



PES UNIVERSITY, BANGALORE

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**Team-Details:**

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**Problem Statement – 1:**

Your new software project is a product delivery platform. As a part of project initiation and approval you are required to perform and note down a thorough competitor analysis. (Some companies with a product delivery platform are Unbxd, Algolia etc.)

After your analysis, you are expected to do the following exercise as a part of risk management.

On the digital document or paper, add columns with the following headers:

- What could cause a miss in your deadline?
- What will keep your project on time?
- What does this project need that you don't have?
- What do you already have that this project needs?
- What are you worried about?

- What are you excited about?
- What could go wrong with this project?
- What could go right with this project?

Brainstorm and write down answers for these questions first. Next, mention the points that you feel are going to be risks and successes.

Questions	Solutions
What could cause a miss in your deadline?	<ul style="list-style-type: none"> <li>• Poor resource management</li> <li>• Uncommitted stakeholders</li> <li>• No clarity of goal to be achieved</li> <li>• Low effective usage of resources</li> </ul>
What will keep your project on time?	<ul style="list-style-type: none"> <li>• Having clear and complete planning</li> <li>• Ability to cope with increase in complexity</li> <li>• Active involvement of customers</li> <li>• Break Down the Project into Smaller Tasks</li> </ul>
What does this project need that you don't have?	<ul style="list-style-type: none"> <li>• Need to know customer requirements clearly.</li> <li>• Need for proper resources and skill.</li> <li>• New technology</li> </ul>
What do you already have that this project needs?	<ul style="list-style-type: none"> <li>• Proper risk management</li> <li>• Through market analysis</li> <li>• Good project team and manager</li> </ul>
What are you worried about?	<ul style="list-style-type: none"> <li>• Customer is unhappy with product</li> <li>• Lack of communication among team members</li> <li>• Budget restriction and stakeholder expectations</li> </ul>
What are you excited about?	<ul style="list-style-type: none"> <li>• Surpassing customer's expectations</li> <li>• Bringing in a reliable and efficient</li> </ul>

	product for a big user base <ul style="list-style-type: none"> <li>● Personal satisfaction and commitment</li> </ul>
What could go wrong with this project?	<ul style="list-style-type: none"> <li>● Miscommunication between the team and customers</li> <li>● Insufficient resources to handle all requirements</li> <li>● Results may not be optimal</li> </ul>
What could go right with this project?	<ul style="list-style-type: none"> <li>● Product deployed with no technical bugs or errors</li> <li>● Finish building within a given deadline</li> <li>● Cost and resources kept under control</li> </ul>

### **RISKS:**

- Lack of resources
- Limited scaling
- Vulnerability to attacks
- Poor management visibility
- Need for deadline extensions

### **SUCSESSES:**

- Selecting people with the required skill set
- Coordination with the customer and requirement analysis
- Secure product usage
- Impressive integration into the market
- Effective communication

## **Problem Statement – 2:**

You are required to curate the AWS architecture for an Indian Premier League management system, complete with a score predictor and attractive dashboard. Explain why that particular service has been used and draw a final flowchart with all the services you think are necessary.

### **Necessary services:**

- **AWS:**
  - To securely host the IPL application
  - Reliable and highly scalable
- **NGINX:**
  - To save and facilitate user details and preferences
  - Used for reverse proxy, load balancer
- **React:**
  - To access the IPL web application on phones
  - To make attractive UI elements like dashboard
- **Kubernetes-Docker:**
  - To automate the deployment of IPL application
  - Increases DevOps efficiency
- **Graph SQL:**
  - For storing and predicting score information
  - Faster and smoother user experience
- **Amazon DevOps:**
  - To reduce system development lifecycle while maintaining high software quality(uses Agile ways)
  - To deliver the application and service at a faster pace

## Diagram:

