Project Design Phase-II
Data Flow Diagram & User Stories

Date	16 February 2026
Team ID	LTVIP2026TMIDS55781
Project Name	Plugging into the Future: An Exploration of Electricity Consumption Patterns Using Tableau
Maximum Marks	4 Marks

Customer Journey Map:

This map represents how a product strategist or analyst interacts with the iRevolution dashboard from need to insight.

Dimension	Entice	Enter	Engage	Exit	Extend
Steps	User receives a high monthly electricity bill or a mandate to cut energy costs. They are told a new Tableau dashboard is available to investigate the data.	User logs into Tableau Server/Online, navigates to the relevant project folder, and opens the "Electricity Consumption" workbook.	User filters by date range, building, or department. They drill down into hourly patterns to identify peak usage times and anomalies.	User exports a PDF report of the anomalous consumption patterns and emails it to the facility management team with recommendations.	User sets up a data-driven alert in Tableau to notify them if weekly consumption exceeds a certain kilowatt-hour (kWh) threshold.

Interactions	• People: Management • Places: Office/Home • Things: Email, Utility Bill	• Places: Web browser • Things: Tableau Login Portal, SSO Authentication	• Things: Tableau dashboard, interactive filters, tooltips, trend lines	• People: Facility Manager • Things: Tableau export tool, Email client	• Things: Automated Tableau email alerts, Slack/Teams integration
Goals & Motivation	Help me understand why our energy costs spiked this month without having to dig through massive Excel spreadsheets.	Help me access the data quickly, securely, and without software installation hurdles.	Help me easily pinpoint exactly when and where the highest electricity usage is occurring.	Help me communicate these findings clearly and professionally to stakeholders so we can take action.	Help me avoid manual daily checking by notifying me automatically if usage spikes again.
Positive moments	Relief upon learning there is a visual, automated tool available to solve their problem instead of manual data crunching.	Seamless Single Sign-On (SSO) experience. The dashboard loads quickly upon opening.	Discovering a clear, obvious visual spike on a specific date (e.g., HVAC left on over the weekend).	The export process is just one click, and the resulting PDF is perfectly formatted for a presentation.	Receiving the first automated alert, proving the system works and gives them peace of mind.
Negative moments	Initial frustration or anxiety regarding the high electricity bill and the pressure to find an immediate answer.	Forgetting VPN credentials or experiencing a slow initial load time due to a massive, unaggregated dataset	Dashboard feels cluttered. Tooltips overlap, or data hasn't refreshed to show the most recent days	The exported PDF cuts off a crucial part of the chart, or the legend is missing in the static view.	Alert thresholds are set too low, resulting in "alert fatigue" from too many spammy emails
Areas of opportunity	Embed a direct link to the Tableau dashboard inside the monthly digital utility bill or internal financial review email	Optimize dashboard performance using data extracts. Ensure automated refresh schedules run early in the morning.	Add a "Predictive Forecasting" or "Anomaly Highlighting" feature using Tableau's advanced analytics to guide the user's eye instantly.	Create a custom "Summary View" dashboard specifically optimized for 8.5x11 PDF export to prevent formatting issues.	Integrate Tableau alerts directly into a dedicated Slack or Microsoft Teams channel for faster team collaboration.