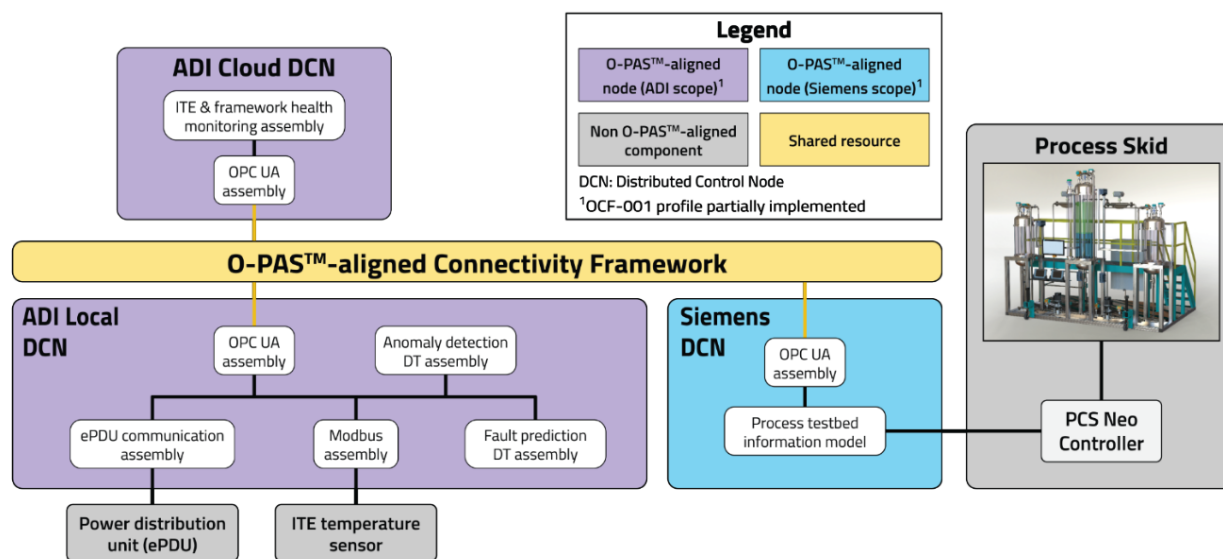Figure 1: Testbed at MxD

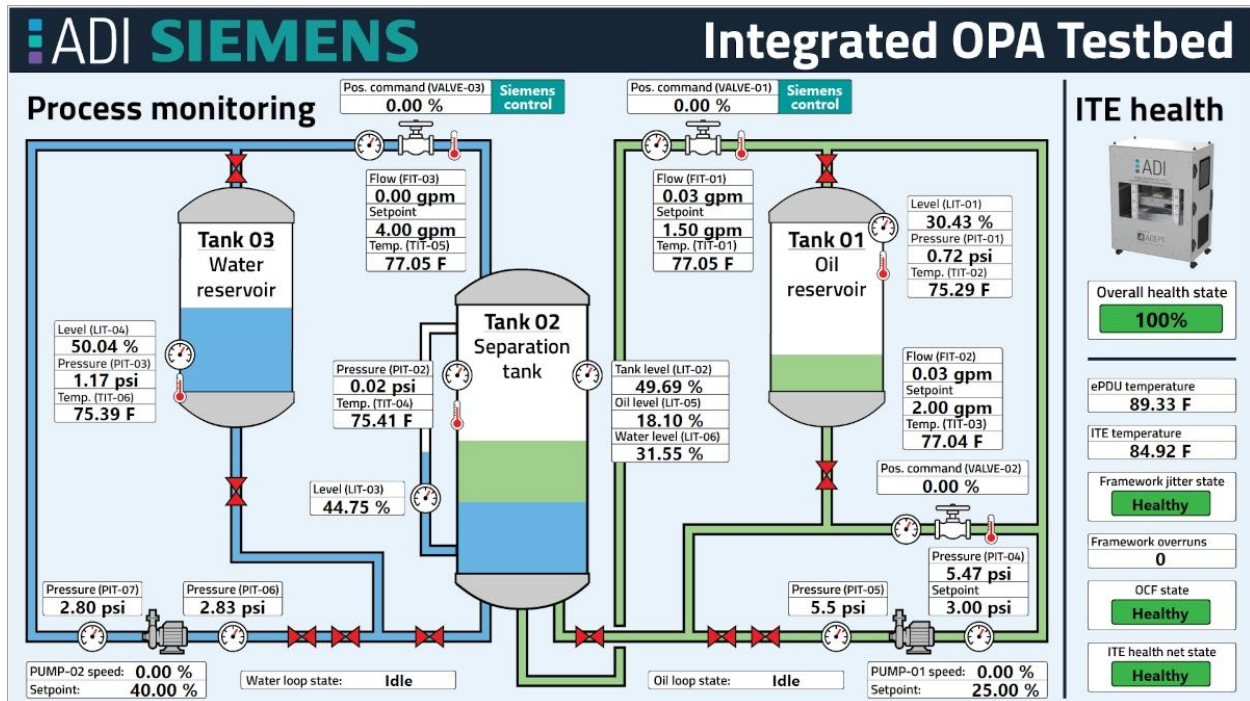Figure 2: Communication Architecture

Figure 3: Process Monitoring Panel Displaying Real-time Measurements from Physical Process Skid
