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AN AUTODESK COMPANY

The Art of Digital Transformation for Waste Water Operations



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Agenda

Why Digital Digital Transformation?



Digital Transformation Process

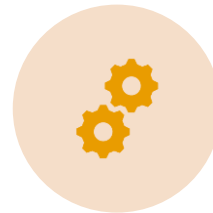
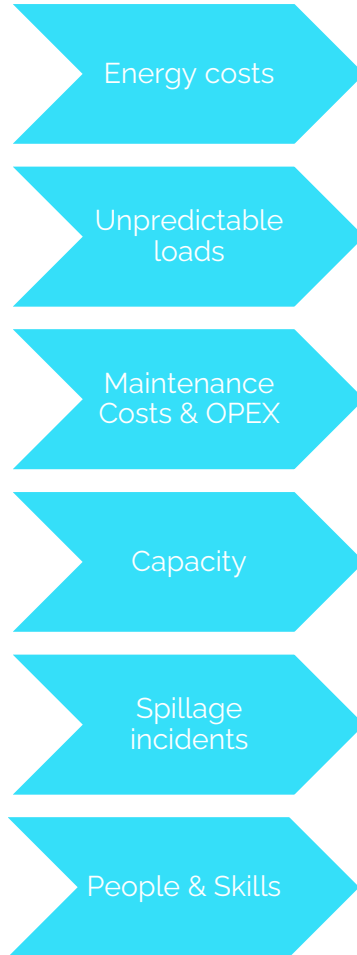


Operational Excellence



Where to start?

Why digital transformation?



EFFICIENT
OPERATIONS

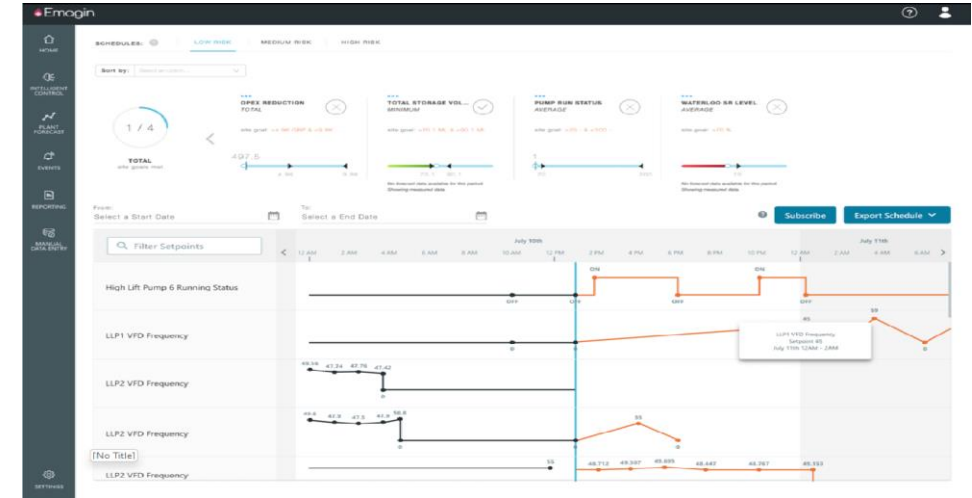


COMPLIANCE



ASSET
PERFORMANCE

Why Digital Transformation?



Info360 Plant
(Water Treatment Advanced analytics)

Emagin AI



Digital Transformation in Water Industry Operations

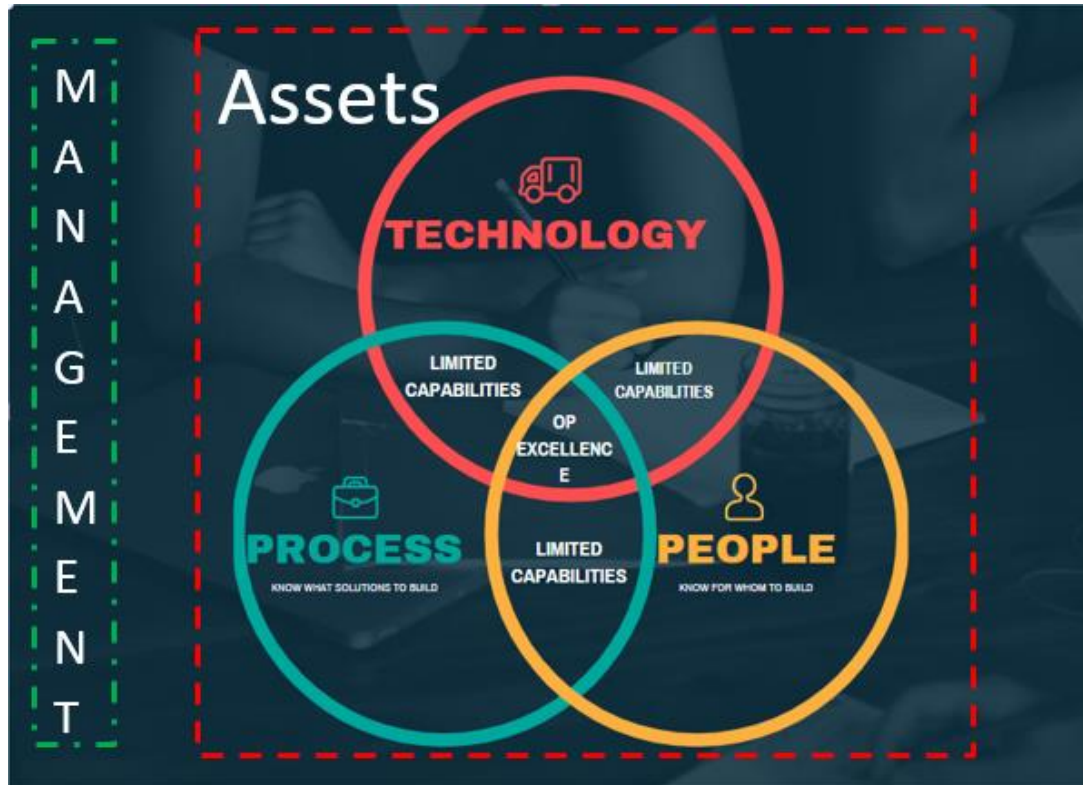
- Digital transformation- Water industry is going through digital transformation to meet stringent regulatory requirements as well as to achieve Operational Excellence

