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

**Answer-**

* Goal- To bridge the gap between farmers and products i.e Buyers and Sellers.
* Inputs- Skilled employees, Marketing techniques, Knowledge about Agricultural products
* Resources- Warehouses, Software, Office space, Good network.
* Outputs- Profit, Efficient flow of product, Awareness about the agricultural products.
* Activities- Easily accessible app/website, Good customer service.
* Value- Customer satisfaction, High quality crops.

1. **Question**- 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.

**Answer**-

|  |  |
| --- | --- |
| **Strength** | **Weakness** |
| Superior quality agricultural products | Not a recognised brand |
| Monopoly in this sector | Complicated inventory |
| **Opportunities** | **Threats** |
| Solve the major farmer problems | Government policies/ laws |
| Helpful in growing good quality crops | Environment conditions |

1. **Question-** 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

**Answer-** Budget – 2 crore

Time frame – 18 months

Technology – 10 lakhs

Hardware – 15 lakhs

Software – 25 lakhs

Trained resources – 1crore 34 lakhs

|  |  |
| --- | --- |
| **Designation** | **Salary** |
| Project Manager | 1,00,000 |
| Business Analyst | 60000 |
| Senior Java Developer | 70000 |
| Java Developer 1 | 50000 |
| Java Developer 2 | 50000 |
| Java Developer 3 | 50000 |
| Java Developer 4 | 50000 |
| Network Admin | 50000 |
| Database Admin | 50000 |
| Tester 1 | 50000 |
| Tester 2 | 50000 |
| Total as per 18 months | 1,34,00,000 |

1. **Question 4 -** 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

**Answer – GAP Analysis**

**As Is**

* Fertilizers, seeds, and pesticides are not readily available.
* Need to be dependent on local vendors for all the agricultural products.
* Cultivation is less as the right product is not available at the right time.

**To be**

* Well-developed UI application where products are available at the appropriate time.
* Personalize the interaction of farmers with the seller directly to get the best product for farming.
* Door to door delivery.

1. **Question** - List down different risk factors that may be involved (BA Risks And process/Project Risks)

**Answer – BA Risk**

* Incomplete Requirement
* Different Domain
* Change in Requirement
* Past Experience

**Project Risk**

* Scope Creep
* Allotted time
* Budget
* Stakeholder Risk

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

**Answer** –

|  |  |  |
| --- | --- | --- |
| RACI | Name | Designation |
| Responsible | Mr. Doku | Project Coordinator |
|  | Ms. Juhi | Senior Java Developer |
| Accountable | Mr. Vandanam | Project Manager |
|  | Myself | Business Analyst |
| Consulted | Mr. Karthik | Delivery Head |
|  | Mr. Mike | Network Admin |
| Informed | Mr. Henry | Owner |
|  | Mr. Peter, Mr. Kevin, Mr. Ben | Stakeholders |

1. **Question** - Help Mr Karthik to prepare a business case document

**Answer** –

* Why this project is initiated?

Mr. Henry noticed that there is a problem in obtaining the agricultural products by the farmers to do the productive farming. He decided to build an online platform/app where the farmers can directly purchase the product.

* What are the current problem?
* Agricultural products are not readily available.
* Dependency on local vendors.
* No communication between the farmers and the manufacturing companies.
* With this project, how many problems could be solved?

The development of this online platform will solve all of the client's major problems.

* What are the resources required?

|  |
| --- |
| Project Manager |
| Business Analyst |
| Senior Java Developer |
| Java Developer 1 |
| Java Developer 2 |
| Java Developer 3 |
| Java Developer 4 |
| Network Admin |
| Database Admin |
| Tester 1 |
| Tester 2 |

* How much organizational changes are required to adopt this technology?

With the current resources and measures that are there in the organization, all the goals can be easily achieved. Just in case the change requests are more than, we might require experienced hands in the agile module and need to shift this project from waterfall to agile, and that will be the only case in which organizational change would be required.

* What is the time frame of ROI?

One year

* How to identify the stakeholder?

Through the RACI matrix

1. The Committee of Mr. Henry, Mr Pandu, and Mr Dooku and Mr Karthik are having a discussion on Project Development Approach.

