LIC Market-Driven System

Q1) Identify all the stakeholders and users of the systems. Enlist all features of the LIC Market-Driven system by each user of the system, in the form of user stories. Can you prioritize them using the requirement prioritization techniques? (e.g., AHP, Numerical Assessment, MoSCoW method, etc.) How? Provide details.

Ans)

StakeHolders of the system are the Retinodes software company, Investors in the company, LIC insurance company, policymakers, Insurance customers.

Users of the system will be customers, insurance agents, and admin.

Features(Prioritization using MoSCoW technique):

- As a user, I must be able to register so that I can apply for new insurance. - **Must have**
- As a user, I must be able to login into the system so that I can access the system and create and apply for insurance packages. - **Must have**
- As a user, I must be able to apply and pay for a package so that I can get a package of my choice. - **Must have**
- As a user, I want to be able to see the list of all available packages so that I can make an informed decision about the insurance package I want to choose. - **Must have**
- As a user, I should be able to renew an existing policy. - **Must have**
- As an insurance agent, I want to be able to set restrictions on the insurance policy so that only valid policies can be uploaded by the user. - **Must have**
- As an admin, I must be able to see all the information about the users and agents in our system. - **Must have**
- As an admin, I must be able to ban users who violate terms and conditions. - **Must have**
- As a user, I want to be able to create a new custom package so that I can address my personal needs which are not available in pre-made packages. - **Should have**
- As a user, I want to be able to send my custom package for review so that I can get it approved and apply for it. - **Should have**
- As a user, I must be able to see my existing policies so that I can get information about them whenever I want. - **Should have**
- As an insurance agent, I want to be able to analyze the insurance policy so that I can provide suggestions (if any). - **Should have**
- As a user, I must be able to filter the list of available packages so that I can find a pre-made package according to my needs. - **Could have**
- As a user, I want to be able to save my custom packages somewhere so that I can refer and customize them later. - **Could have**

Q2) Prepare a list of market-facing technologies helpful for this project. According to you, would market-facing technologies be helpful in the proper deployment of the product? Why?

Ans) Most appropriate market-facing technologies helpful for this project will be

1. Machine learning and artificial intelligence based models. This will be helpful in the deployment of the product because it can use beforehand data and simulate that accordingly with user requirements and give a better experience to users.
2. Customer education videos and tutorials so that they can understand the functioning and utility of the website.
3. Marketing technologies such as Subscription emails and Social Media accounts to connect with customers.
4. Survey and questionnaire can be used because it will be directly interacting with the set of users that can directly impact on this system.

Q3) Suggest an effective requirement engineering framework that can be used in market-facing projects because there are no existing systems that can be analyzed for the development so we need to consider all requirements from the core.

Ans)

- We can use multiple requirement engineering frameworks like market stakeholder, actor and user based requirements.
- we can develop, document and validate those requirements. After that if necessary we can analyze, manage and change requirements accordingly.
- We can also interview people and do market research to gather requirements.

Q4) List out the possible features those are not feasible to consider. Can you provide justification for each of them in detail?

Possible features that are not feasible to consider-

1. Payers cannot pay through cash, cheque, Demand Draft. Since we need to digitize the system, we are considering accepting payments through net banking only.
2. Group Insurance - We have considered insurance for individuals only as generally companies provide insurance packages for individuals mostly and there are less options available for group insurance, so a developer has less options to compare group insurance packages.
3. If a customized package is approved by the system, then the system will not add that package in the list of packages for other users as there might be 100’s of customized packages getting approved by the system and it will store redundant packages also(for ex. If the two users customize their packages and they get approved by the system but the customization differs in only one small functionality then there will be sort of redundant packages in the system and space utilization will be reduced.)

Q5) Let us assume that the customized package developed by the customer (using your second product) is similar as the package available in your pre-defined package. What is the possible reason behind this defect? How can it be ensured that this would not happen? In which requirements engineering activity, this defect can be handled? Please provide a scenario to justify.

Ans) There could be a defect in the way the packages are being shown to the customer. The interface might not be good enough because of which the customer was unable to see that a package according to his needs exists already. The search filters might not be narrow enough for the user to find a package to his exact needs.

This defect could be handled during requirements elicitation by talking to the customers more thoroughly and also during requirement specification to improve upon the user interface requirements being provided to the customer. A feature can be added so that any submitted customized insurance package is checked against all the pre-made packages so that the user can be informed and educated about how he could have searched for that particular package with available search filters.

Q6) Identify three different use cases where the conflicts between the requirements occur? Do you think that the conflicts can be resolved? How?

Ans)

1. Use Case: Send package for review.
   -Conflict in this case will be higher pricing or lower pricing in customized user package that can be resolved by communicating with agent after it or customization can be done on pre existing packages
2. Use Case: Analyze Insurance policy.
   -Conflict in this case will be if the package is disapproved by the agent then what happens next. This conflict can be resolved if the system will analyze the policy customized by users and check if a given policy already exists in the system or not.
3. Use Case: Validity check of policy customized by user.
   -Conflict in this case arises if the system will perform a validity check on the policy customized by the user and check for any possible violations of terms and conditions. It can be resolved by the machine learning model trained for policy check might err in certain cases, upon which the customer will be able to contact customer care.

Q7) Considering the set of features you have identified, what are the non-functional aspects associated with this system? Explain rationale behind the selection of each of them.

Ans) Non-Functional Aspects are:

1) Security: Since this is an Insurance Company Huge amount of monetary transaction will be made through the website, Hence robust security measures are needed, also a lot of customers will be sharing their personal details, hence data needs to be encrypted.
2) Scalability: Insurance company should able to handle large amount of users at a time
3) Availability: All the users can see the information related to insurance packages that are

provided by the company or they have chosen at any moment of the time.

4) Usability : The performance of the system should be good in all kinds of modern browsers and it should have a good UI.
5) Compliance: The system should be compliant with the rules and laws specified by the Government of India.

Q8) Can there be 'Open Issues'- issues that are identified but not taken care of? If yes, what are they? Are there some alternative ways for their resolution, such that no requirements conflict will happen?

1. The system lacks in updating the new insurance policies which come into picture all of a sudden. Like in the Covid scenario the covid insurance and the terms and conditions regarding it should be added/updated but the system does not have features to do so. Moreover, AI/ML needs a significant amount of data to be trained and for new policies it can be inefficient to give accurate suggestions.
2. We did not consider the situation of customers having less or no knowledge about the insurance policy market. There is no feature which guides or provides tutorials to a lay man having zero knowledge about choosing insurance policy that could be best for that person.