implementing New Strategies	R	I	R	C	A	I	I

Work Flow

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4.3 Develop the organization structure

Defining Work Relationships

Types of Task Interdependence

Pooled task interdependence

Reciprocal task interdependence
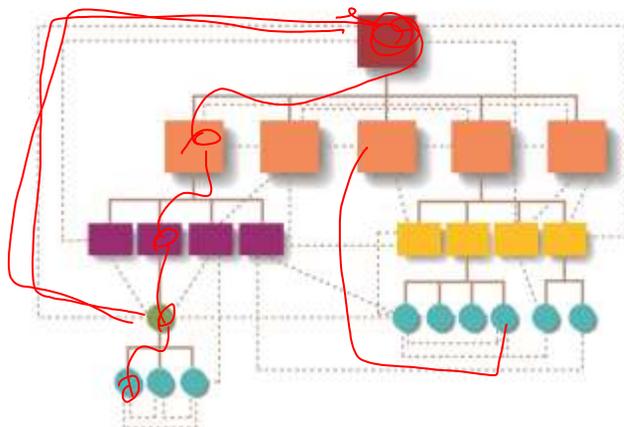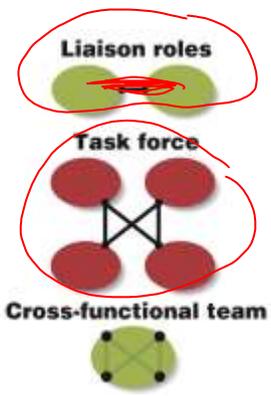
Sequential task interdependence

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4.3 Develop the organization structure

Defining Work Relationships

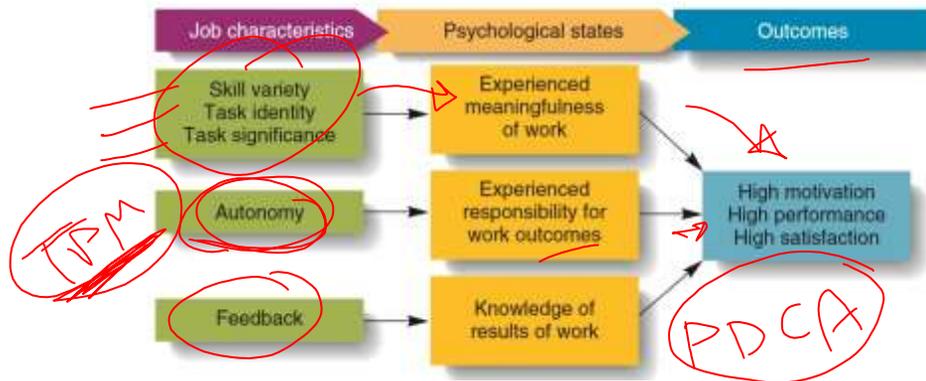Formal and Informal Communication Networks in an Organization

Liaison roles

Task force

Cross-functional team

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4.3 Develop the organization structure

Defining Work Relationships
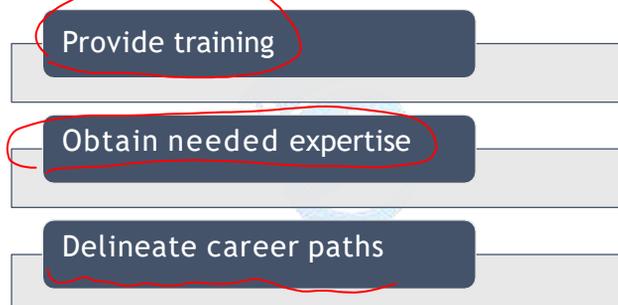
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The Job Characteristics Model

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4.4 Develop personnel

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- Provide training
- Obtain needed expertise
- Delineate career paths

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4.4 Develop personnel

Essential parts of improving organizational performance:

Development of personnel

Aligning staff with the strategic plan

Providing a career path for personnel.

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4.4 Develop personnel

Establishing Training Plan:

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The American Society of Training and Development states:

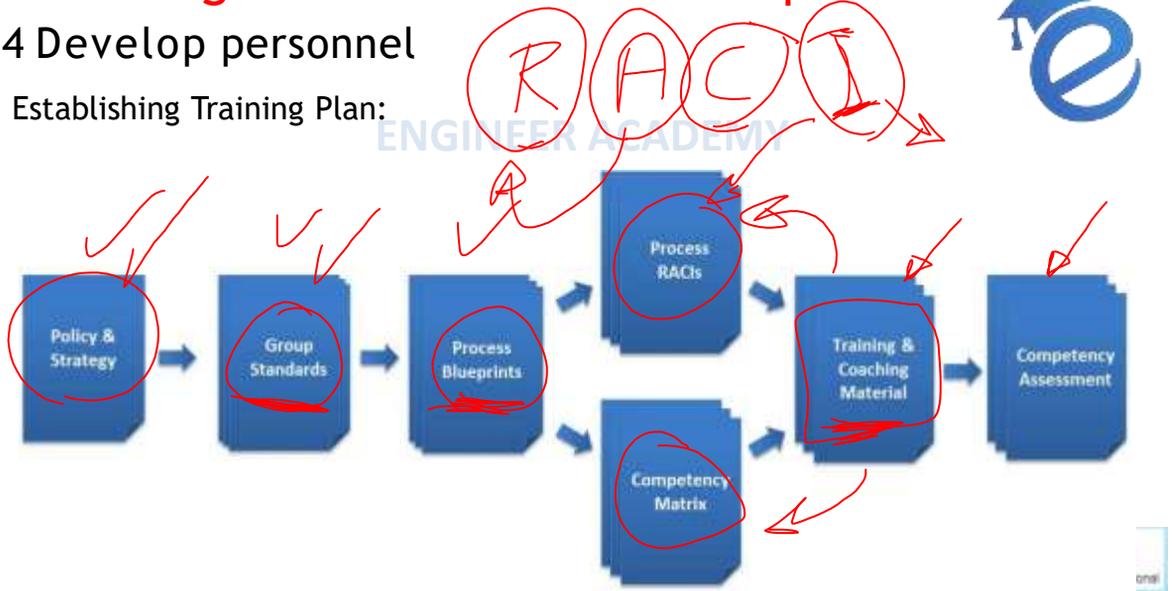An annual investment of $625.00 in training per employee yields a return of $47,000 to the bottom line.

ROI

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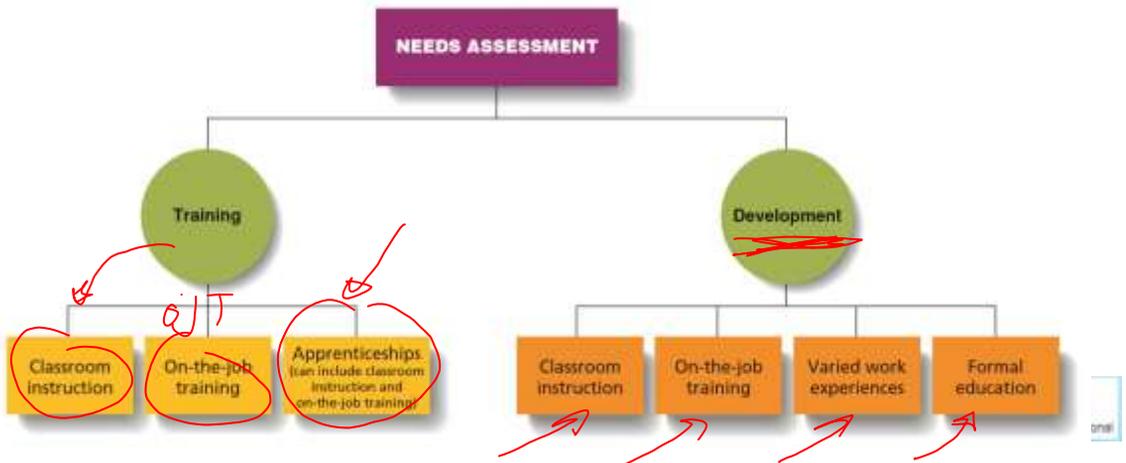# Pillar 4– Organization & Leadership

4.4 Develop personnel

Establishing Training Plan:

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4.4 Develop personnel

Establishing Training Plan:

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4.4 Develop personnel

Establishing Training Plan:

A training plan is the method used to develop a structured curriculum that fits the training requirements of each job role.

The predefined curriculum will facilitate the development of the performance assessment for measuring actual performance against desired performance. Thus, it identifies the right training to close the gap.

Training plans also provide career paths to enhance company growth.

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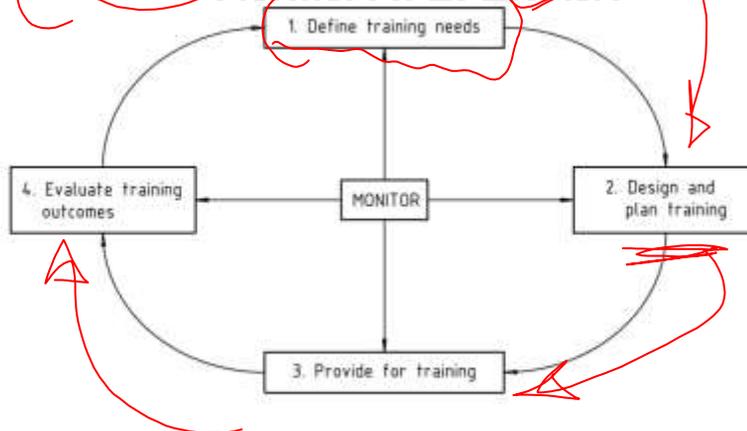## 4.4 Develop personnel

Establishing Training Plan:

Figure 2 — Training cycle

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4.4 Develop personnel

Establishing Training Plan:

Before assigning training programs we need to know what employees need to know.