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

**Answer -**

There are 4 types of SDLC methodologies

* Sequential
* Iterative
* Evolutionary
* Agile
* Sequential - As the name itself depicts, everything needs to be in sequence, or we can say everything needs to be in order, one by one. There is no scope for skipping any step; every phase has its own importance that will end with the accomplishment of the project on time. It is suitable for small project. E.g.- Waterfall Model
* Iterative - In this methodology, the project needs to be developed by the repeated cycles, whose outcome will be the completion of the project. There is also scope for improvement, which needs to be done for the project to be done on time. E.g.—Rational Unified Process (RUP)
* Evolutionary - This methodology is development-driven, where the project is evolving with the repetitive steps. It also gives importance to adaptation and makes changes in the process accordingly. E.g., Spiral Model
* Agile - It is the most flexible and productive methodology as compared to all the methodologies. It emphasizes continuous changes and adaptation, which are being required to deliver the project to the client at its maximum satisfactory acceptance. It suited the best of big/lengthy projects. E.g., Agile Model

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

**Answer –**

* Waterfall Model - It is one of the easiest and most traditional models that is being used. In this, the project needs to be carried out by the fixed pathways, as there is no scope for handling change requests. As the name itself depicts, everything is being driven downwards just like a waterfall.
* RUP- Rational Unified process – This model is divided into different phases, and each phase has its own importance. Everything needs to be understood before the start of each phase; in case there are any changes that need to be entertained, then they can be easily accepted, and the project will be completed on time.
* Spiral Model – It's a combination of both the waterfall and RUP models. Same as RUP, this model also has different phases, has its own importance, and needs to be completed to get the desired outcome. There is scope for entertaining change requests in each phase as per the client requirement.
* Scrum Model- It is one of the most productive and dynamic models, which delivers the high-quality product. It is known for its flexible nature because it always welcomes the change requests. There will always be scope for improvement, as it is a continuous process.  Best suited for large projects.

s

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

**Answer –**

|  |  |
| --- | --- |
| **Waterfall Model** | **V-Model** |
| Best suited for small projects. | Best suited for mid-length and dynamic projects. |
| Change requested can be entertained. | Can be entertained if known at early stage. |
| Testing is done at the last stage. | Testing is being carried out in parallel. |
| Costlier if there the error being found out late. | Cost-effective as errors can be found out in parallel. |
| Less user involvement. | More user involvement. |

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

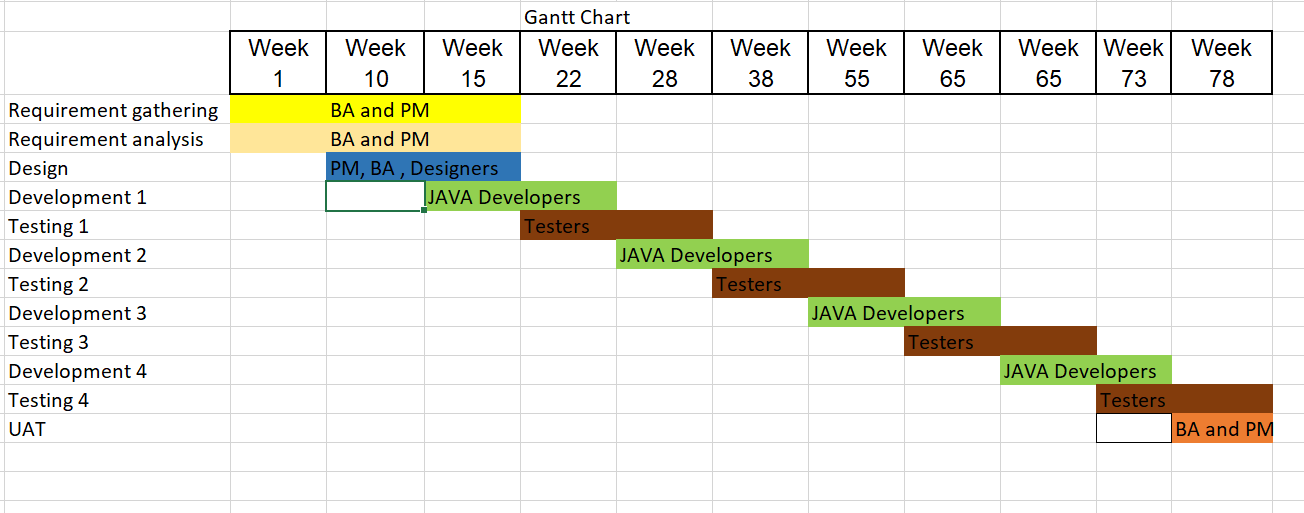
**Answer** - Waterfall will be the best option for this projects.

