Industrial Metaverse for Build Transformation: *Ship Visualization & Punch List Integration*

Project Lead Organization: Datifex
Project Team members: SSI, TBD

Concept/Idea

Issue: Decision-makers need real-time insights into a ship's status throughout its lifecycle. They must quickly identify issues affecting build schedules and operational availability. However, the necessary data is scattered across different systems and requires subject matter experts to interpret. This lack of integrated, accessible information hampers efficient decision-making and timely issue resolution.

Proposed Solution(s): Our platform will consolidate data from multiple systems into a unified, browser-accessible interface. By visualizing the ship's status and integrating punch lists, decision-makers can quickly identify and resolve issues impacting schedules and availability, enhancing overall efficiency and decision-making.

Benefits/Justification

Benefits of the project

Streamline Access:
- Browser-based access to real-time ship build status.
- Visualize 3D engineering and operations data from any device.
- Interactive search and filter capabilities within the 3D model.

Enable Collaboration:
- Programmatically map punch list items to components/systems.
- Configure one-click reports and collaborate in real-time
- Facilitate quicker decision-making with automated alerts.

Enhance Control:
- Integrate data from multiple sources for a comprehensive view.
- Execute actions directly within the platform, ensuring immediate updates.
- Manage and synchronize external systems from a single pane of glass.

Project Approach

High level statement of work

1. Platform Configuration:
- Using Datifex's proprietary platform, configure a browser based virtual environment accessible to all project stakeholders on any device.

2. 3D Model Visualization:
- Visualize a lightweight model of the entire ship, integrated with ShipbuildingPLM via API.
- Connect progress status data to parts and systems.
- Enable interactive search and filter capabilities within the 3D model.

3. Punch List Integration:
- Map punch list items to components/systems.
- Allow users to organize items into collections based on metadata.
- Enable reports to see heat maps and prioritize issues.

Cost/Images/Relevant Information

- **Project Estimated Cost:** TBD