Job Task Analysis (JTA) is the foundation of training program success.

It determines in detail the duties and requirements for a given job with relative importance of each.

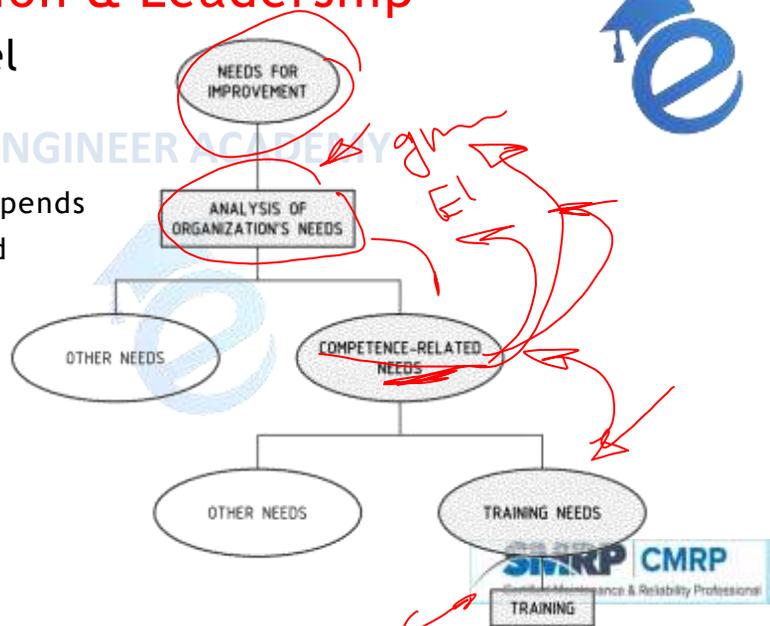A job is a collection of tasks and responsibilities that are ssigned to an employee.

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4.4 Develop personnel

Establishing Training Plan:

Assessing training needs depends on organizations needs and related competencies.

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4.4 Develop personnel

Training Return on Investment:

The Maintenance Training ROI Process.

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4.4 Develop personnel

Example Training Benchmarks:

Training Benchmark	Low	High	Best of the Best
Percentage of Overall Budget — Payroll	0.5	6.4	4.5
Expenditure per Employee in $	650	5,000	4200
Training Hours / Employee	5	110	96

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4.4 Develop personnel

Delineate Career Paths:

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Employee Life Cycle

| Hire | Inspire | Admire | Retire |

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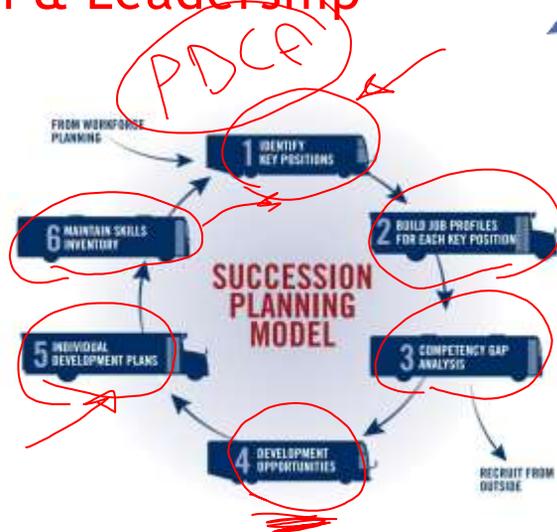# Pillar 4– Organization & Leadership

4.4 Develop personnel

Delineate Career Paths:

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Succession Planning

the process of identifying and preparing suitable employees through mentoring, training, and job rotation—to replace key players in the organization.

PDCA

FROM WORKFORCE PLANNING

SUCCESSION PLANNING MODEL

1 IDENTIFY KEY POSITIONS
2 BUILD JOB PROFILES FOR EACH KEY POSITION
3 COMPETENCY GAP ANALYSIS
4 DEVELOPMENT OPPORTUNITIES
5 INDIVIDUAL DEVELOPMENT PLANS
6 MAINTAIN SKILLS INVENTORY

RECRUIT FROM OUTSIDE

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4.4 Develop personnel

Delineate Career Paths:

Succession Planning

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Right People.
Right Development.
Right Time.

- Focus on the right competencies
- Assess bench strength
- Engage and develop high potentials
- Forecast the impact of succession planning
- Determine if your program has the desired impact

9 Box Talent Model

The Talent Matrix

	Low	Medium	High
High	C1 – Key Contributor	B1 – Strong Performer	A1 – Star Performer
Medium	C2 – Acceptable Performer	B2 – Solid Citizen	A2 – Rising Star
Low	C3 – Unacceptable Performer	B3 – Marginal Performer	A3 – Too New

Performance / Potential