

# **PROJECT MANAGEMENT FOR PROJECT MANAGERS**

## **Lesson 6: Project** **HUMAN RESOURCE** **(HR) Management**

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# 6.1: Definition

**Project Human Resource Management** is the science of:

- allocating human resources among various projects or business units.
- maximizing the utilization of available personnel resources to achieve business goals.
- performing the activities that are necessary in the maintenance of that workforce.



## 6.1.1: Objective

To ensure successful project delivery.

### **HOW?!!!**

- ✓ Clearly define roles & responsibilities
- ✓ Enhanced under-represented capabilities  
and skills
- ✓ Select individual with appropriate capabilities
  - ✓ Establish proactive communication

## 6.2: Organization Structure

- It is an enterprise environmental factor which can affect the availability of resources and influence how projects are conducted.
- It range from functional to projectized, with a variety of matrix structures between them.

# 6.2.1: Organizational Influences on Projects

**Table 2-1. Influence of Organizational Structures on Projects**

<b>Project Characteristics</b> / <b>Organization Structure</b>	<b>Functional</b>	<b>Matrix</b>			<b>Projectized</b>
		<b>Weak Matrix</b>	<b>Balanced Matrix</b>	<b>Strong Matrix</b>	
<b>Project Manager's Authority</b>	Little or None	Low	Low to Moderate	Moderate to High	High to Almost Total
<b>Resource Availability</b>	Little or None	Low	Low to Moderate	Moderate to High	High to Almost Total
<b>Who manages the project budget</b>	Functional Manager	Functional Manager	Mixed	Project Manager	Project Manager
<b>Project Manager's Role</b>	Part-time	Part-time	Full-time	Full-time	Full-time
<b>Project Management Administrative Staff</b>	Part-time	Part-time	Part-time	Full-time	Full-time

Source: PMBoK 4<sup>th</sup> Edition

## 6.2.2: JKR Organization Structure

- ❑ JKR adopts strong matrix organization structure
- ❑ In managing under this matrix organization structure, it is important for parties involved to understand their roles and responsibilities.



# 6.2.3: Roles & Responsibilities of HOPT

- Prepare project management plan and monitor & control of the project throughout the project lifecycle
- Proactively influencing outcomes
- Ensuring technical issues are resolved
- Manage, document and report on overall status of the project at defined points
- Ensuring completing the project on time and to budget with quality outcomes
- Managing all the key stakeholders of the project

# .....Roles & Responsibilities of HOPT

## (Cont.)

- Focus on overall needs and expectations of customers and other stakeholders
- Single point of contact for clients
- Set the overall project scope, schedule and budget that the HODT & SO will deliver
- Full-time project managers, with no supervisory duties
- Prepare responsibility assignment matrix for project team members

# 6.2.4: Roles & Responsibilities of HODT

- Responsible for the technical aspect of the project by focusing on technical scope, schedule, budget and quality including assisting and support HOPT in QA/QC throughout the project life cycle
- Plan and design product realisation within defined scope, time, cost and agreed quality/performance standards & helps to resolve technical issues on the project
- Perform technical audit on the project at any point throughout the project life cycle as QA/QC requirement
- Supports and assists in contract management

# .....Roles & Responsibilities of HODT

## (Cont.)

- Collaborates with other stakeholders (e.g. other HODTs, SO etc.) to provide support and services to the project
- Manages, documents and reports on overall project technical scope, schedule and budget at regular interval as required for monitoring & controlling
- Prepare documentations, reports & lessons learned in accordance with the assigned tasks for future projects