3 step Process

- Digitization
 - Process of creating infrastructure for data collection. Installing Sensors, OT devices etc
- Digitalization
 - Process of collecting data, transforming, processing and gaining insights and acting based on it
- Transformation
 - Process of being transformed-Depend on Digital data to drive initiatives and combine other data sources at an organizational level to derive higher benefits



Operational Excellence



- Components of Operational Excellence
 - People
 - Technology
 - Process
 - Assets
 - Management

Digital Transformation is one of the techniques to achieve Operational Excellence

Operational Excellence

“Ability to achieve production targets while produce a product or a deliverable with lowest cost, lowest impact on environment and in a safe manner without compromising on the Quality”

HSEEQ- Sweden

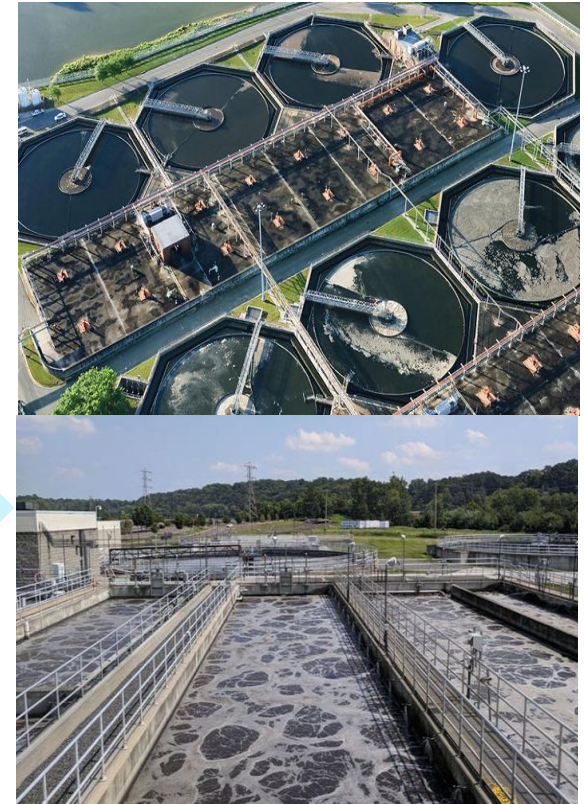


Operational Excellence in Water Industry

Operational Excellence in water industry would pertain to produce/treat water with lowest energy & chemical consumption with prolonged Asset life while complying to regulatory requirements.

Operational Excellence is an imperative need for water industry due to

- Cost to produce clean water
- Cost to process waste water
- Water being an sustainable & abundant resource cannot have large demands on energy which would counteract its purpose
- Demand and consumption and effluent rates are ever increasing which puts a lot of strain on existing infrastructure and assets
- Keeping the water industry green and clean- Meeting sustainability targets and focus on new challenges (such as Microplastics)



Where to start?

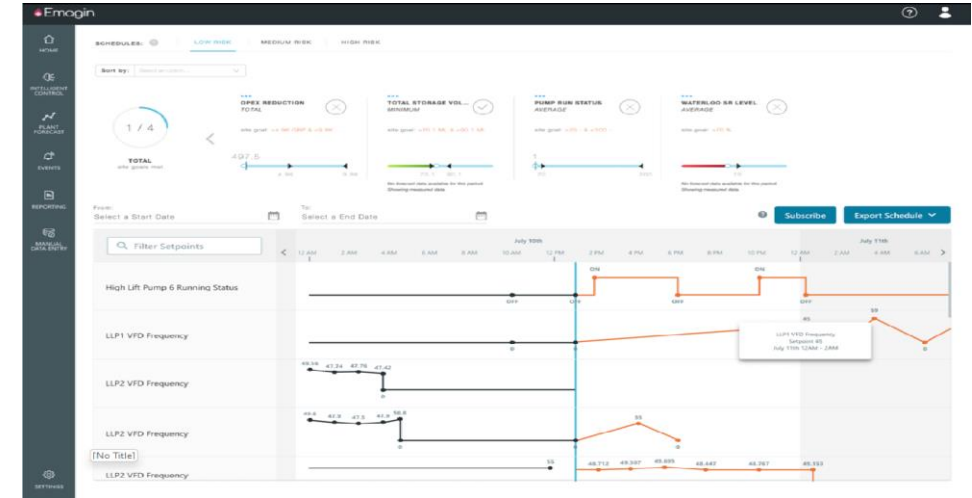
- Scenario – By Age

- Old plant- Selective digitization
- Mid age plant-Digitization and Digitalization
- New plant-Operational Analytics

- Scenario- By Need

- Problem Identified- Digitize and digitalize the problem, apply Analytics and ML methods to solve it
- To identify Opportunities-Digitize key areas and use operational analytics to discover the potential

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Sustainability Goals

Digital Maturity

Data Maturity

Improvements & KPI

Optimization

Target

Measure

Act

Continuously Improve

Thank You and Questions?

Presented by:



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Empowering water experts