

# Project Management Body of Knowledge (PMBOK 7<sup>th</sup> Ed.)

*Fereydoun Fardad*

*(MSc, PE, PMP, RMP, PBA, ACP, PRINCE2, IPMA-C, PSM, SFC, SFPC, SMPC, CASF, EBCL \*A, ICPA, OCB A)*

# Fereydown Fardad



- مدرس و مشاور بهبود فردی، مدیریت پروژه، تحلیل کسب و کار و تعالی سازمانهای پروژه محور
- مدیر PMO، مدرس و مدیر پروژههای موسسه مدیریت پروژه آریانا
- مدیر EPMO شرکت ریل پرداز سیستم، مدیر PMO شرکت مهندسين مشاور سازه پردازی ایران
- کارشناس عمران و کارشناس ارشد مهندسی و مدیریت پروژه و ساخت از دانشگاه صنعتی امیرکبیر
- عضو موسسه PMI، انجمن مدیریت پروژه ایران و سازمان نظام مهندسی ساختمان استان تهران
- عضو تیم بازرنگری استاندارد 6,7 PMBOK و استانداردهای مدیریت ریسک، زمانبندی و تخمین
- عضو کمیته‌های گواهی‌نامه مشاوران و جایزه ملی مدیریت پروژه ایران (انجمن مدیریت پروژه ایران)
- دارای مدارک مدیریت پروژه PMP، RMP و PBA از موسسه مدیریت پروژه آمریکا (PMI)
- دارای مدرک مدیریت پروژه PRINCE2 از OGC انگلستان
- دارای مدرک مدیریت پروژه سطح C از انجمن بین‌المللی مدیریت پروژه (IPMA-C)
- دارای مدرک مدیریت پروژه اسکرام مستر حرفه‌ای (PSM) از Scrum.org آمریکا
- دارای مدرک مدیریت پروژه چابک SFC از موسسه PM Study آمریکا
- دارای مدارک مدیریت پروژه چابک SFPC, SMPC از موسسه CertiProf آمریکا
- دارای گواهی‌نامه سطح A شایستگی مدیریت اتحادیه اروپا (EBCL\*A)
- دارای مدرک ارزیاب حرفه‌ای ICPA از IMI- ADC
- دارای مدرک سرممیزی ISO 21500 از موسسه G-Certi
- دارای مدرک ارزیاب حرفه‌ای مدل PM-Delta (OCB) از انجمن بین‌المللی مدیریت پروژه (IPMA)
- ارزیاب و سرارزیاب جایزه تعالی مدیریت پروژه ایران (PEM) و جایزه ملی بهره‌وری و تعالی سازمانی (EFQM)
- ارزیاب مستقل مدل بلوغ مدیریت پروژه پتروشیمی (CPM3)، ارزیاب سیستم مدیریت کیفیت ISO 9001
- مدیر سیستم و کیفیت گروه پیمانکاری بام، مدیر کنترل پروژه و HSE شرکت مهندسين مشاور گذرراه
- مدرس دارای صلاحیت انجمن مدیریت پروژه ایران (همکار آموزشی انجمن مدیریت پروژه ایران)
- عضو تیم مولفین اولین کتاب مدل تعالی پروژه (PEM) در ایران
- سابقه تدریس بیش از ۴۵۰ دوره آموزشی در سازمانها و صنایع مختلف
- ارایه مقالات و سخنرانی‌های متعدد علمی در کنفرانس‌های ملی و بین‌المللی

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**FardadPM**



فرقی نمی‌کند ۲۰ ساله  
هستید یا ۸۰ ساله. هر کس  
آموختن را متوقف کند پیر  
می‌شود و هر کس پیوسته  
بیاموزد، جوان خواهد ماند.  
مهمترین چیز در زندگی،  
داشتن ذهنی جوان است

هنری فورد





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دوست و سرور گرامی

تمامی حقوق این اثر متعلق به نگارنده می باشد و هرگونه نسخه برداری از آن، اعم از کپی، اسکن، تکثیر، نسخه برداری الکترونیکی و یا ترجمه بفش و یا تمام آن منوط به اجازه کتبی از نگارنده می باشد.

لذا با توجه به اینکه برای تهیه جزوه حقوق زمان، هزینه و انرژی بسیار زیادی صرف شده تا از هر نظر ممتاز باشد، از شما تقاضا دارم اصول کپی رایت را رعایت کرده و در صورت نیاز، سفارش خرید آن را به تهیه کننده بدهید.  
با تشکر

