DTP

Digital Twin Use Case Framework

This framework has been developed to support your digital twin use case ideation workshop.

The x-axis represents the stages of project lifecycle and the y-axis represents the types of digital twins. A twin model of objects could be a rubbish bin, and the twin model of systems could be the rubbish collection network.

Workshop steps:

1 Introduce the framework to your workshop attendees and decide on the use case card fields that will be completed.

2 Ask each workshop attendees to create use case cards of what is required within your application industries / organisation.

3 Play back the use case cards and collectively decide on criteria for the location of each use case card. Prioritise accordingly based on your organisations strategic vision and goals.

Use Case Card
Name:
Application Industry:
Project Lifecycle:
Stage:
Application Use:
Scope:
Problem statement:
Objective:
Stakeholders:

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TWIN MODEL OF SYSTEMS

PROJECT LIFECYCLE PHASES

PROJECT LIFECYCLE PHASES

NEED   DESIGN   BUILD / AQUIRE   OPERATE   SUSTAIN   RENEW

TWIN MODEL OF OBJECTS

Application Industry Options:
- Aerospace
- Education
- Construction
- Automotive
- Agriculture
- Retail
- Health care
- Government
- Mining
- Manufacturing
- Utilities
- Emergency management
- Transportation
- Cultural assets (e.g. art galleries)
- Logistics
- Other

Application Use Options:
- system prediction
- system simulation
- asset interoperability
- asset condition assessment
- asset operational envelopes
- maintenance
- system visualisation
- product simulation