Question1– BPM - Identify Business Process Model for Online Agriculture Store–(Goal, Inputs, Resources, Outputs, Activities, Value created to the end Customer)

Ans :

Goal : To create a Online agriculture product (Fertilizer ,pesticides, seed etc.) store .application Should be User friendly ,easy payment

Input: Customer data, Product Range ,Experience team

Resources : office space, Delivery staff / Vendor, Software .

Output : Sales revenue , Profit ,

Activities : Market Survey Empanel with major Agri Manufacturer , Marketing campaign,

Value: Value addition to suppliy chain, Customer satisfaction.

Question2–SWOT 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.

Ans :-

EXPERIENCED SOFTWARE TEAM LOGISTICS ISSUES .

UNTAPPED MARKET SUPPLY CHAIN MANAGEMENT LOWER INTERNET CONNECTIVITY

Less Tech Savvy Customer

UNTAPPED MARKET, CAN CREATE MONOPOLY Middle Men Problem

LESS COMPETETION Monsoon and Global Warming

Managing Cash flow as per the Crop season

Question3–Feasibility study Mr Karthik is trying to do feasibility study on doing this project in Technology(Java), lease help him with points (HWSW Trained Resources Budget Timeframe)to consider in feasibility Study.

Ans :-

Hardware: Should be based on storage backup, systems network infrastructure.

Software :Based on shopping cart software , supply chain management and payment gateway software

Resources : Project management team , BA , software development

Budget : Business cost , development costs , hardware cost.

Time frame : based on resources , No of features.

Question4–GapAnalysis

Ans :-

GAP analysis provide the foundation of time money and resources required to achieve a particular outcome. Normally performed by BA and PMs.

Stages of GAP analysis

* Review system
* Develop requirements
* Comparisons
* Implications
* Recomendations

Current state: The retailer procures the Agri products from the middlemen.

He then makes the products available to farmers.

Farmer need to in advance give the request as the product can’t be available at the same time.

And due to unpredictability of weather farmer may incur loss in case could not use entire quantity.

Shops mostly take cash payments.

Desired State:

The Manufacturing companies will give their product catalog on the application, Farmer will select the product and make the payment to buy it.

Product shall be available in the sowing season and immediate delivery will be made as per the demand .

Farmer can make payments though multiple options including KCC .

Question5–Risk Analysis

Ans :

Risk Analysis is done to determine if the proposed project carries more risk than the org’s capacity.

Process risk : Supply chain management of the Agri product .

Project risk : Scope risk

Software company has limit experience of working on Rural projects .

Hardware and network compatibility can be a risk as customer base is Rural.

BA risk : incomplete requirement .

Domain knowledge

Change in requirement.

Requirement based on BA assumptions.

Question 6 - Stakeholder Analysis (RACIMatrix)

Ans :

* Responsible
* Accountable
* Supporting
* Consulted
* Informed

|  |  |  |  |
| --- | --- | --- | --- |
| R/A/C/I | NAME STAKEHOLDER | DESIGNATION | DETAILS |
|  |  |  |  |
| RESPONSIBLE | VANDANAM | PROJECT NAMAGER |  |
|  |  |  |  |
| ACCOUNTABLE | MS JUHI | SR JAVA DEV |  |
|  | TEYSON | JAVA DEV |  |
|  | LUCIE | JAVA DEV |  |
|  |  |  |  |
| CONSULTED | MrKarthik | DeliveryHead |  |
|  |  |  |  |
|  |  |  |  |
| INFORMED | PANDU | FINANCE HEAD |  |
|  | DOOKU | PROJECT COORDINATOR |  |

Question 7 – Business Case Document

Answer : A business case includes information analysis and recommendations . It is prepared by the Sr. BA , Business Architects and Presales team . A business case also helps in identify key stakeholders who are affected by the problem.

**Why is the project initiated :** There is a gap in farmers and the companies selling the agriculture products like Pesticides , seeds etc. . Purpose of this project is to develop an application that can give easy access to the farmers for the agriculture product.

**What is the current prob.**

Currently farmers in the remote villages are not able to procure good quality agri product, if available then it is not accessible on time . due to middlemen involvement same is expensive as well. This leads to lower yields from the crops.

**How many prob wil be solved?**

With this project following problems can be resolved:

# Good quality agri products will be avsilable to farmers at doorstep.

#pricing will be competitive due to no middlemen.