## 6.2.5: Roles & Responsibilities of SO

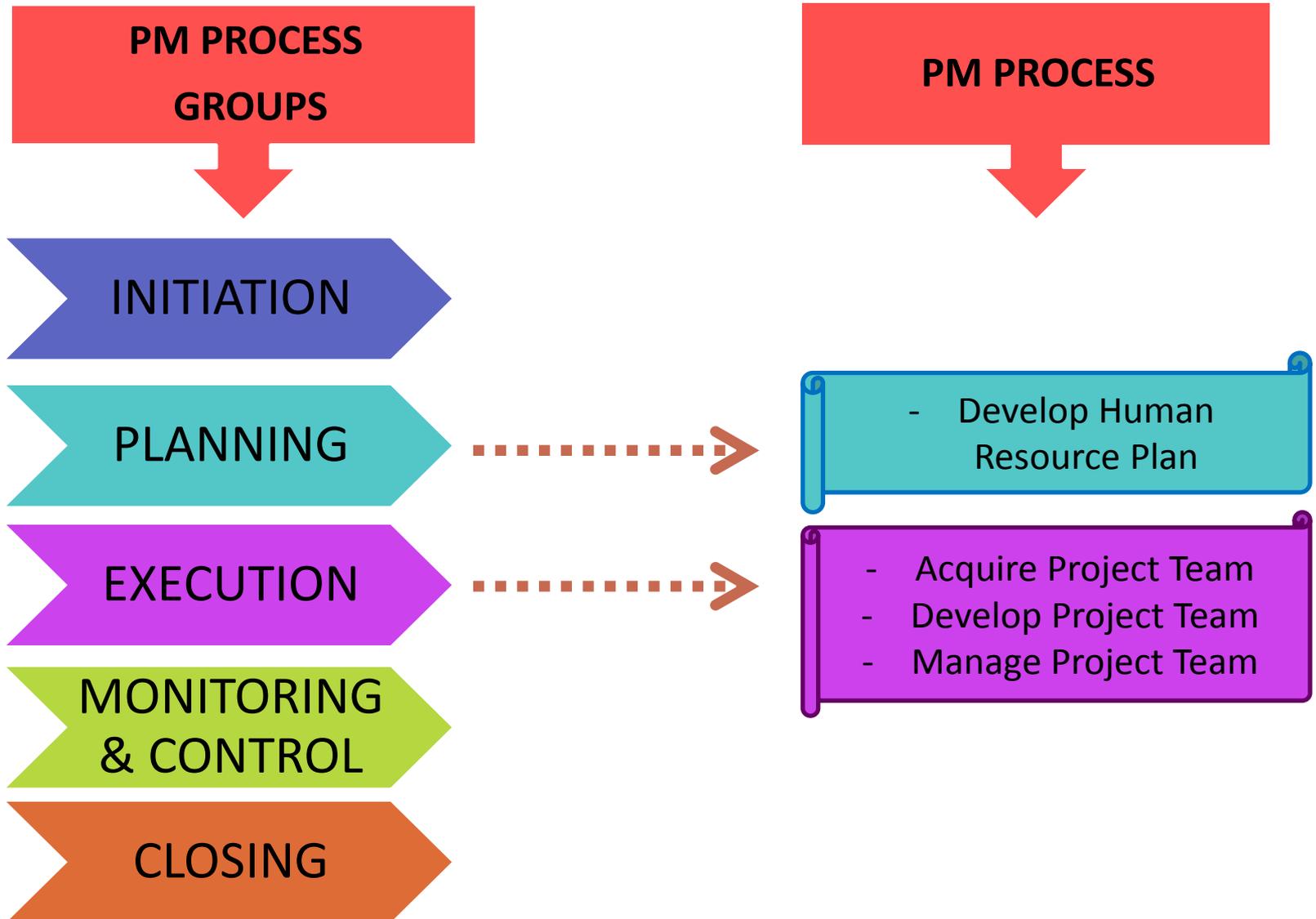
- The SO may not be a party to a contract but he/she is named in the contract document as the person fully responsible to administer the contract between the government and the contractor except for clauses reserved for other officers' named, during the entire contract period of construction and handover phase of the project
- Supervise, monitor & control of the project in accordance with the drawings & specifications to achieve the outcomes of:
  - Quality
  - Time
  - Cost
- As a certifier under the contract the SO has a duty to act fairly and impartially when doing certification
- Liaise with HOPT should there be any ambiguity, discrepancy or inadequacy of drawings/specs etc.

# .....Roles & Responsibilities of SO

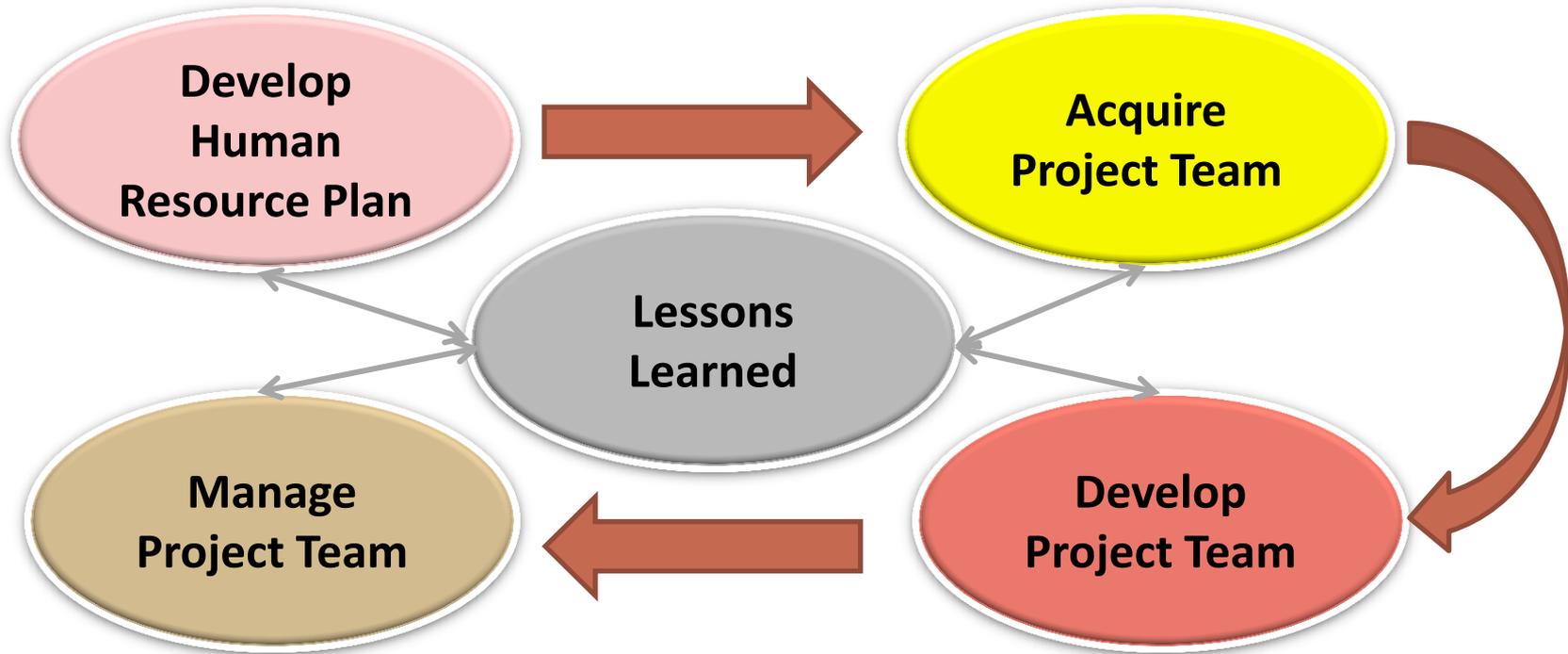
## (Cont.)