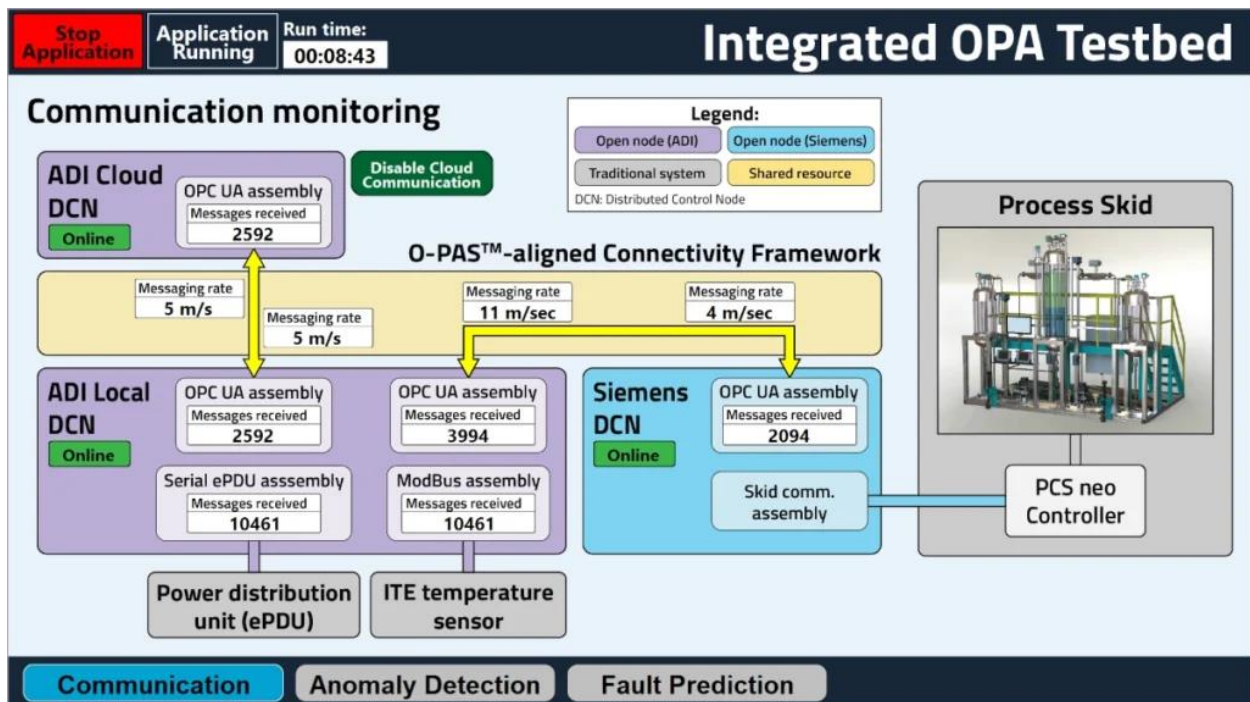

Figure 4: Communication Monitoring Panel Showing Communication Pathway and Messaging Rates
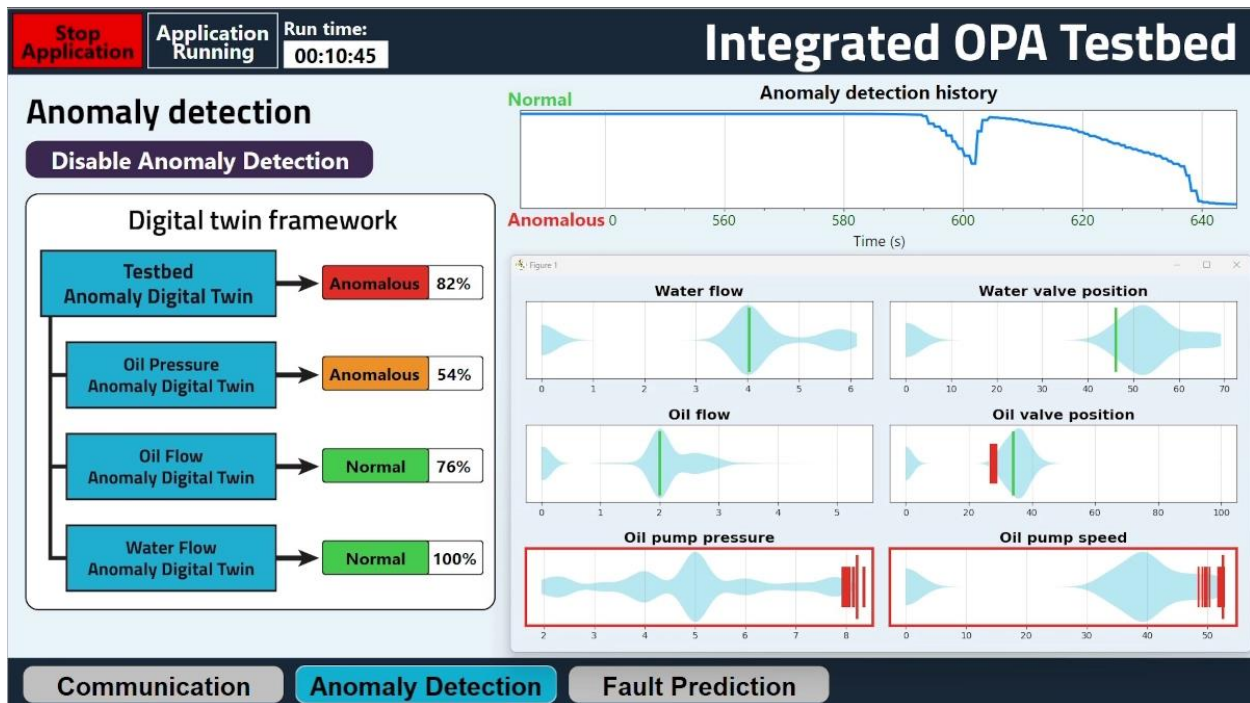