#farmers can order Agri product from anywhere as the app will be user friendly and operational in lower internet connectivity

**What are the resources required ?**

Delivery head , project manager, developer , db admin Finance head , tester , BA

Question 8 – Four SDLC Methodologies

Ans :

SEQUENTIAL(waterfall):- Sequential is classic waterfall method of software development lifecycle.

Also referred as linear sequential method, in this model next phase can start once the last phase is complete.

Stages of waterfall model

* Requirement analysis
* Design
* Development
* Testing
* Deployement & implementation

ITERATIVE (RATIONAL UNIFIED PROCESS ):

Rational unified process is an iterative software development methodology

It was developed by rational soft corp in feb 2003 .

RUP is based on building blocks describing what is to produced the necessary skills required and step by step explanation describing how specific goals are to be achieved the building blocks are following :

Roles : Set of skills competencies and responsibility .

Work Product : A work product represents resulting from the task . inc documents ,models produced while following the process .

Task : Task define the unit of work assigned to a role that provide meaning full result .

**Four project lifecycle phases:**

Inception : Agreemnt between team and customer on what to be built .

Elaboration : Agreement among the team about architecture and design need to be deliver the agreed system behavior .

Construction : The iterative implementation of the fully functional system.

Transition : Delivery , defect correction .

In RUP or Iterative method project is broken in to small components and testing and change management takes place in each iterative steps .

**EVOLUTIONARY(SPIRAL ) :-**

Evolutionary or Spiral model has four phases ;

Planning

Risk analysis

Engineering

Evaluation

The requirement is gathered in planning phase in risk analysis phase risk is identified and alternate solution , a prototype is produced after risk analysis phase . software is developed in the engineering phase , testing at the end of it .

Evaluation Phase gives customer to evaluate the output project before it moves to next spiral.

* High amount of risk analysis
* Can be costly project
* Good for large critical projects

AGILE (SCRUM):

Agile is Faster delivery software development methodology ,

Basically consists of 4 values and 12 principles. It is also and iterative method of soft development.

There is no documentation in Agile , requirements are taken in the form of user stories .

Same is worked upon by the scrum team and the project is developed brick by brick .

It is different from the conventional software dev methodologies as It require small team of seasoned developers , product owner and scrum master.

Question 10 – Waterfall Vs V-Model - 5 Marks

Ans :

|  |  |
| --- | --- |
| WATERFALL | V MODEL |
| LOW COST | EXPENSIVE |
| TESTING STARTS AT LATER STAGE | TESTING STARTS AT EARLIER STATGE |
| MOVE IN LINEAR WAY | DON’T MOVE IN LINEAR DIRECTION |
| LESS CUST INVOLVEMENT | MORE CUSTOMER INVOLVEMENT |
|  |  |

Question 11 : - **Water fall is suitable for this project since**

* It suits for small projects
* It is simple to use and implement.
* Cost will be reduced once the implementation is done as only support team is required.
* Every process is reviewed well.

Question 12 – Gantt Chart –

Work break down structure , it is a break down of the work in week by week .

It is prepared by the Project manager.

Question 13 – Fixed Bid Vs Billing

A FIXED BID Project is one where service provider agrees to deliver a specific scope for a fixed price .

The scope of work deliverables and timeline are agreed opon upfront and service provider agrees to any cost overrun or delay.

A billing project is one where the service provider bills the client for actual time and resources utilized on the project the client pays for the service providers time and expenses and scope of work can be adjusted as need through the project .

Question 14 – Preparer Timesheets of a BA in various stages of SDLC - 20 marks

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | Design Timesheet | | |  |
|  | TASKS | ACTIONABLE ITEM | START TIME | END TIME | DURATION |
| 1 | DESIGN MEETING WITH TEAM | MEETING FOR DESIGN BLUE PRINT | 10:00 | 11:00 | 1 |
| 2 | CLIENT INTERACTION | DISCSSING THE DESIGN OUTLINED WITH THE CLIENT | 14:00 | 16:00 | 2 |
| 3 | FINETUNING THE BRD DOSUMENT | SME DISCUSSION- ON DESIGN DOCUMENT | 12:00 | 13:30 | 1.5 |
| 4 | TEAM MEETING | WORKING ON KEY FEATURES | 16:00 | 18:00 | 2 |
| 5 | REVIEW DESIGN | TEAM MEETING | 14:00 | 15:00 | 1 |
|  |  |  |  | TOTAL | 7.5 HOURS |