**Requirement life cycle for Customer segmentation model for a telecommunications company.**

**Elicitation –** First step is to understand why customer segmentation is needed and identify the benefits of doing customer segmentation. We also need to understand the different ways of how the customer segmentation can be done. To do this, we can interact with users, because our goal is to segment the users based on some factors. We can also conduct surveys to identify their needs. We should also interact with stakeholders, which in this case can be officers and executives from the company who can give you an idea about the nonfunctional and domain requirements as well.

**Analysis and Documentation –** Next, we need to analyse the data collected to ensure we have gathered the right kind of information that can help us to segment the customers. Important demographics such as age, gender, area etc. should be included. Necessary step should be taken to address any lack of clarity or incompleteness in the gathered data. We should document these in a structured and organised way for a clear understanding of what we want to achieve and what all we need to have to achieve the goal.

**Validation and Verification –** Next the documentation is validated to see that it correctly matches the requirements of the stakeholders. It is also verified to see if there’s any mistakes in the collected data or the analysis done on the data. It should also be ensured the documentation meets the industry standards guidelines and benchmark.

For eg: if most of our customers are found to be middle-aged group, offers like unlimited calls or faster internet after 11 P.M. might not be a good idea. So, the age group can be key factor in doing customer segmentation for a telecommunication company.

**Prioritization and Negotiation –** Once we have the structured documentation ready, we need to do resource allocation. If there are limited resources if there are any conflicting requirements, we must identify the most important and key factors that help us do customer segmentation and prioritize it over lesser factors so that we can optimize our resources. The stakeholders then decide on which are the key factors that are of utmost importance.

**Change management –** We can expect changes at any time during the project due to varying needs and market conditions. These changes need to be managed through a well-established change control process so that they are evaluated, documented and implemented correctly.

**Communication & Collaboration –** This is a key aspect for a successful project. Clear and accurate communication ensures that all the stakeholders of the project, from designers and developers to users and management is aware of what we are expecting at the end of our project. Timely meetings and communication channels need to be created so that everyone is on the same page.

**Traceability and Impact Analysis –** Traceability is very useful in understanding how each of the different factors are affecting the results. It is done by creating links between the requirement we are looking for and the exact source which helps to meet that particular requirement. We can also understand how changes in these requirements affects or impacts the overall project.

**Implementation and Testing –** This is where we actually build the system by coding, or through visualisation tools to segment the customers based on various key factors. The results should be tested again and again to ensure they are accurate as well as meets our requirements.

**Validation & Acceptance –** After we complete the development of the model, it should be validated by various stakeholders and may be the users as well to ensure it complies with our initial requirements. The developed model should effectively segment the customers.

**Deployment and Maintenance –** Once the model passes the validation step, we can now deploy it to be used by executives from different teams of the company. For eg: the sales team can use this model to develop some schemes or offers to attract more customers, the marketing team can use this model to create advertisements and marketing techniques based on each customer segment.

**Retirement & Archival –** If the model we developed reaches its end of lifecycle, i.e it no longer serves the goal for which it was built, we archive the requirement documentation and other important aspects of the project for future reference or compliance.

Our aim is to ensure that we are always in alignment with the end goal, while being able to adapt to any changes. Effective communication, accurate documentation and rigorous testing is how we are able to achieve our aim.