- Obtain consent from HOPT for change of scope and cost to the project
- Manages overall risks, budget, and resources assigned to the project
- Plan and manage communication plan e.g.. Meetings, reports, flow of communication etc.
- Managing the stakeholders e.g. Public, TNB, Waterworks, TM etc. during contract stage
- Assists in the technical or quality audits carried out during construction/handover stage
- Prepare close out report incorporating lessons learnt to be submitted to the HOPT for future projects

# 6.3: Project HR Management Processes



# .....Project HR Management Processes



## 6.4: Project HR Management -Overview

### Project Human Resource Management

#### Develop HR Plan

- ✓ **Inputs**
  - ✓ Activity Resource Requirement
  - ✓ Enterprise Environmental Factor
  - ✓ Organizational Process Assets
- ✓ **Tools and Techniques**
  - ✓ Organization Charts and Position Description
  - ✓ Networking
  - ✓ Organizational Theory
- ✓ **Outputs**
  - ✓ Human Resource Plan

#### Acquire Project Team

- ✓ **Inputs**
  - ✓ Project Management Plan
  - ✓ Enterprise Environmental factor
  - ✓ Organizational Process Assets
- ✓ **Tools and Techniques**
  - ✓ Pre-assignment
  - ✓ Negotiation
  - ✓ Acquisition
  - ✓ Virtual Teams
- ✓ **Outputs**
  - ✓ Project Staff Assignment
  - ✓ Resource Calendars
  - ✓ Project Management Plan Updates

# .....Project HR Management –Overview (Cont.)

## Project Human Resource Management

### Develop Project Team

- ✓ **Inputs**
  - ✓ Project Staff Assignments
  - ✓ Project Management Plan
  - ✓ Resource Calendars
- ✓ **Tools and Techniques**
  - ✓ Interpersonal Skills
  - ✓ Training
  - ✓ Team Building Activities
  - ✓ Ground Rules
  - ✓ Co-location
  - ✓ Recognition and rewards
- ✓ **Outputs**
  - ✓ Team performance assessments
  - ✓ Enterprise Environmental factor Updates

### Manage Project Team

- ✓ **Inputs**
  - ✓ Project Staff Assignment
  - ✓ Project Management Plan
  - ✓ Team Performance Assessments
  - ✓ Performance Reports
  - ✓ Organizational Process Assets
- ✓ **Tools and Techniques**
  - ✓ Observation and Conversation
  - ✓ Project Performance Appraisal
  - ✓ Conflict Management
  - ✓ Issue Log
  - ✓ Interpersonal Skills
- ✓ **Outputs**
  - ✓ Enterprise Environmental factor Updates
  - ✓ Organizational Process Assets Updates
  - ✓ Change Request
  - ✓ Project Management Plan Updates

## 6.5: Develop Human Resource Plan

- Process of identifying and documenting project **roles, responsibilities** and required **skills, reporting relationship** and creating a **staffing management plan**.
- Human resource planning is used to **determine and identify** human resource with the necessary **skills required** for project success.

# .....Develop Human Resource Plan

- Identify of **training needs**, team building strategies, plan for **recognitions and rewards** program, compliance considerations, **safety issues** and the impact of the Staffing Management Plan on the organization.
- Important consideration should be given to the **availability** of, or completion for scarce or limited human resources.