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# My Symbols



**More Info**



**Movie**



**Real Sample**

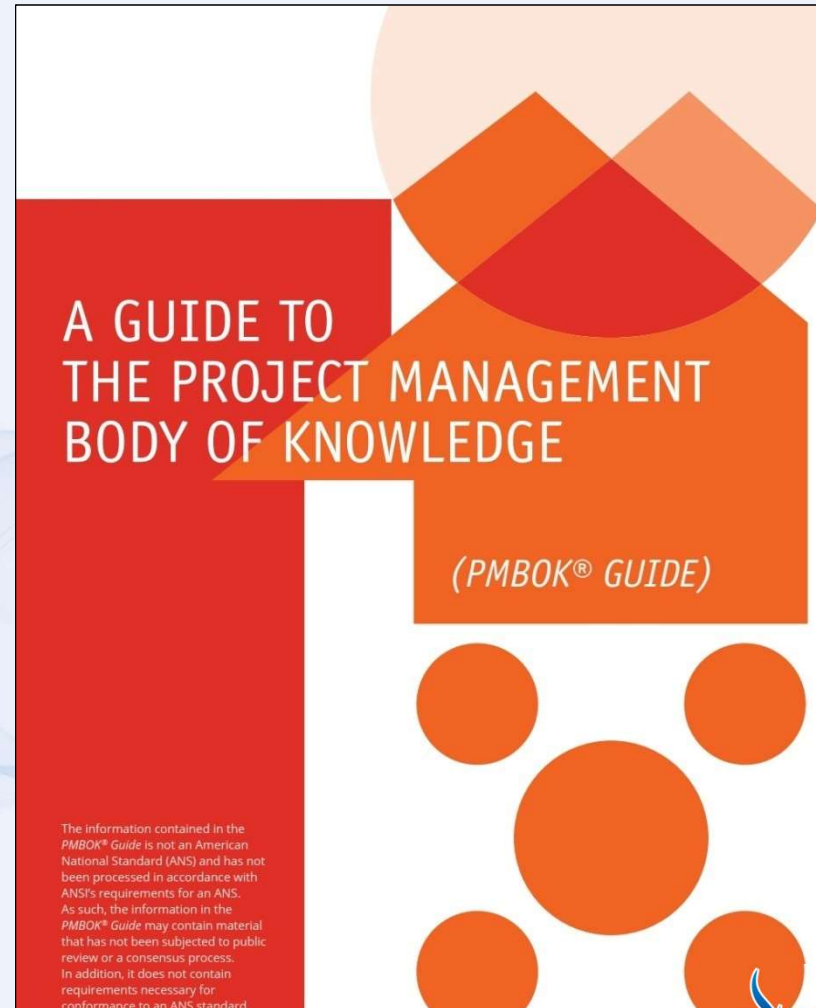


**Memorizing**

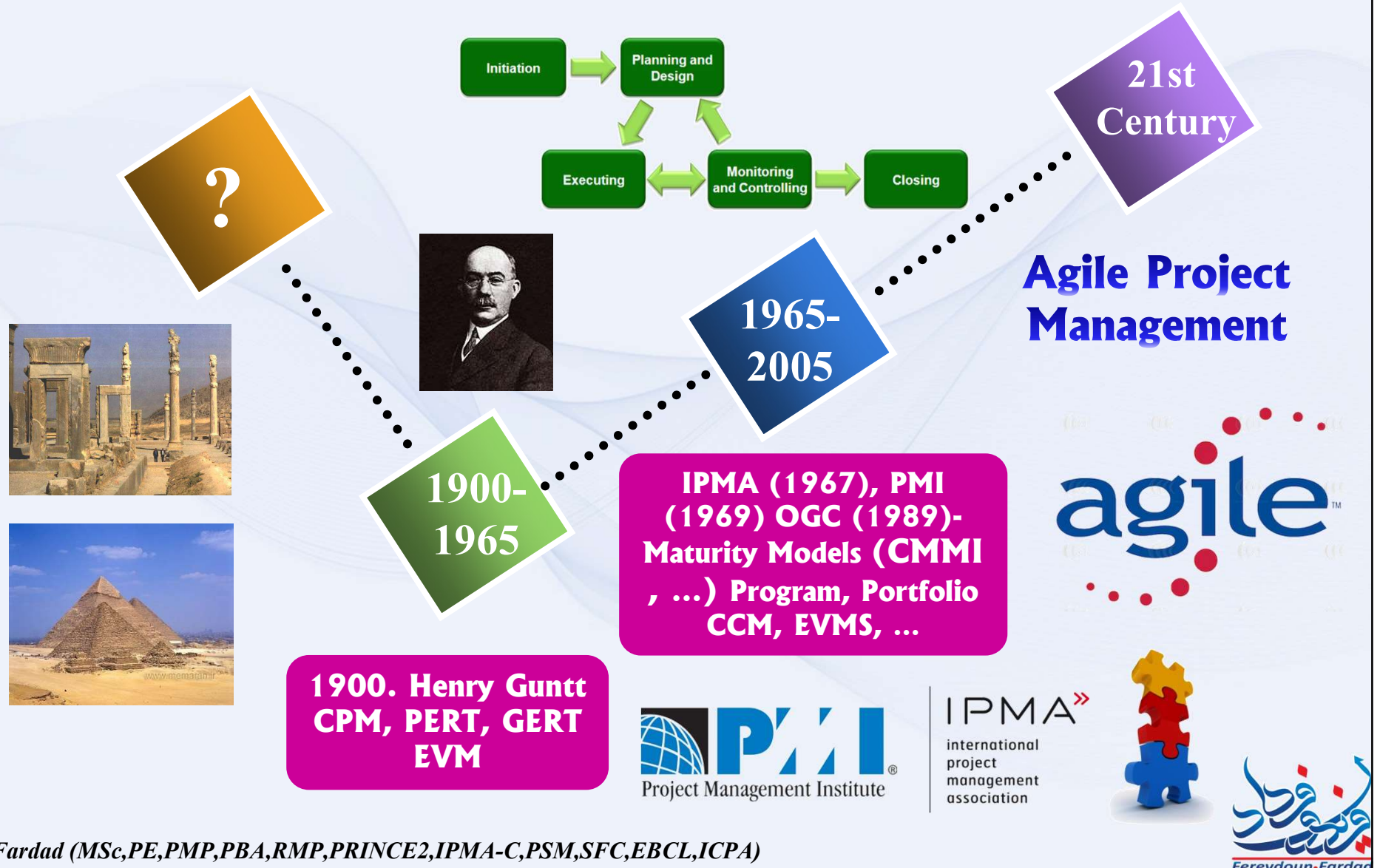


**More Practice**

# PMBOK 7<sup>th</sup>



# History of Project Management





# Alternatives to PMI

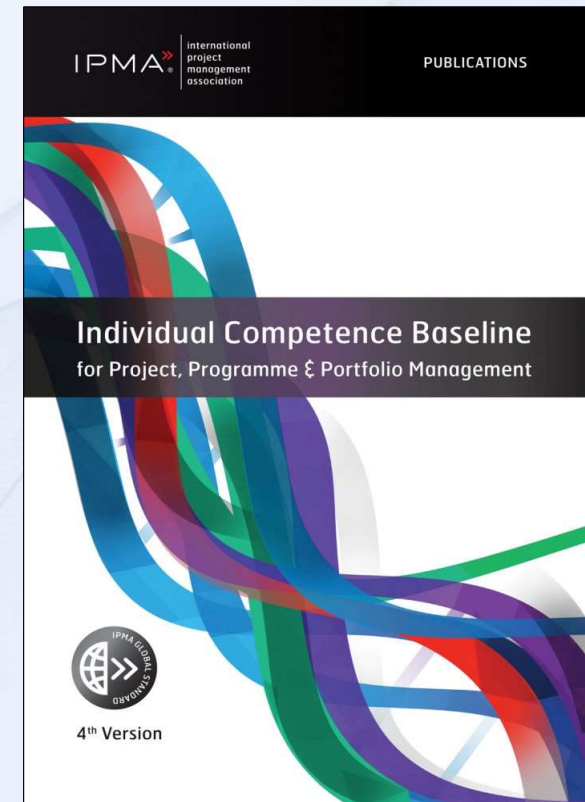
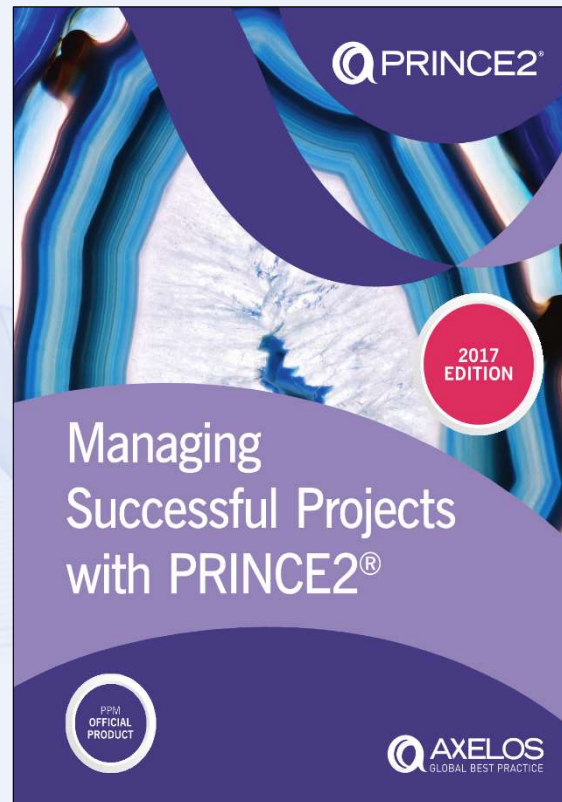
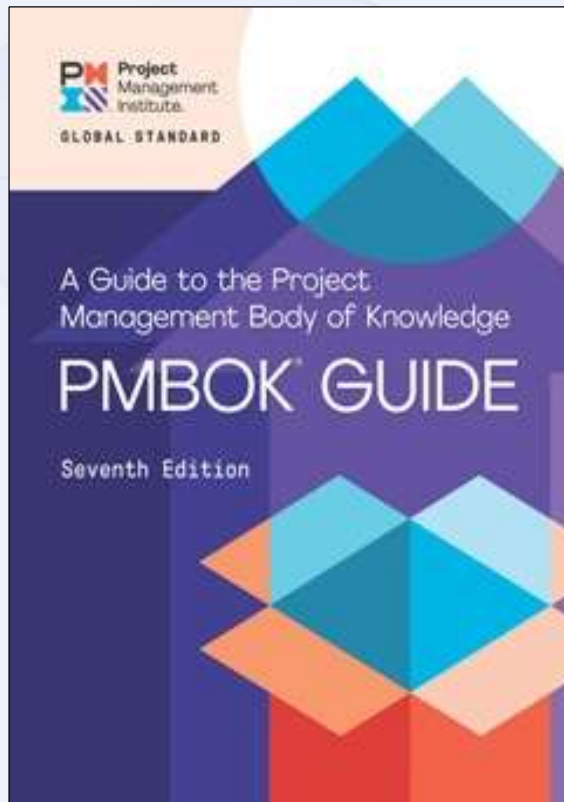


