Function/Component	1.0 Technician	2.0 Edge Computer	2.1 Hardware	2.1.1 Micro SD Card	2.1.2 USB 128 GB	2.1.3 Error Code LED	2.1.4 External WIFI	2.1.5 Raspberry pi 4	2.1.6 LORA ESP 32	2.1.7 LORA ESP 32	2.1.8 Raspberry pi 4	2.1.9 Micro SD card	2.1.10 Real Time Clock	2.2 OS	2.3 Services	2.3.1 Monitoring	2.3.2 Dashboard (Control	2.3.3 Network (Network	2.3.4 Expenses (CRUD	2.3.5 (Inventory and	2.3.6 Config Files	2.3.7 Object Storage	2.3.9 Cloud Native	2.3.10 Container (CNI)	2.3.11 Sersors Pipeline	2.4 PC	2.5 Mobile	2.6 Print-out Chart	3.0 Sensors	3.1 Ecowitth Weather	3.2 AA Battries	3.3 ESP 32 Lora Receiver	3.4 AA Batteries	3.5 Sensors Enclousure	3.6 Flow Meters	4.0 Smart Valve	4.1 LORA ESP32 Receiver	4.2 AAA Batteries	5.0 Installation Kit	5.1 Pre-assemble Instruction Kit			
1.1 Pre assemble	x																																										
1.2.1 Mount assembly																																							x				
1.2.2 Inspect Mounting Equipment	x																																										
1.3.1 Install Base Image				x																x																							
1.3.2 Config new image				x														x																									
1.3.3 Add Update Over Air							x													x																							
1.3.4 Replicate Raspberry pi												x																															
1.3.5 Flashing ESP32 for										x																																	
1.4 Add Enclosure																																			x								
1.5 Power Assembly																																											
2.1.1 Measure Windspeed																														x													
2.1.2 Measure Soil Moisture																														x													
2.1.3 Measure Humidity																														x													
2.1.4 Measure Wind																														x													
2.1.5 Measure Temperature																										x																	
2.1.6 Measure Rainfall																										x																	
2.1.7 Measure UV																										x																	
2.1.8 Measure Moisture																																x											
2.2.1 Extract													x																														
2.2.2 Transform																									x																		
2.2.3 Load																									x																		
2.3.1 Power Wifi Sensors																															x												
2.3.2 Power LORA Sensors																																	x										
3.1.1 Preview Environment																											x																
3.1.2 Preview Maintenance																				x																							
3.2.2 Give system access.								x																																			

3.2.1 Create ad-hoc network.						x																																					
3.3.1 Built in-house service for																			x																								
3.3.2 Track Network Usuage															x																												
3.3.3 Track Monthly Expense																	x																										
3.3.4 Check Part Availability																x																											
3.3.5 Track Warranty Duration																			x																								
4.1.1 Check Moisture Level															x																												
4.1.2 Predict Water Reservoir												x																							x								
4.2.1 Connect Wireless										x																																	
4.2.2 Send Turn On Signal.																																				x							
5.1 Detect System Failure.					x																																						
5.2.1 Generate User Input.																		x																									
5.3.1 Collect Parts Handbook.																					x																						
5.3.2 Classification Inspection Type.																			x																								
5.3.3 Classification																			x																								
5.3.4 Record Condition of System.																			x																								