**Question 1. BPM**

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

**Answer:**

This Online Agriculture Product Store’s Business process model is mentioned below

**Goal:** To make Agriculture products easily available at one place and to earn Profit

**Specific Inputs:** Agriculture products Data, Trained employees

**User Resources:** Internet, Delivery Agents, Farmers, Companies producing Agricultural Products, Payment Gateways

**Specific Outputs:** Details of products,

**Activities:** Login, Searching the product, selection of product, buying the product, payment, delivery

**Value Created:** Customer satisfaction

**Question 2. SWOT analysis**

**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:** Following will be the strengths, opportunities, weaknesses and threats in usage of the online agriculture product system

|  |  |
| --- | --- |
| **Strengths:**1. As this is a new a scheme will be helpful to all farmers.
2. Experienced people who are working in that field are there.
3. Experienced team from APT solutions.
4. Scalability to add more features and more regions
5. It will connect Farmers, Suppliers, Buyers in one ecosystem
6. Digital payment solutions for secure transactions
7. Convenient for users as it is accessible everywhere.

  | **Weaknesses:**1. People are not that aware about online applications as they may lack experience with smartphones.
2. Connectivity issue as user base belongs to remote areas
3. Trust issues
4. More chances for replication of idea.
5. If the app doesn’t support local language, it will fail
6. App’s demand may vary seasonally, which will affect usage of app.
7. Dependencies on Third Parties i.e. Payment gateways and suppliers increases.
 |
| **Opportunities:**1. It can bring digital Transformation in agriculture industry
2. Changes of market enhancement
3. Can add value added services or features like videos for handling app, weather information, market prices etc.
4. Promote organic and ecofriendly products
5. Can collaborate with Government Agencies, private Companies
6. Exploring AI options
7. Empowering women and Youth
 | **Threats:**1. Competition with new players in the market
2. Infrastructure limitations like internet and devices for app use
3. Trust about product Quality
4. Political effect
5. Operational challenges with vendors, distributors.
6. Financial risk as the as the number of orders may fluctuate based on plating, harvesting which will lead to generation of inconsistent revenue
 |

**Question 3: Feasibility study**

**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 Cr

Time: 18 Months

**Technology:** Based onDB servers, Security, Payment Gateways

**Hardware:** Based on Storage, Backup systems, Network Infrastructure

**Software:** Based on Payment Gateway software, Agricultural Product Application Software, Security software

**Resources:** Based on Software development Team, BA, Project Team

**Budget:** Based onSalary paid to Team members,

cost of hardware, software and technology

**Timeframe:** Based on Members in Project

**Question 4: GAP Analysis**

**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:**

**AS-IS:**

1. No system to Communicate Between Buyers and Sellers
2. Farmers Dependence on few vendors for purchase of agricultural Products

**TO-BE:**

1. System which will communicate between buyers and sellers
2. Farmers will not be dependent on Few vendors as They are getting a large platform for purchase of products

**Question 5: Risk Analysis**

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

**Answer:**

**BA Risks:**

1. Coordinate between testers, developers and stakeholders
2. Incomplete Requirements Gathering
3. Changes in Requirements
4. Lack of Training

**Process Risks:**

1. Technical Issues
2. System Downtime
3. Untrained Employees
4. Bugs in system

**Environmental Risks:**

1. Changes in Weather conditions

**Question 6: Stakeholder Analysis (RACI Matrix)**

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



|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Name**  | **Position** | **Details of persons**  | **R** | **A** | **C** | **I** |
| Mr. Henry | Owner |  | - | - | - |  |
| Mr. Peter | Stakeholder |  | - | - |  |  |
| Mr. Kevin | Stakeholder |  | - | - |  |  |
| Mr. Ben | Stakeholder |  | - | - |  |  |
| Mr. Pandu | Financial Head |  | - | - |  |  |
| Mr. Doku | Project Co-ordinator |  | - | - |  |  |
| Mr. Karthik | Delivery Head |  | - |  | - | - |
| Mr. Vandanam | Project Manager |  | - |  | - | - |
| Ms. Juhi | Senior Java Developer |  | - |  | - | - |
| Mr. Teyson | Java Developer |  |  | - | - | - |
| Ms. Lucie | Java Developer |  |  | - | - | - |
| Mr. Tucker | Java Developer |  |  | - | - | - |
| Mr. Bravo | Java Developer |  |  | - | - | - |
| Mr. Mike | Network Admin |  | - | - |  | - |
| Mr. John | DB Admin |  | - | - |  | - |
| Mr. Jason | Tester |  |  | - | - | - |
| Ms. Alekya | Tester |  |  | - | - | - |
| Ms. Kalyani | BA |  | - |  | - | - |

**Question 7 – Business Case Document**

**Help Mr Karthik to prepare a business case document**

**Answer:**

* Why is this app being Developed?
* What is the current Situation in the market?
* How will you solve the issue with this application?
* What are Your Resources?
* What is the Time frame and Budget for the Project?
* Who are the stake holders?
* What is agenda to complete the project?

**Question 10. Waterfall Vs V-Model**

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

**Answer:**

|  |  |  |
| --- | --- | --- |
| **Sr. No.** | **Waterfall Model** | **V Model** |
| **1.** | Waterfall is a linear Sequential Life cycle Model. | V model is a Parallel Life cycle Model. |
| **2.** | In Waterfall model Testing can not run parallelly with validation | In V Model Testing runs parallelly with validation. |
| **3.** | Waterfall Model is less Flexible | V Model is moderately flexible. |
| **4.** | In Waterfall Model Testing phase starts after development | In V Model Testing Phase Works Parallelly with development phase.  |
| **5.** | In Waterfall Model there is High Risk as defects were identified Late. | In V model there is low Risk as defects were identified earlier. |