PM Organization	Head Office	Famous PM Standard	# of Members
<b>PMI</b>  Project Management Institute®	<b>USA</b>	<b>PMBOK</b>	<b>240,000</b>
<b>IPMA</b>  international project management association	<b>Europe</b>	<b>ICB</b>	<b>30,000</b>
<b>AXELOS</b>  GLOBAL BEST PRACTICE	<b>UK</b>	<b>PRINCE II</b>	<b>15,000</b>
<b>AIPM</b>  Australian Institute of Project Management	<b>Australia</b>	-	<b>7,100</b>

**Numbers from Craig Brown (sep. 2007)**

- ICB: IPMA (Individual) Competency Baseline
- PRINCE2: Project In Controlled Environment

# Famous PM Standards



- ICB: IPMA (Individual) Competency Baseline
- PRINCE2: Project In Controlled Environment

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# Introduction to PMI



- A professional institute specializing in project management.
- PMI Offices is in Newtown Square, Pennsylvania in the USA.
- Founded in 1969 by working project managers.
- **Website: [www.pmi.org](http://www.pmi.org)**
- Activities:
  - Project Management Standards;
  - Project Management Books
  - A Monthly Magazine (PM Network)
  - A Monthly Newsletter (PMI Today)
  - A Quarterly Journal (Project Management Journal)
  - Supervision on Training (PMI Registered Education Providers (REP))
  - Professional Certification





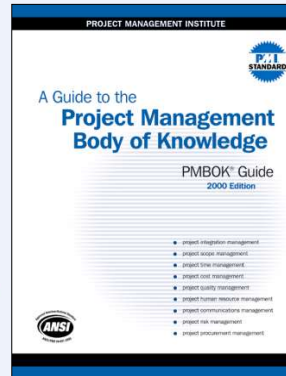
# History of PMBOK®



1987



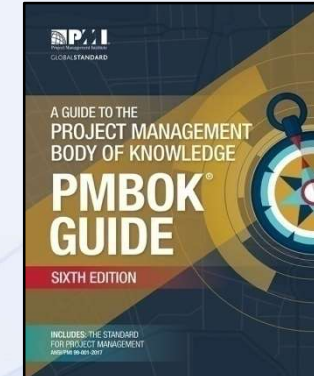
1999



2000



2008

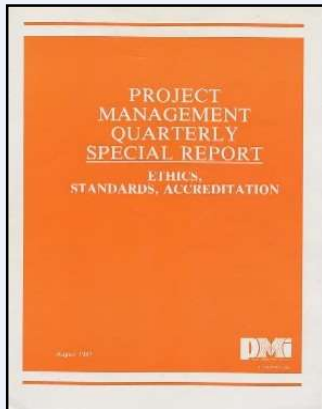


2017

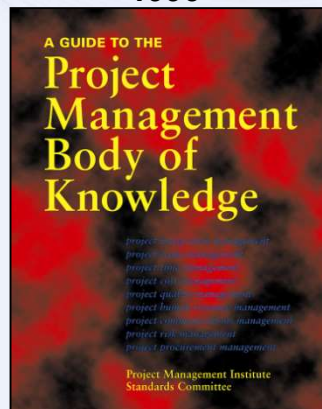


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Organizational  
Development Academy  
فریب

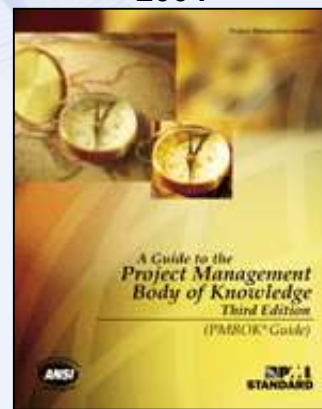
1983



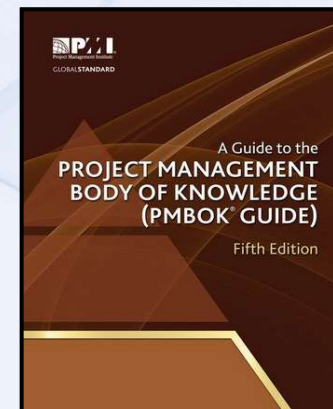
1996



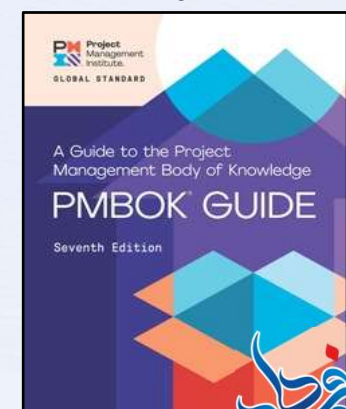
2004



2013



2021



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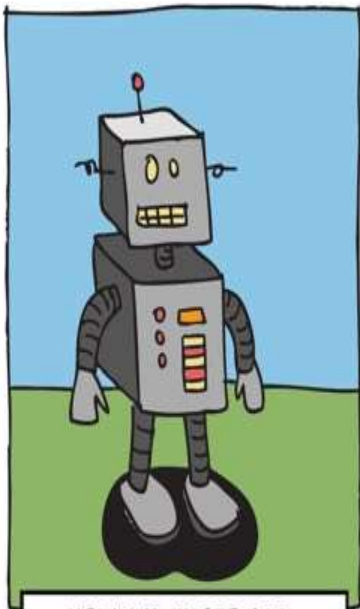
فریب  
Fereydoon Fardad



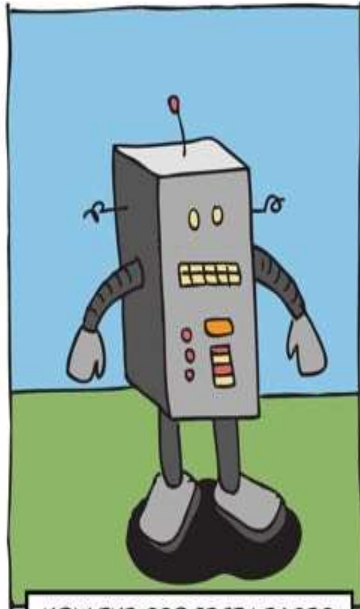
# PMP Trend



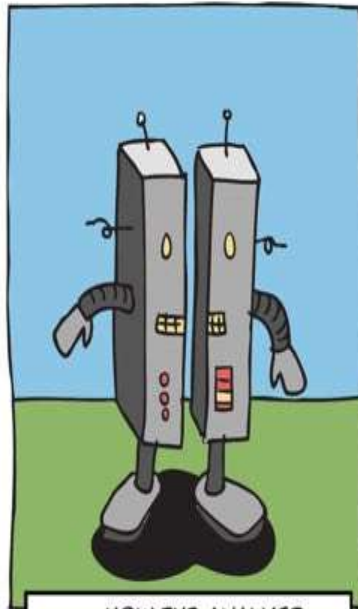
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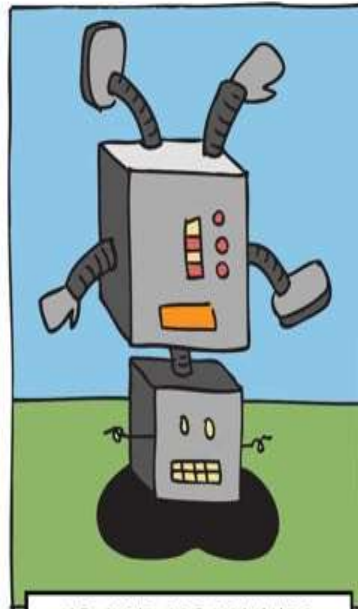
HOW THE CUSTOMER EXPLAINED IT