Reasons-

* It’s a small project.
* Not much user involvement is required.
* Cost effective.
* Requirement can be gathered at the early stage.
* Change request will be less as the client have already mentioned all the necessary requirements.

1. 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.

**Answer** –



1. Explain the difference between Fixed Bid and Billing project

**Answer** –

|  |  |
| --- | --- |
| **Fixed-Bid Projects** | **Billing Projects** |
| Fixed revenue | Varies on time and efforts |
| Suited for small projects | Suited for large projects |
| Fixed timeline | Varies depend upon on change requests |
| Does not entertain change requests | Change requests are entertained |
| E.g. Waterfall | E.g. Scum |

1. 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

**Answer** –

➢ Design Timesheet of a BA

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| S.no | Tasks | Actionable Items | Start Time | End Time | Duration |
| 1. | Identifying Stakeholders | Team meeting | 10:00 AM | 11:00 AM | 1 hour |
| 2. | Client Interactions | Client call | 11:00 AM | 1:00PM | 2 hours |
| 3. | Improvise BRD | SME- on call | 2:00 PM | 3:00PM | 1 hour |
| 4. | Requirement Analysis | On desk paper work | 3:00PM | 4:00 PM | 1 hour |
| 5. | Team meeting | Day summary and future goals | 4:30 PM | 7:00 PM | 2.5hours |
|  |  |  |  | Total | 7.5 hours |

➢ Development Timesheet of a BA

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| S.no | Tasks | Actionable Items | Start Time | End Time | Duration |
| 1. | Team meeting including developers | Tobe done for the day | 10:00 AM | 11:00 AM | 1 hour |
| 2. | Work on change request if any for work on different analysis | On desk | 11:00 AM | 1:00PM | 2 hours |
| 3. | Client Interactions | Update client on the process | 2:00 PM | 3:00PM | 1 hour |
| 4. | Check for the overall development project | On desk paper work | 3:00PM | 4:00 PM | 1 hour |
| 5. | Team meeting | Day summary and future goals | 4:30 PM | 7:00 PM | 2.5hours |
|  |  |  |  | Total | 7.5 hours |

➢ Testing Timesheet of a BA

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| S.no | Tasks | Actionable Items | Start Time | End Time | Duration |
| 1. | Team meeting including testers | Tobe done for the day | 10:00 AM | 11:00 AM | 1 hour |
| 2. | Get update from the testers on the app | On desk | 11:00 AM | 1:00PM | 2 hours |
| 3. | Client Interactions | Update client on the process | 2:00 PM | 3:00PM | 1 hour |
| 4. | Check for the overall development project | Correct if anything seems wrong | 3:00PM | 4:00 PM | 1 hour |
| 5. | Team meeting | Day summary and future goals | 4:30 PM | 7:00 PM | 2.5hours |
|  |  |  |  | Total | 7.5 hours |

➢ UAT Timesheet of a BA

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| S.no | Tasks | Actionable Items | Start Time | End Time | Duration |
| 1. | Team meeting | Tobe done for the day | 10:00 AM | 11:00 AM | 1 hour |
| 2. | Client Interactions | Get the approval from client the app is working fine | 11:00 AM | 1:00PM | 1 hour |
| 3. | Update PM and management | Update the management | 2:00 PM | 3:00PM | 1 hour |
| 4. | Check for the overall development project | Correct if anything seems wrong | 3:00PM | 4:00 PM | 1 hour |
| 5. | Team meeting | Day summary and future goals | 4:30 PM | 7:00 PM | 2.5hours |
|  |  |  |  | Total | 6.5 hours |

➢ Deployment n Implementation Timesheet of a BA

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| S.no | Tasks | Actionable Items | Start Time | End Time | Duration |
| 1. | Team meeting including management | Update on the overall project | 10:00 AM | 11:00 AM | 1 hour |
| 2. | Client Interactions | Inform the client that the app is live | 11:00 AM | 1:00PM | 1 hour |
| 3. | Check if there is any glitch | Keep an eye on the eye and check with the backend team as well | 2:00 PM | 3:00PM | 1 hour |
| 4. | Work on glitches and correct them | Correct if anything seems wrong | 3:00PM | 4:00 PM | 1 hour |
| 5. | Team meeting including managementss | Day summary and future goals | 4:30 PM | 7:00 PM | 2.5hours |
|  |  |  |  | Total | 6.5 hours |