

## It project management essay

Project	Process	Project management process groups
<b>Has a unique purpose(no two projects are the same).</b>  <b>Has a start and end.</b>  <b>Requires resources often from various areas.</b>	<b>A series of actions directed towards a results.</b>	<b>Progress from initiating, planning , executing , monitoring, controlling , closing activities.</b>

Project Management Process Groups	
<b>Initiating</b>	Defining and authorizing a project or project phase.
<b>Planning</b>	Maintaining a workable scheme to ensure that the project addresses the organization needs.  (Cost Management plan – Scope Management plan – Schedule Management Plan – Procurement Management Plan )
<b>Executing</b>	Coordinating people and other resources to carry out the various plans and create the products, services, or results of the project or phase.
<b>Monitoring</b>	Regularly measuring and monitoring progress to ensure that the project team meets the project objectives.
<b>Closing</b>	Formalizing acceptance of the project or project phase and ending it efficiently.

Methodology	The PMBOK® Guide
Describes how things should be done and different organizations often have different ways of doing things.	A standard that describes best practices for what should be done to manage a project.

DMAIC	DMADV
Define, Measure, Analyze, Improve, and Control - used to improve an existing business process	Define, Measure, Analyze, Design, and Verify - used to create new product or process designs to achieve predictable, defect-free performance

Waterfall Method	Agile Method
Has well-defined, linear stages of systems development and support.	Is an adaptive product life cycle used when deliverables have a high degree of change and a high frequency of delivery.

<b>Artificial intelligence in IT project management</b>		<b>AI: Is a branch of computer science that focuses on the creation of intelligent machines capable of performing tasks that typically require human intelligence.</b>
<b>Components</b>	<ul style="list-style-type: none"> <li>- Machine Learning</li> <li>- Natural Language Processing</li> <li>- Robotics process automation</li> </ul>	
<b>Applications</b>	<ul style="list-style-type: none"> <li>- Intelligent Project Planning</li> <li>- Intelligent Task Management</li> <li>- Intelligent Decision Support</li> <li>- Intelligent Risk Management</li> </ul>	
<b>Benefits</b>	<ul style="list-style-type: none"> <li>- Enhanced Efficiency</li> <li>- Improved Decision-Making</li> <li>- Increased Accuracy and Quality</li> <li>- Cost Savings</li> </ul>	
<b>Challenges</b>	<ul style="list-style-type: none"> <li>- Data Quality and Availability</li> <li>- Ethical and Legal Implications</li> <li>- User Adoption and Change Management</li> </ul>	

<b>Blockchain in IT project management</b>		<b>Blockchain: A shared system that safely records transactions and can't be changed</b>
<b>Features</b>	<ul style="list-style-type: none"> <li>- Decentralization</li> <li>- Transparency</li> <li>- Security</li> <li>- Unchangeable</li> <li>- Smart Contracts</li> </ul>	
<b>Applications</b>	<ul style="list-style-type: none"> <li>- Transparent Project Tracking</li> <li>- Smart Contract-based Collaboration</li> <li>- Secure Data Management</li> <li>- Supply Chain Management</li> </ul>	
<b>Benefits</b>	<ul style="list-style-type: none"> <li>- Enhanced Transparency</li> <li>- Strengthened Security</li> <li>- Streamlined Collaboration</li> <li>- Improved Efficiency and Cost Savings</li> </ul>	
<b>Challenges</b>	<ul style="list-style-type: none"> <li>- Scalability</li> <li>- Adoption and Integration</li> <li>- Regulatory and Legal Implications</li> <li>- Technological Maturity</li> </ul>	

<b>Artificial intelligence</b>	<b>Blockchain</b>	<b>Cloud based IT project management</b>
Is a branch of computer science that focuses on the creation of intelligent machines capable of performing tasks that typically require human intelligence.	A shared system that safely records transactions and can't be changed	Managing projects using cloud platforms to enable easy access, storage, and team collaboration.

<b>cloud based IT project Management</b>		
<b>Features</b>	<ul style="list-style-type: none"> <li>- Collaboration</li> <li>- Scalability</li> <li>- Flexibility</li> <li>- Accessibility</li> <li>- Integration</li> </ul>	<b>Cloud based IT project management</b> : Managing projects using cloud platforms to enable easy access, storage, and team collaboration.
<b>Benefits</b>	<ul style="list-style-type: none"> <li>- Enhanced Collaboration and Communication</li> <li>- Flexibility and Scalability</li> <li>- Cost-effectiveness</li> <li>- Accessibility and Remote Work</li> <li>-</li> </ul>	

### Important

<b>Machine Learning</b>	<b>Natural Language processing</b>	<b>Robotics process automation</b>
A way for computers to learn from data and improve without being programmed directly	A technology that helps computers understand and work with human language	A tool that uses software robots to do repetitive computer tasks automatically

<b>Knowledge areas</b>		
<b>Integration Management:</b> Making sure all parts of the project work together smoothly	<b>Scope Management:</b> Defining and controlling what is included (and not included) in the project	<b>Schedule Management:</b> Planning and controlling the timeline of the project
<b>Cost Management:</b> Estimating and managing the project's budget	<b>Quality Management:</b> Ensuring the project meets the required standards	<b>Resource Management:</b> Organizing and managing the people, tools, and materials needed for the project
<b>Communications Management:</b> Making sure the right information reaches the right people at the right time	<b>Risk Management:</b> Identifying and handling anything that could go wrong in the project	<b>Procurement Management:</b> Getting goods or services from outside the organization for the project
<b>Stakeholder Management:</b> Managing the needs and expectations of everyone involved in or affected by the project		