HOW THE PROJECT LEADER UNDERSTOOD IT



HOW THE ANALYST DESIGNED IT



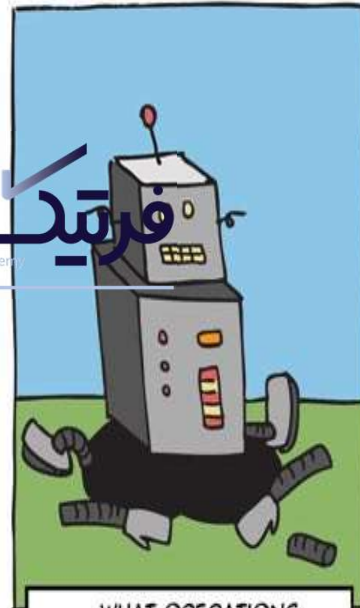
HOW THE PROGRAMMER WROTE IT



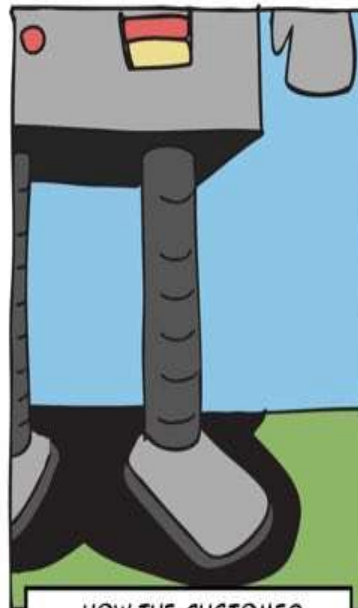
HOW THE BUSINESS CONSULTANT DESCRIBED IT



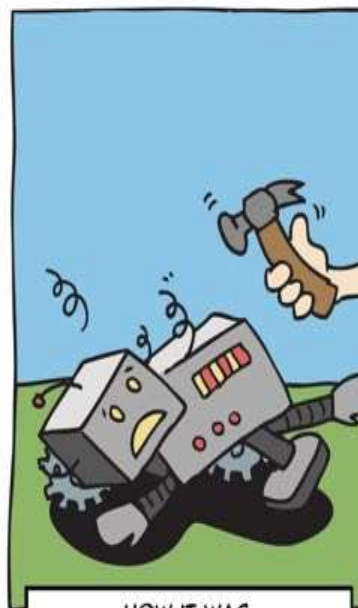
HOW THE PROJECT WAS DOCUMENTED



WHAT OPERATIONS INSTALLED



HOW THE CUSTOMER WAS BILLED



HOW IT WAS SUPPORTED



WHAT THE CUSTOMER REALLY NEEDED

# The Standard For PM

The Standard for Project Management identifies Project Management Principles that guide the Behaviors and Actions of project professionals and other stakeholders who work on or are engaged with projects.





# Purpose of The Standard For PM

- The Standard for Project Management provides a **basis for understanding project management** and how it **enables intended outcomes**.
- This standard applies regardless of industry, location, size, or delivery approach, for example, predictive, hybrid, or adaptive.
- It describes the **system** within which projects operate, including governance, possible functions, the project environment, and considerations for the relationship between project management and product management.





# Audience For This Standard

- Are responsible or accountable for delivering project outcomes;
- Work on projects full or part time;
- Work in portfolio, program, or project management offices (PMOs);
- Are involved in project sponsorship, product ownership, product management, executive leadership, or project governance;
- Are involved with portfolio or program management;
- Provide resources for project work;
- Focus on value delivery for portfolios, programs, and projects;
- Teach or study project management; and
- Are involved in any aspect of the project value delivery chain.

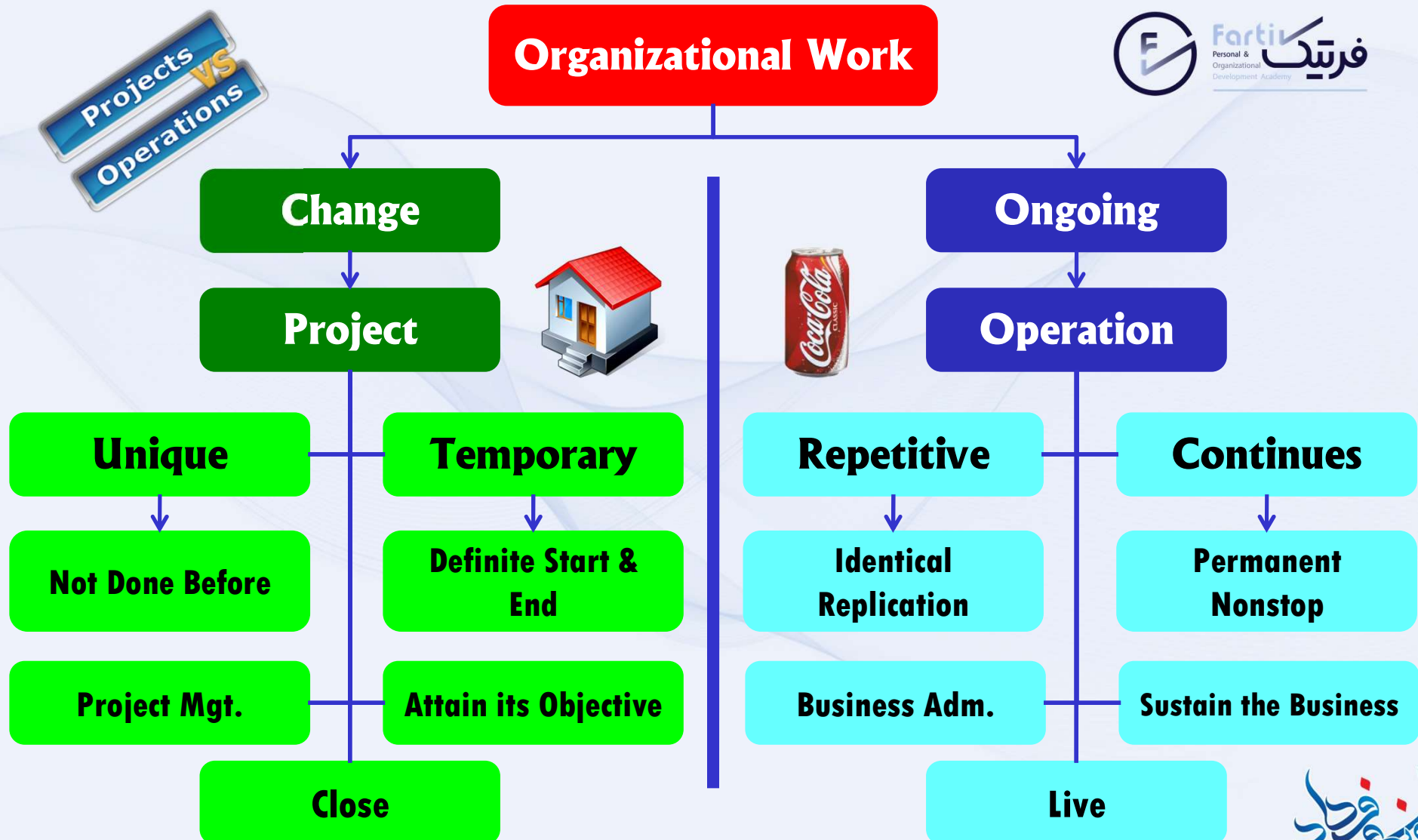


# Key Terms and Concepts

- The Standard for Project Management reflects the progression of the profession.
- Organizations expect projects to deliver outcomes in addition to outputs and artifacts.
- Project managers are expected to deliver projects that create **value** for the organization and stakeholders within the organization's system for value delivery.
- The following terms are defined to provide context for the content in this standard.