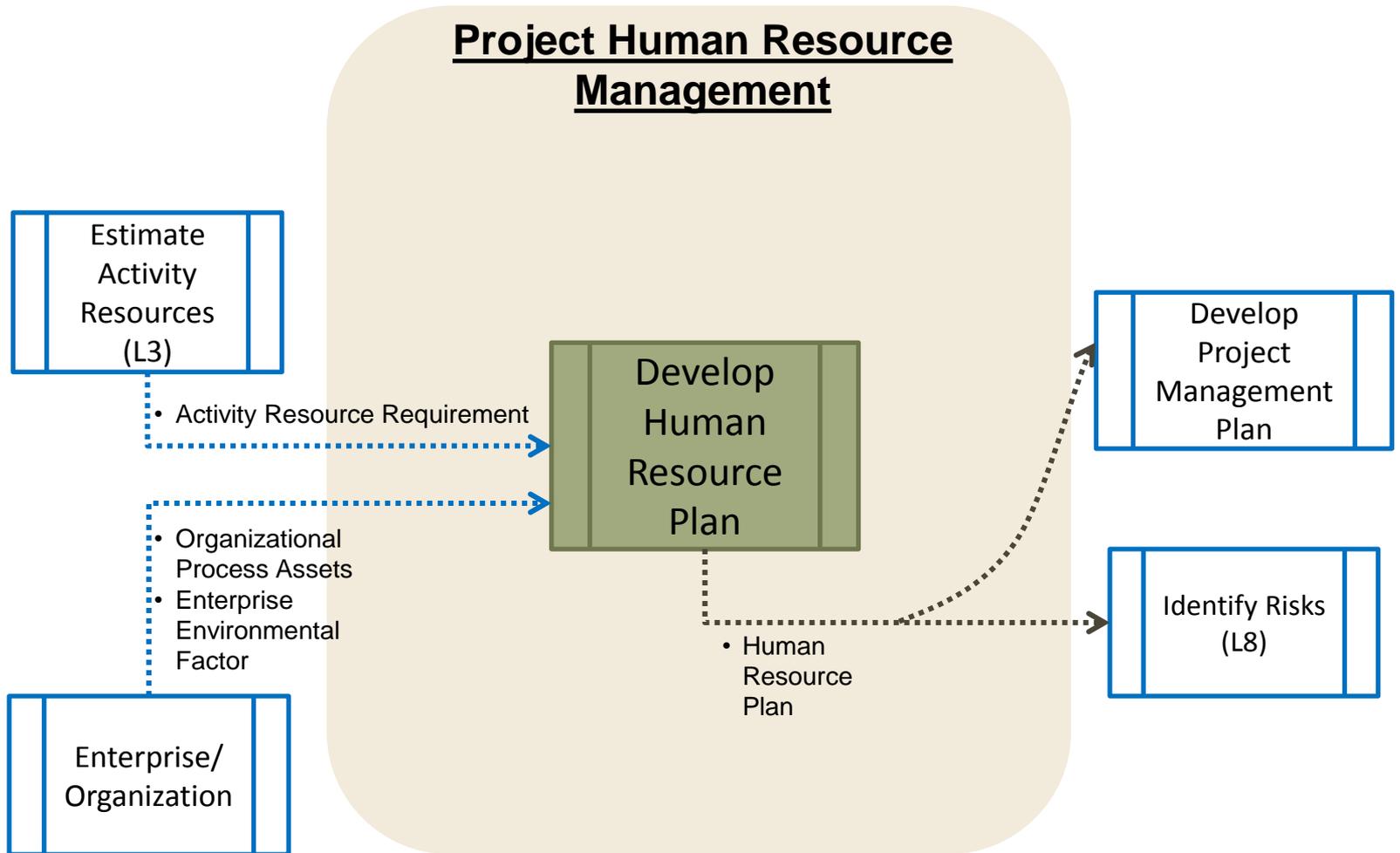
# .....Develop Human Resource Plan

- Project roles can be designated for persons or group who can be from the inside or outside the organization performing the project.
- Other projects may be competing for the resources with the same competencies and skills sets.



# .....Develop Human Resource Plan

- Given these factors, project costs, schedule, quality and other areas may be significantly affected.
- Effective human resource planning should consider and plan for these factors and develop human resource options.
- Examples: RAM, Organisation Charts, Competency Model & Dictionary, Competency Identifications, MyKJ / HR Policies & Procedures. / SPB - Lampiran A, D & E



**Figure 6.1: Develop Human Resource Data Flow Diagram**

## 6.6: Acquire Project Team

- Process of confirming human resource availability and obtaining the team necessary to complete project assignment.
- The Project Manager or the Project Management Team should effectively negotiate and influence others who are in the position to provide the required human resources for the project.

# .....Acquire Project Team

- Failure to acquire the necessary human resource for the project may affect project schedules, budgets, customer satisfaction, quality and risks – it could decrease the probability of success and ultimately result to project cancellation / failures.

