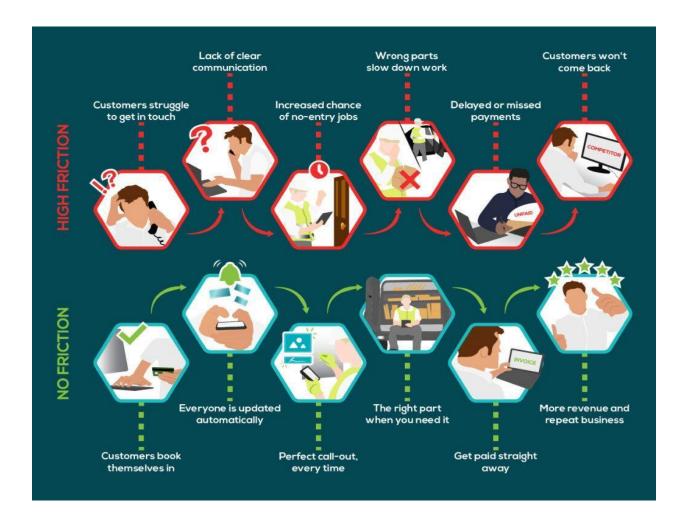
Date	20-06-2025
Team ID	LTVIP2025TMID29686
Project Name	Field Service WorkOrder Optimization
Maximum Marks	

CHAPTER 3: Requirement Analysis

To identify, document, and validate the functional and non-functional needs of stakeholders involved in field service operations. This ensures the solution is aligned with business goals, user expectations, and technical feasibility.

3.1 – Journey Map



3.2 - Software Requirements

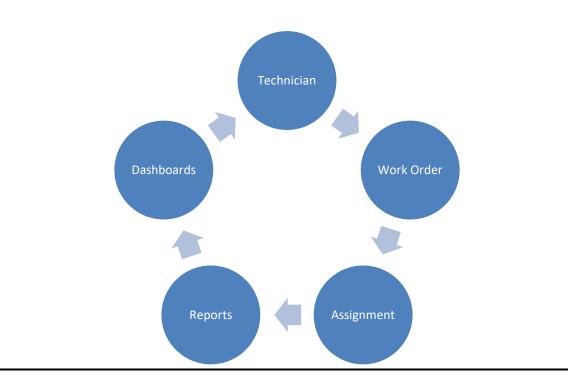
Software Requirements for a Field Service Work Order Optimization system.

Technical Stack Components:

Layer	Technology / Tool	Purpose
Platform core	Salesforce (Multitenant,	Foundation for data model,
	Metadata – Driven)	security, APIs

Backend logic	Apex (Triggers, Classes, Batch	Custom business logic and
	Jobs), SOQL/SOSL	data processing
User Interface	Lightning Web components	Responsive and portal UI for
	(LWC), Aura, Experience Cloud	tenants/managers
Automation Tools	Flow Builder, Scheduled	Automate processes like
	Flows, Approval Processes	renewals, reminders

3.3 - Data Flow Daigrams



3.4 – Technology Stack

Technology Stack for a **Field Service Work Order Optimization** system, designed to support scalability, performance, and intelligent automation

1.Platform

- Salesforce Platform (Force.com / Lightning Platform): The primary PaaS (Platform as a Service) used to build and run custom applications.
- **Heroku:** A platform used for building and deploying external apps using open-source technologies like Node.js, Ruby, Java, etc.

2. Programming Languages

- **Apex:** Salesforce's proprietary object-oriented programming language similar to Java. Used for business logic and server-side code.
- **Visualforce:** A markup language for creating custom user interfaces (UI), now largely replaced by Lightning components.
- **Lightning Web Components (LWC):** Salesforce's modern UI framework based on web standards (HTML, CSS, and JavaScript).
- **JavaScript:** Used heavily in LWCs and front-end customization.
- **SOQL / SOSL:** Salesforce-specific query languages to retrieve data from the Salesforce database (SOQL = SQL-like; SOSL = full-text search).