# Operations & Project Management





# What Is Project?



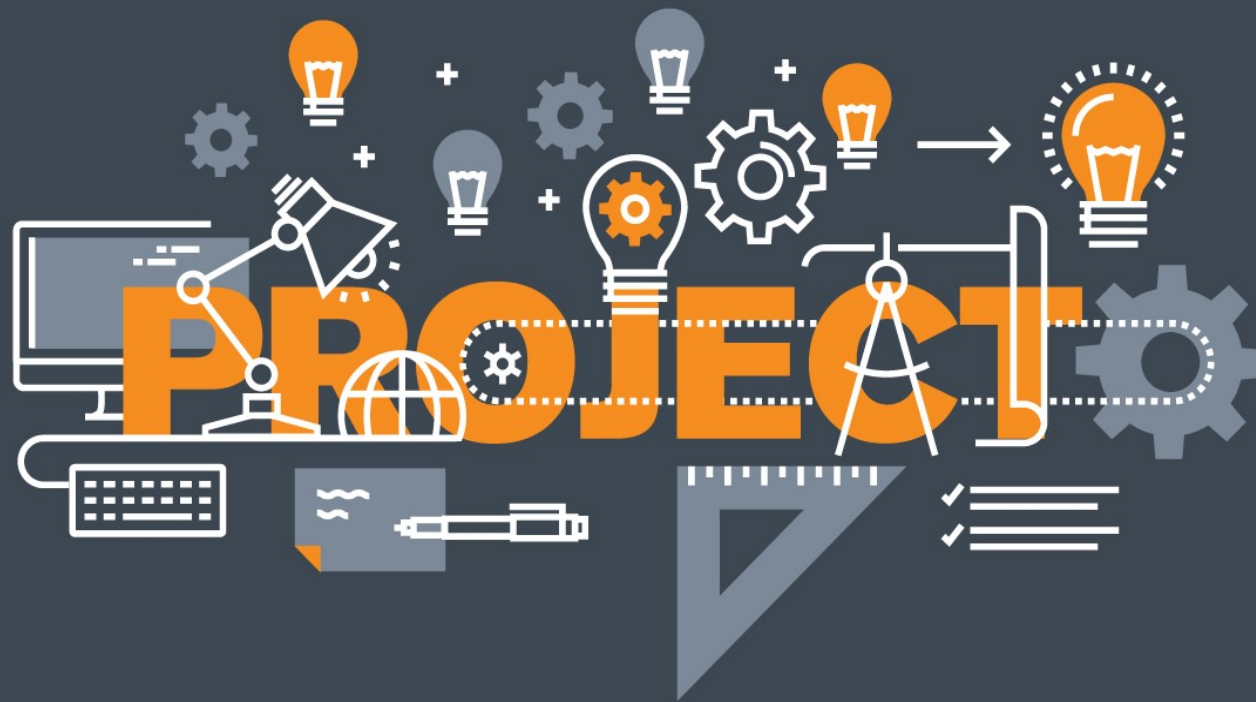
A Project is a **Temporary Endeavor** undertaken to create a **Unique Product, Service, or Result.**





# What Is Project?

The temporary nature of projects indicates a beginning and an end to the project work or a phase of the project work



Projects can stand alone or be part of a Program or Portfolio

# Project's Characteristics

**01** Unique Product,  
Service or Result

**02** Temporary  
Endeavor



**03** Progressive  
Elaboration

Projects Drive  
Change

**04**

Projects Enable  
Business Value  
Creation





**05**

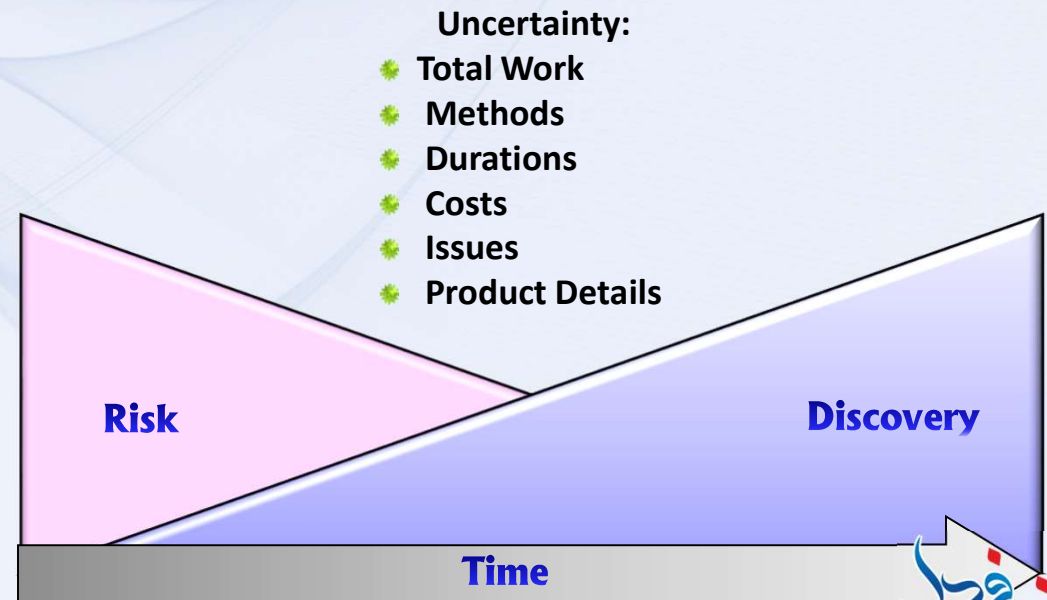
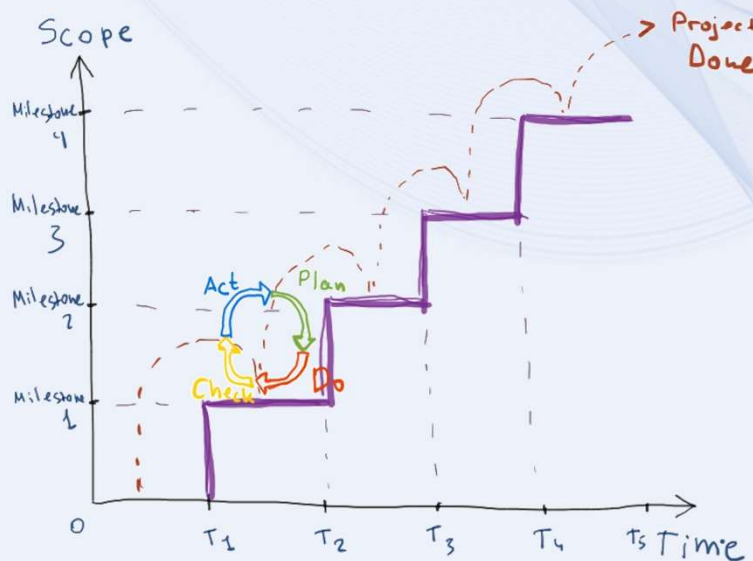
Project Initiation  
Context

**06**



# Progressive Elaboration

-  **Progressively**: proceeding in *Steps*.
-  **Elaborated**: Worked with *Care* and *Detail*.
-  Developing in steps, and continuing in increments.
-  Continuously improving and detailing a plan as more detailed and specific information and more accurate estimates become available.



# Project Management

- The application of **Knowledge, Skills, Tools and Techniques** to project activities to meet **Project Requirements**.
- Project management refers to **guiding** the project work to deliver the **intended outcomes**.
- Project teams can achieve the outcomes using a broad range of **approaches (Predictive, Hybrid, and Adaptive)**.