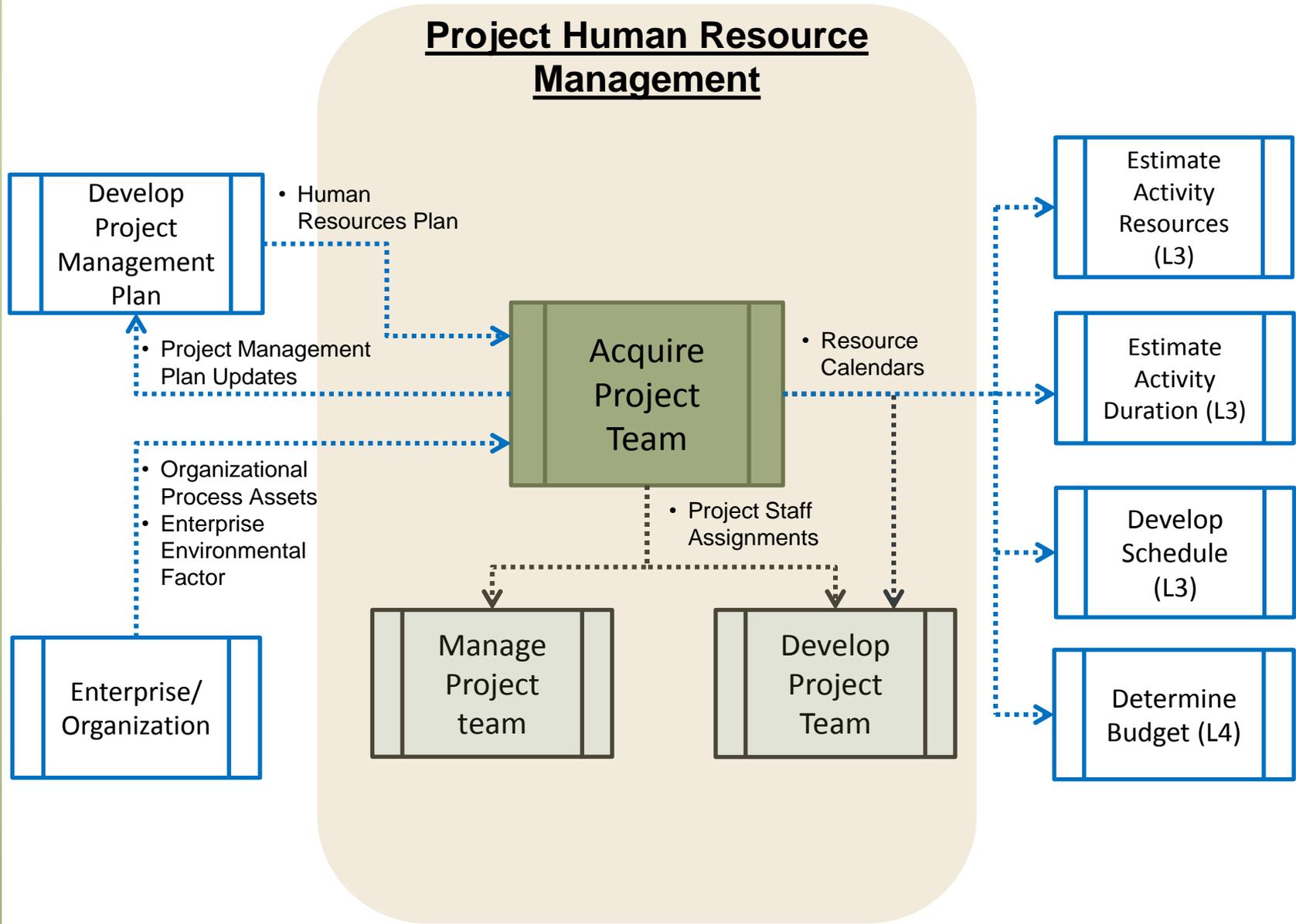


# .....Acquire Project Team

- If the human resources are not available due to constraints, economic factors or previous assignment to other projects, the project manager or project team may required to assign alternative resources, perhaps with lower competencies, provided there is no violation of legal, regulatory, mandatory, or other specific criteria.

# .....Acquire Project Team

- These factors should be considered and planned for in the planning stages.
- The project manager and the project team will be required to reflect the impact of any unavailability of required human resources in the project schedule, project budget, project risks, project quality, training plans, and the other project management plans as required.
- Examples: Q-Plan (Analisa Sumber) / D-Plan (Analisa Sumber)/ HR Request.