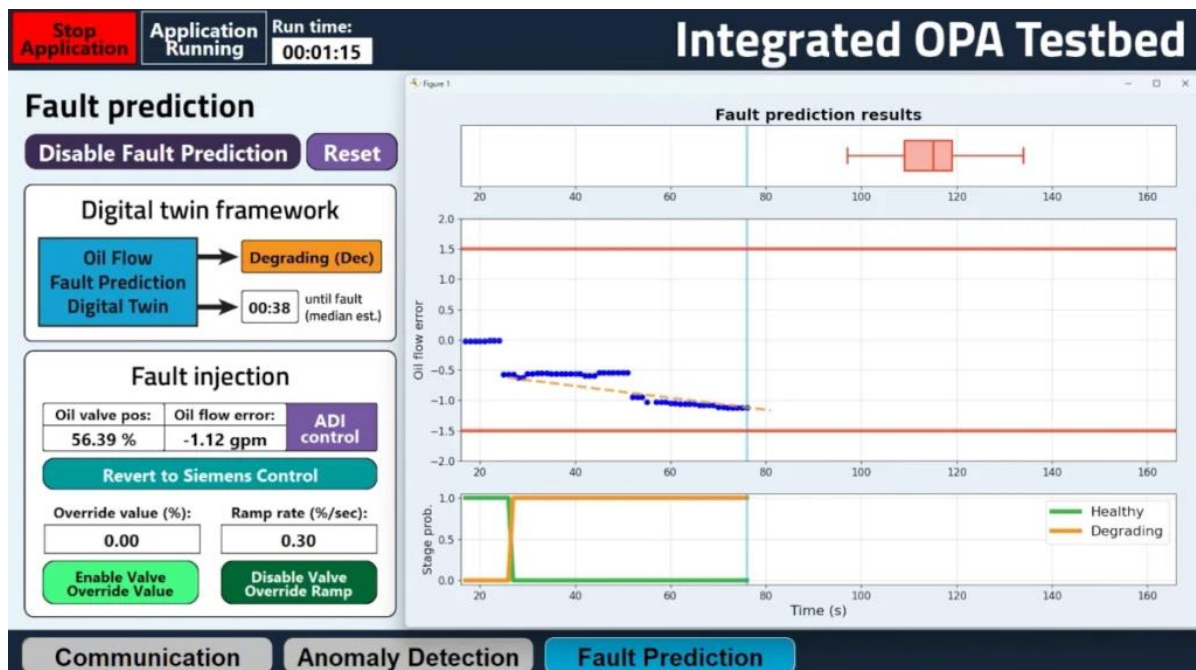Figure 5: Anomaly Detection Panel Showing Purpose-built Digital Twins

Figure 6: Fault Prediction Panel Showing Fault Injection Controls and Plots Describing Equipment Degradation History and Predicted Fault Times