# Deliverables

**Any Unique and Verifiable Product, Result, or capability to perform a Service that must be produced to complete a process, phase, or project**



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# Deliverables: Product



## Product

- An artifact is produced, is quantifiable, and be either an end item in itself or a component item. Additional words for products are material and goods



## Service

- Useful work performed that does not produce a tangible product or result , such as performing any of the business functions supporting production or distribution (transfer).



## Result

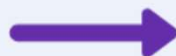
- An output from performing project management processes and activities, include outcomes (integrated systems, revised process, rescheduled org , ...) and documents (e.g., policies, plans, ...).

# Outcome

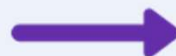
- **An end result or consequence of a process or project.**
- Outcomes can include **Outputs and Artifacts**, but have a **broader** intent by focusing on the benefits and value that the project was undertaken to deliver.



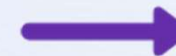
Inputs



Process



Output

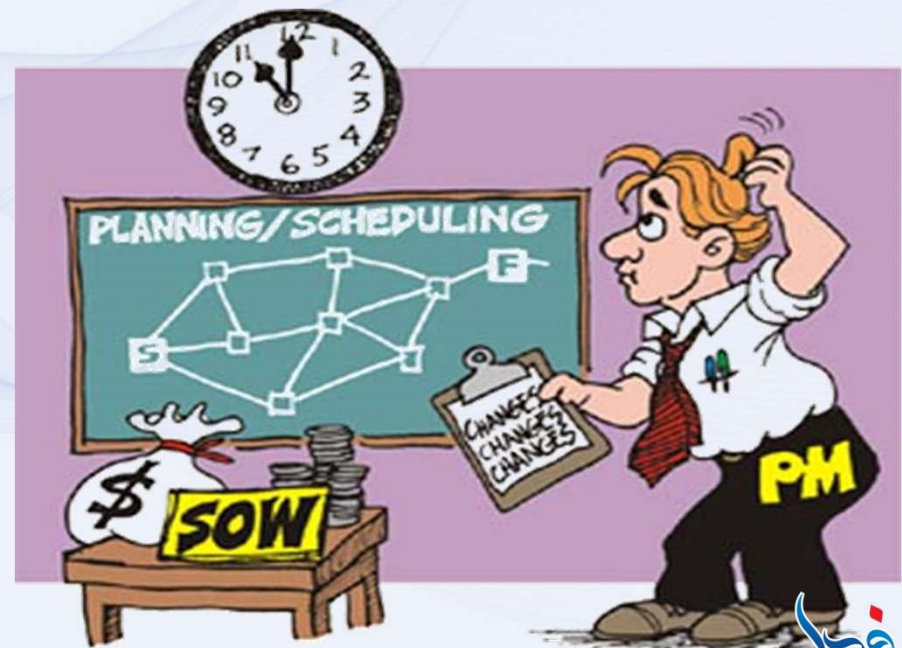


Outcome



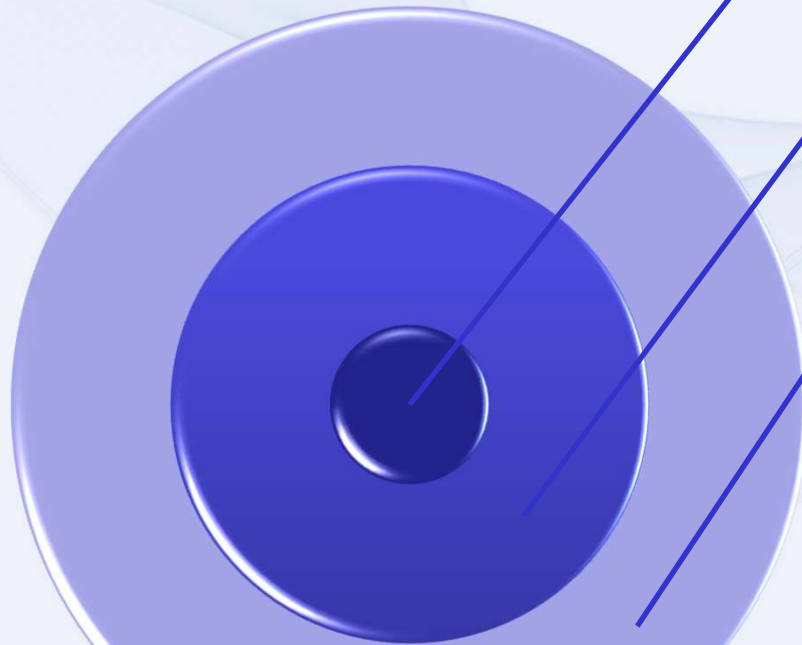
# Project Manager

- The person assigned by the **performing organization** to **lead** the project team that is responsible for achieving the **project objectives**.
- Project managers perform a variety of functions, such as
  - **Facilitating** the project team work to achieve the **outcomes** and
  - Managing the **processes** to deliver intended **outcomes**.



# Project Team

**A set of individuals performing the work of the project to achieve its objectives**



**PM:** Project Manager



**PMS/T:** Project Management Staff/Team.



**Others:** individuals from different groups with knowledge of a specific subject matter or with a specific skill set who **carry out the work of the project**



# Program

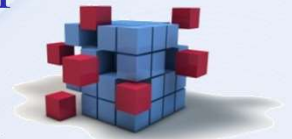
- A program is defined as a **Group of Related** projects, subsidiary programs, and program activities managed in a coordinated manner to obtain **Benefits** not available from managing them individually.
- Programs include program related **work outside the scope** of the discrete projects in the program.
- Programs may also include work that is **operational in nature**.
- Programs are not large projects.
- A very large project may be referred to as a megaproject.
- As a guideline, megaprojects cost US\$1billion or more, affect 1 million or more people, and run for years.





# Program Management

- ❖ Program management is defined as the **application** of knowledge, skills, and principles to a program to achieve the **program objectives** and to obtain **benefits** and control not available by managing program components individually.
- ❖ A program component refers to **projects and other programs** within a program.
- ❖ Project management **focuses** on interdependencies within a project to determine the optimal approach for managing the project.
- ❖ Program management **focuses** on the interdependencies between projects and between projects and the program level to determine the optimal approach for managing them.
- ❖ **Example:** Communications satellite system with projects for the **Design** and **Construction** of the satellite and the ground stations, the **Launch** of the satellite, and the **Integration** of the system.