**Figure 6.2: Acquire Project Team Data Flow Diagram**

## 6.7: Develop Project Team

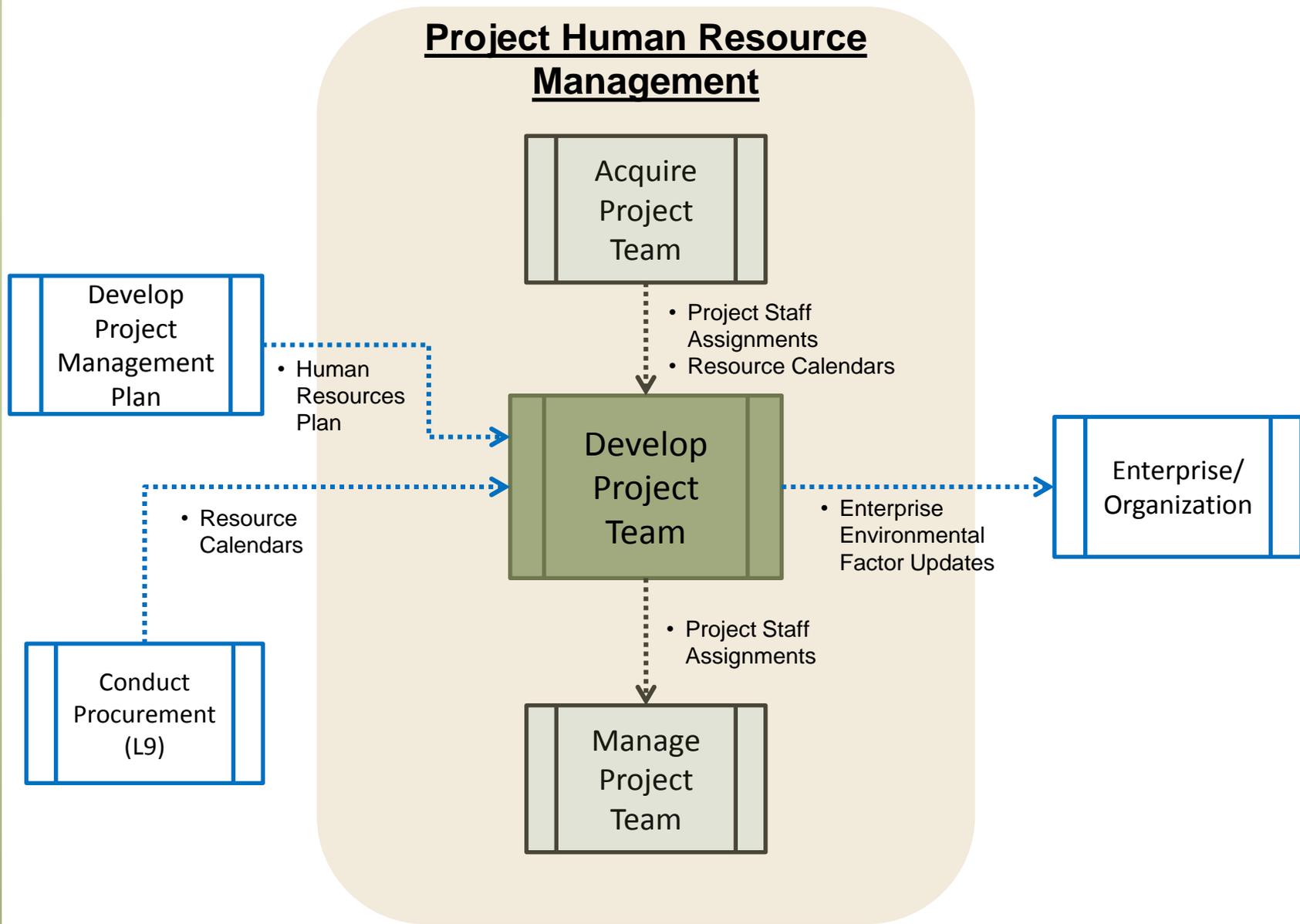
- Process of improving the competencies, team interaction and the overall team environment to enhance project performance.
- The **project manager** should acquire **skills** to **identify, build, maintain, motivate, lead, and inspire project teams** to achieve high team performance and to meet the project objectives.

# .....Develop Project Team

- Teamwork is critical factor for project success, and developing effective project teams is one of the primary responsibilities of the project manager.
- Project manager should create an environment that facilitates teamwork, and continually motivate their team by providing challenges and opportunities, timely feedback and support as needed, recognizing and rewarding good performance.

# .....Develop Project Team

- High team performance can be achieved by using open and effective communication, developing trust among team members, managing conflicts in a constructive manner and encouraging collaborative problem-solving and decision making.
- The Project Manager should request management support and/or influence the appropriate stakeholders to acquire the resources needed to develop effective project teams.



**Figure 6.3: Develop Project Team Data Flow Diagram**

## 6.8: Manage Project Team

- Tracking team member performance, providing feedback, resolving issues and managing changes to optimize project performance.
- The project management team observe team behavior, manages conflict, resolve issues, and appraise team member performance.



