Decode the Project

<u>Project idea</u>: Make an online agriculture store where the farmers and the manufactures of the farm product can communicate the required.

<u>Current need</u>: build a user friendly application which allows the farmer to buy all the necessary farming products (seeds, fertilizer, pesticides, etc) and to have a good internet connectivity.

<u>Overview of the project</u>: Required an application where the details of the farming product are available and the end user can select the product, buy it and get it delivered to their location.

<u>Current problem</u>: Facing difficulty to get pesticides, seeds, fertilizer, etc at the required time and location. Shortage of space to buy and store the farming products for a long time.

Team

Mr. Pandya: Financial Head

Mr. Dooku: project coordinator

Mr. Karthik: Delivery Head

Mr. Vandanam: Project Manager

Mrs. Juhi: Sr.Java developer

Mr. Teyson, Lucie, Tucker, Bravo: Java Developer

Mr.Mike: Network Admin

Mr. John: DB Admin

Ms. Alekya & Mr. Jason: Tester

Mr Peter, Kevin & Ben- Farmer

Project Name: APT IT Solutions

Duration: 18mths.

Budget: 2cr.

Q. Identify Business Process Model for Online Agriculture Store – (Goal, Inputs, Resources, Outputs, Activities, Value created to the end Customer)

A. BPM is a process of working in a specific manner to get a desired output.

<u>Goal</u>: To bridge a gap between the Buyers(farmers) and the Sellers (farm products manufacturing companies)

Input: Awareness, Internet connection, farmer date.

Resource: warehouse, manufacturing company.

Output: Doorstep availability of farming products for the farmers to increase the productivity.

Activities: pair with the manufacturing companies

<u>Value</u>: farmers satification, easy and accessible farming products.

Q Mr Karthik is doing SWOT analysis before he accepts this project. What Aspects he Should consider as Strengths, as Weaknesses, as Opportunity and as Threats.

A.SWOT analysis is a model used to understand the influencing factor and how may it affect the project.

Strength and Weakness are the internal factors and Opportunity and Threats are external factors.

Strength: Availability of farming land, active customers (farmers to buy the product)

<u>Weakness:</u> new mobile user, stock and delivery management due to remote place, dependency on internet.

Opportunity: can capture the market with easy delivery market.

<u>Threats</u>: the manufacturing company need to keep competitive price so that the farmers can completely rely on the online shop.

Q. Mr Karthik is trying to do feasibility study on doing this project in Technology (Java), Please help him with points (HW SW Trained Resources Budget Time frame) to consider in feasibility Study

A. This is carried out to check if the project is viable or not and wether we can complete and deliver the project.

<u>Hardware</u>: Based on the network, backup system, and storage

<u>Software</u>: based on the items added in the shopping cart, location, and payment gateway

system

Resources: Project management team,BA,developer

Budget: Development cost, variable cost

<u>Time</u>: Based on available resources.

Q. Mr Karthik must submit Gap Analysis to Mr Henry to convince to initiate this project. What points (compare AS-IS existing process with TO-BE future Process) to showcase in the GAP Analysis

A. This analysis is performed by the PM and BA to address the gap/discrepancy in the current state and the desired future state of an organization. So basically it says where we are and where we want to be.

AS-IS: difficulty in procuring the farming products, lack of storage and maintenance facility.

<u>TO-BE</u>: Online store for purchasing the farming products, easy purchase and door step delivery location, availability of smart phones and internet network, farmer can communicate their requirement directly to the manufacturer.

Q. List down different risk factors that may be involved (BA Risks And process/Project Risks)

A. Risk analysis is carried out to determine if the proposed project carries more risk than the organizational capacity to support it.

Internal Risk: door step delivery ,dependency on internet connectivity in remote village.

External Risk: change in government regulation which effects the e-commerce industry.

BA risk: Incomplete requirement, lack of domain knowledge, change in request.

<u>Project risk</u>:Quality of the farming products, price of the products, climate change, lack of app/mobile awareness for the user

Q. Perform stakeholder analysis (RACI Matrix) to find out the key stakeholders who can take Decisions and Who are the influencers

A.

- Responsible: BA is responsible person for the project
- Accountable: Project manager (Mr. Vandanam) is accountable for the project
- Consulted: The technical team, project coordinator and financial head is consulted for initiating the project (Ms.Juhi, Mr. Tyson, Ms. Lucie, Mr. Tucker, Mr. Bravo, Mr. Mike, Mr. John, Alekya,jason, Mr Pandya, Mr. Dooku.
- Informed: Customer (Mr. Peter,kevin and ben)

Q. Help Mr Karthik to prepare a business case document

A. this project is initiated by Mr Henry to help his fellow farmer friend in their day-to-day farming activity. The main agenda is to open up a online farming products store from where the farmers can browse and buy the products which can be delivered to their doorstep. The main problem faced by the farmers is lack of availability of farming products and the time taken to get them from faraway places.so by making a online store the logistic problem can be solved.