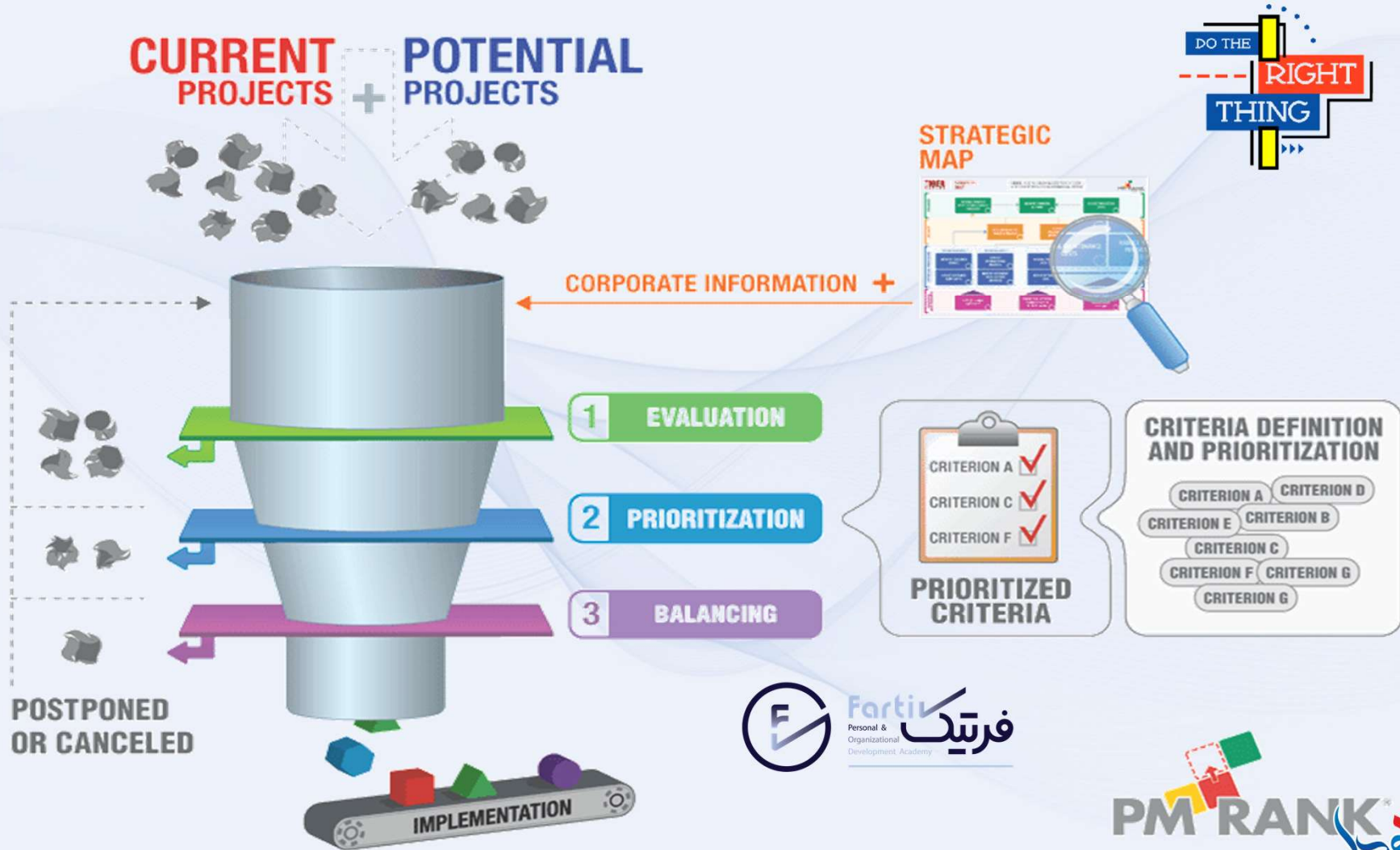


# Portfolio

- A portfolio is defined as **projects, programs, subsidiary portfolios, and operations Managed as a Group** to achieve **Strategic Objectives**.
- The projects or programs of the portfolio **may not** necessarily be **interdependent** or directly related.
- **Portfolio Management** is defined as the **centralized management** of one or more portfolios to achieve strategic objectives.
- The **Aim** of portfolio management is to:
  - Guide organizational **investment decisions**.
  - **Select** the **optimal** mix of programs and projects to meet strategic objectives.
  - Provide **decision-making** transparency.
  - **Prioritize** team and physical resource allocation.
  - Increase the likelihood of realizing the desired **return on investment**.
  - **Centralize** the management of the aggregate risk profile of all components.

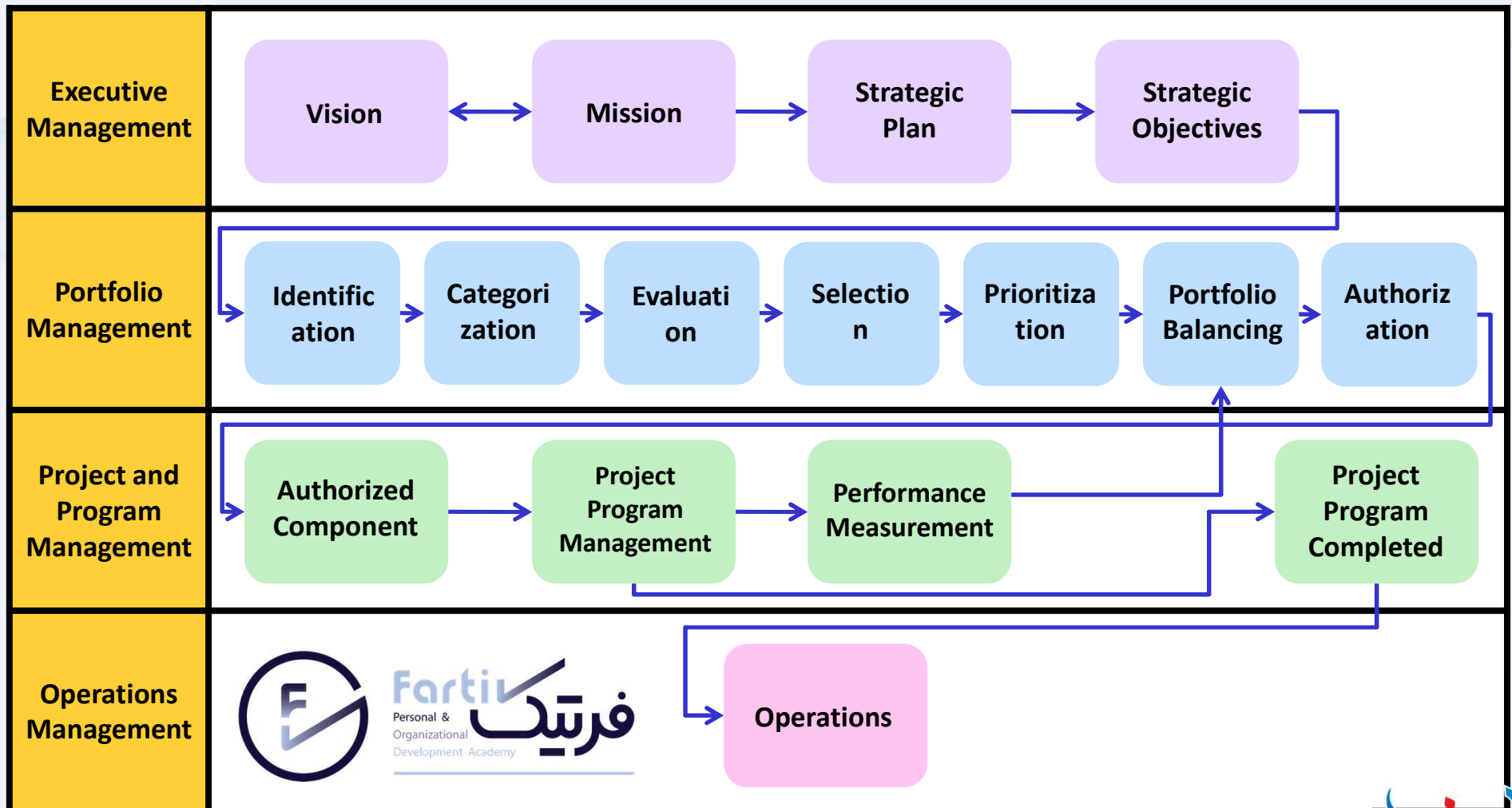


# Portfolio





# Relationships Among 3P



# Relationships Among 3P

- The portfolio view allows organizations to see **how the strategic goals are reflected in the portfolio.**
- This coordinated governance allows authorized allocation of human, financial, and physical resources based on expected performance and benefits.
- Looking at project, program, and portfolio management from an organizational perspective:
  - **Program and Project Management** **focus** on doing programs and projects the **“Right” Way**; and
  - **Portfolio Management** focuses on **Doing the “Right” Programs and Projects.**



# Value

- The **Worth**, **Importance**, or **Usefulness** of something.
- **Different stakeholders perceive value in different ways.**
- **Customers** can define value as the ability to use specific features or functions of a product.
- **Organizations** can focus on business value as determined with financial metrics, such as the benefits less the cost of achieving those benefits.
- **Societal** value can include the contribution to groups of people, communities, or the environment.