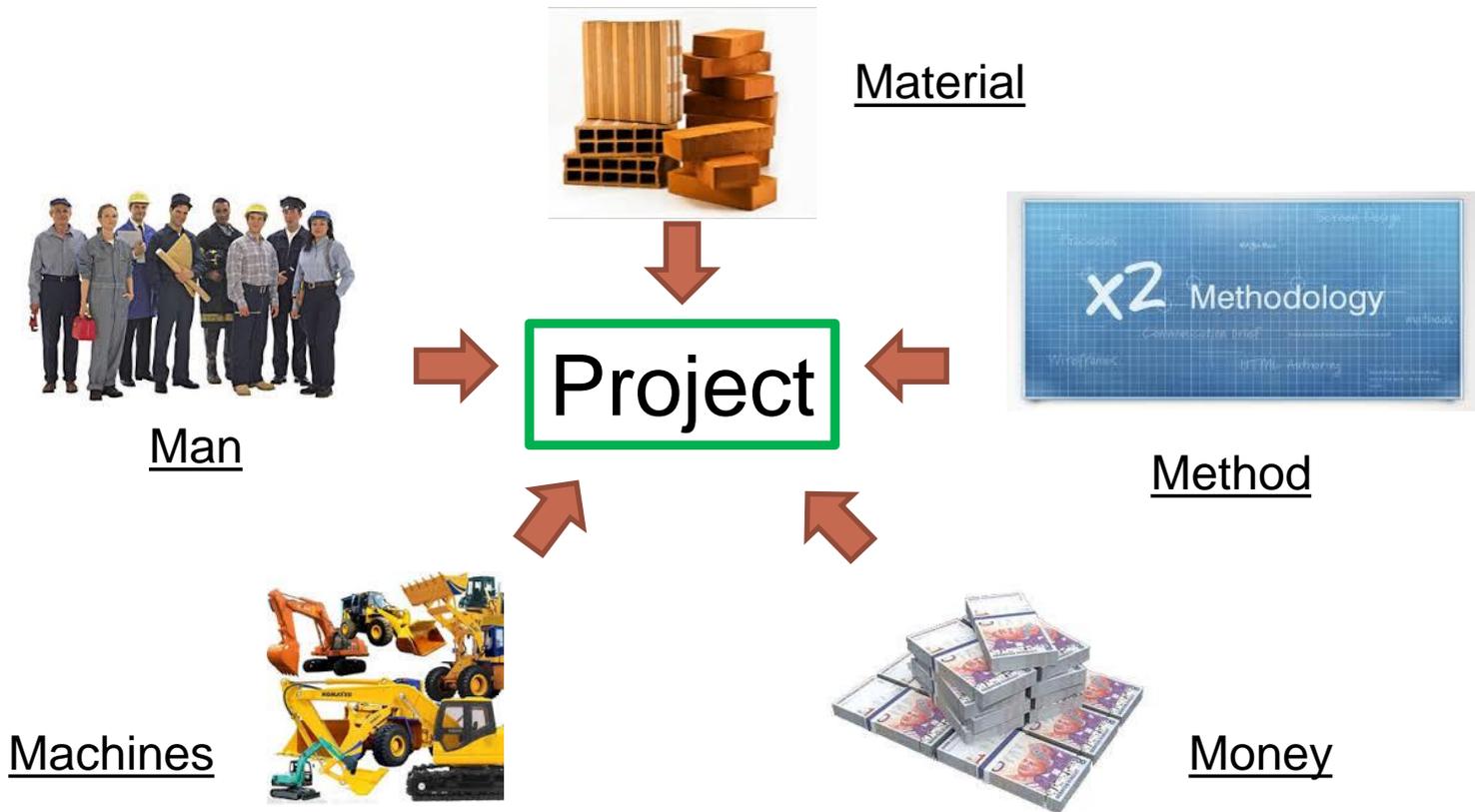
# .....Manage Project Team

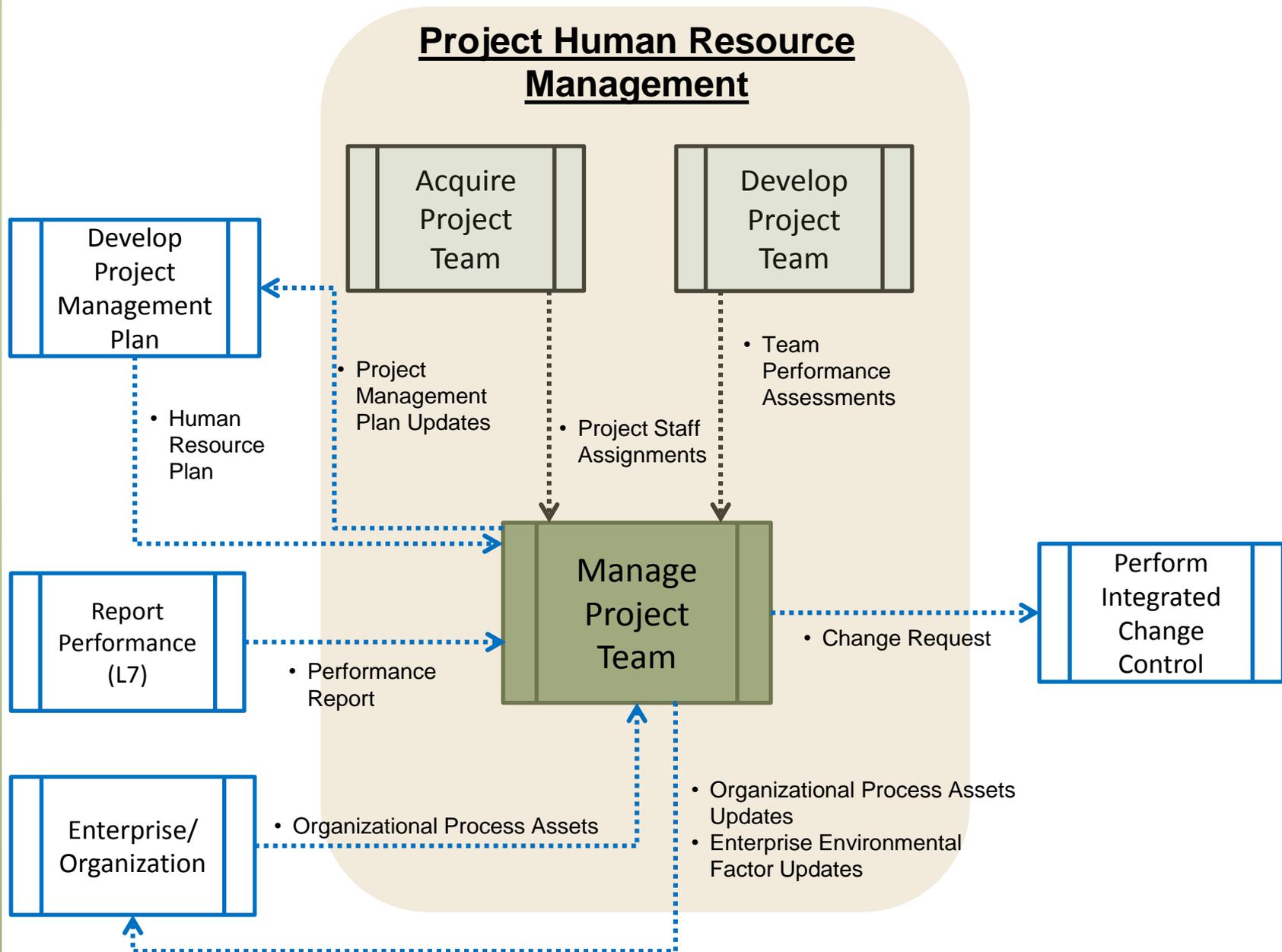
- Managing a project team require a variety of management skills for fostering teamwork and integrating the efforts of team members to create a high performance team.
- Team management involves a combination of skills with special emphasis on communication, conflict management, negotiation and leadership.



# .....Manage Project Team

- Managing team members alone is not enough. To ensure successfulness of the project, team leader also need to manage other resources.





**Figure 6.4: Manage Project Team Data Flow Diagram**

## 6.9: Lesson Learned

- Enterprise Environmental factors updates;
  - ✓ organizational performance appraisal and
  - ✓ individual skills updates.
- Organizational process assets updates:
  - ✓ lessons-learned documentation,
  - ✓ templates and
  - ✓ organizational standard processes.

# .....Lesson Learned

- Change request:
  - ✓ Perform Integrated Change Control Process.
- Project Management Plan updates:
  - ✓ Elements of the project management plan that may be updated include, but are not limited to the Staffing Management Plan.

# 6.10: Exercise

# Exercise 1

Develop project team base on information provided. Use responsibility assignment matrix template.

# Project HR Management Template:

## RAM

	<b>PENGURUSAN PROJEK</b>												Rujukan :	JKR.PMMM.04			
	<b>Matriks Penugasan Tanggungjawab</b>												No Mukasurat :	1			
												No Keluaran :	1				
												No Semakan :	1				
												Tarikh :	13.01.2014				
<b>PROJEK:</b>																	
<b>PENGURUS PROJEK :</b>												<b>TARIKH PENYEDIAAN:</b>					
<b>JKR</b>																	
<b>LAIN-LAIN</b>				<b>PASUKAN PROJEK</b>							<b>KONTRAKTOR</b>		<b>LAIN-LAIN</b>				
Pihak yang bertanggungjawab (singkatan nama)		KP	TKP	PGRH CAW.	HOPT	HODT Elek	HODT Mek	HODT Ukur Bahan	HODT Ark	HODT Strktr	HODT Geo	UTAMA	NSC	KEM. PELNGGAN	PERUN DING	JURU UKUR TNH	LAIN-LAIN
		<b>WBS</b>	<b>Fasa/Aktiviti/Tugas</b>														
Page 1																	
<b>Disediakan oleh :</b>												<b>Tandatangan :</b>					
<b>Disemak oleh :</b>												<b>Tandatangan :</b>					
Penentuan tanggungjawab:																	
<b>R</b>	Pihak bertanggungjawab melaksanakan aktiviti																
<b>A</b>	Pihak yang membantu melaksanakan aktiviti																
<b>C</b>	Pihak yang dirujuk sebelum melaksanakan aktiviti																
<b>I</b>	Pihak yang dimaklumkan berhubung keputusan sesuatu aktiviti																
<b>S</b>	Pihak yang meluluskan aktiviti																
																	
JKR.PMMM.04																	



# Example: Responsibility Assignment Matrix (RAM)

## Activity

## Stakeholders

	PM	PO	Adm	Legal	DG
Workshop Scope & Schedule	R	A	A	A	C
Draft brief	S	R	A		
Circulate to departmental stakeholders	C	R	A	C	C
Incorporate comments	C	R	A		
Prepare Final	R	A	A	A	C
Submit	R	A			S

**R** Responsible  
**A** Assist  
**C** Consult  
**S** Sign –off

**PM** Project Manager  
**PO** Project officer  
**Adm** Admin Assistance  
**Legal** Legal adviser  
**FAS** Div Head

## 6.10: Summary

- People is the **most critical resources** for project delivery.
- Proper **planning, acquisition, development and management** of the human resource is vital and must be effectively executed, to ensure optimization of human resource.

# References

- A Guide to the Project Management Body of Knowledge (PMBOK® Guide) – 4<sup>th</sup> Edition
- <https://www.jkr.gov.my/prokom>

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