Requirement life cycle for Customer segmentation model for a Telecommunications Company.

1. Initiation

 Identify the need for customer segmentation to better understand and cater to the diverse needs of telecom customers.

2. Planning

- Form a cross-functional team including representatives from marketing, data science, customer service, and IT departments.
- Determine the resources required, including data, tools, expertise, and budget.
- Develop a project plan with timelines, milestones, and responsibilities.

3. Requirements Gathering

- Conduct interviews and workshops with stakeholders to understand their needs and expectations from the segmentation model.
- Document functional and non-functional requirements, such as accuracy, scalability, interpretability, and compliance with regulations like GDPR.
- Define key performance indicators (KPIs) to evaluate the effectiveness of the segmentation model.

4. Analysis and Design

 Analyze the available data sources to identify relevant variables for segmentation.

5. Development

- Acquire and preprocess the necessary data, ensuring data quality, consistency, and privacy.
- Implement the segmentation model using suitable technologies and programming languages (e.g., Python, R, SQL).

6. Testing

- Conduct rigorous testing to ensure the segmentation model meets the specified requirements.
- Perform testing to identify and fix any issues or bugs.

- Deploy the segmentation model in a production environment, considering factors like scalability, reliability, and security.
- Monitor the model's performance in real-time and establish processes for model maintenance and updates.
- Provide necessary documentation and training to end-users and stakeholders.

8. Evaluation and Feedback

- Continuously monitor the effectiveness of the segmentation model using predefined KPIs.
- Gather feedback from users, stakeholders, and customers to identify areas for improvement.

9. Maintenance and Enhancement

- Establish a maintenance plan to address any issues, drift in data distribution, or changes in business needs.
- Explore opportunities for enhancing the model's capabilities or integrating with other systems or analytics tools.