# System For Value Delivery

- A collection of strategic business activities aimed at building, sustaining, and/or advancing an organization.
- **Portfolios, Programs, Projects, Products, and Operations can all be part of an Organization's System for Value Delivery.**



# Project Life Cycle

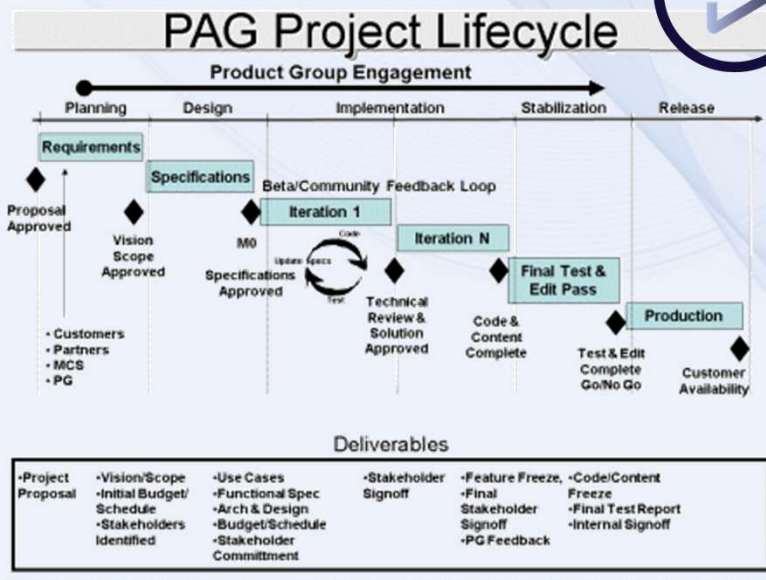
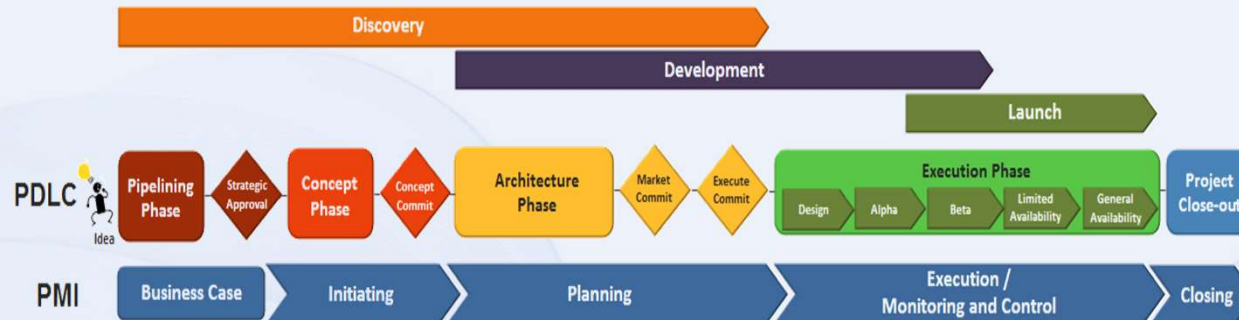


- A project life cycle is the **series of phases** that a project passes through from its initiation to its closure.
- They are **generally sequential**, and their names and numbers are determined by:
  - The **management and Control needs** of the organization(s) involved in the project,
  - The **nature** of the project itself, and
  - Its area of application.
- The phases can be **broken down** by functional or partial objectives, intermediate results or deliverables, specific milestones within the overall scope of work, or financial availability.
- Phases are generally **time bounded**, with a start and ending or **control point**.





# Project Life Cycle

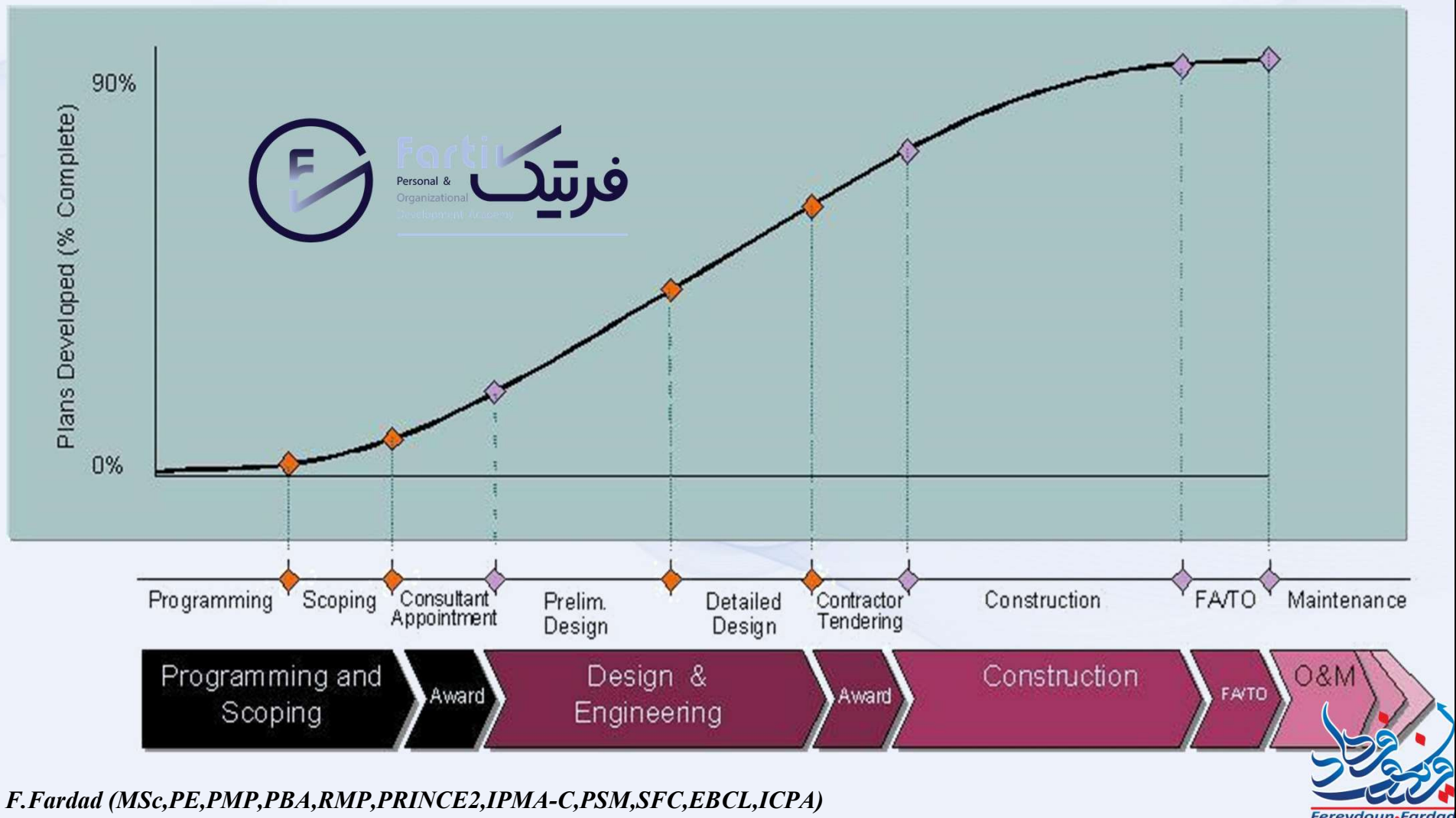


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# Project Life Cycle



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