Q. Mr Karthik explained to Mr. Henry about SDLC. And four methodologies like Sequential Iterative Evolutionary and Agile. Please share your thoughts and clarity on Methodologies

A. SDLC methodologies provides a framework to the team to manage the project efficiently in a structured manner. Common SDLC methodologies includes Sequential, Iterative, Evolutionary and Agile each with its own pros and cons.

- <u>Sequential</u>: This is traditional method where each phase should be completed before the beginning of the next step. It is simple to understand but inflexible especially for a complex project. This method is suitable for a small projects whose requirements are well defined and have less to no changes expected.
- <u>Iterative</u>: This is based on step by step explanation describing on how specific development goal are to be achieved. It is less flexible to changes. It also follows as to who will do what work and how will the same be completed. This is suitable for small projects where the initial requirements are not fully defined.
- <u>Evolutionary</u>: This model emphasis on risk analysis. It has 4 phases.
 Planning, Risk analysis, Engineering, Evaluation phase
 So the software project repeatedly passed through phases in spiral module which is costly and time consuming. This best suited for large complex project with high risk potential.
- Agile- Scrum: Its a method where the team will deliver or release on short cycles(sprint). This method is more adaptive as it also accepts changes, release are done in part and quick. It promotes close interaction between the developers and the stakeholders.

Q. They discussed models in SDLC like waterfall RUP Spiral and Scrum . You put forth your understanding on these models.

- A.<u>Sequential-Waterfall</u>: in this method, each phase should be completed before the beginning of the next step. There are certain stages in waterfall method which includes Requirement Gathering, Requirement Analysis, Design, Development, Testing, Deploying.
- <u>Iterative-Rational Unified Process (RUP)</u>: RUP is based on step by step explanation describing on how specific development goal are to be achieved. It also follows as to who will do what work and how will the same be completed.
- Evolutionary-Spiral: This model emphasis on risk analysis. It has 4 phases.
- Planning: where the requirements are gathered, Risk analysis: where the
 process analysis is taken in identify the risk and alternate solution, Engineering
 phase: where the software is produces along with the testing at the end,
 Evaluation phase: allows the customer to evaluate the output of the project.
- So the software project repeatedly passed through phases in spiral module which is costly and time consuming.
- Agile- Scrum: Its a method where the team will deliver or release on monthly basis. This method is more adaptive as it also accepts changes, release are done in part and quick.

Based on the above methods the Agile-Scrum method should be adapted as it emphasizes on flexibility and collaboration. It is a quick methodology compared to others with frequent releases and feedback approach.

Q. Write down the differences between waterfall model and V model.

A. Waterfall model:

- It is low in cost
- Not flexible to changes after the development stage has begun
- Customer involvement is less
- Testing activity starts at very later stage.

V-model:

- It is expensive
- More flexible to changes as compared to waterfall approach
- Customer involvement is more
- Testing activity starts early ie during requirement and design stage

Q. As a BA, state your reason for choosing one model for this project

A. As a BA i would choose Agile model for the project. It emphasizes on flexibility and collaboration. It is a quick methodology compared to others with frequent releases and feedback approach. Close collaboration and continuous feedback ensures that the final product meets the customers need. Also by breaking down projects into small iteration, agile can identify and mitigate risk early.

Q. The Committee of Mr. Henry, Mr Pandu, and Mr Dooku discussed with Mr Karthik and finalised on the V Model approach (RG, RA, Design, D1, T1, D2, T2, D3, T3, D4, T4 and UAT) Mr Vandanam is mapped as a PM to this project. He studies this Project and Prepares a Gantt chart with V Model (RG, RA, Design, D1, T1, D2, T2, D3, T3, D4, T4 and UAT) as development process and the Resources are PM, BA, Java Developers, testers, DB Admin, NW Admin.

Resources	Week 1	Week 10	Week 20	Week 30	Week 38	Week 46	Week 55	Week 65	Week7 1	Week 78
Project manager										
BA										
Java Developer										

Operational support head					
support head					
Tester					
Network					
engineer					

Q. Explain the difference between Fixed Bid and Billing projects

A. In fixed bid the price is agreed upon at the start of the project regardless of the time required where as in billing bid the service provider pays the bill for the actual time required to complete the project

Q. Preparer Timesheets of a BA in various stages of SDLC

➤ Design Timesheet of a BA ➤ Development Timesheet of a BA ➤ Testing Timesheet of a BA ➤ UAT Timesheet of a BA ➤ Deployment n Implementation Timesheet of a BA

Task										
by BA										
	9.am	10.am	11.am	12.am	1.pm	2.pm	3.pm	4.pm	5.pm	6.p m
RG		10. am								
RA	10.am		10.30							
D1		10.30		10.45						
T1			10.45		11.00					
D2			11.00				1.pm			
T2			11.00			12.30				
D3					12.30				3.45p	
									m	
T3							3.45pm		4.pm	
D4							4.pm		4.30	
									pm	
T4								4.30		5.p
								pm		m
UAT							5.pm			6.p
										m