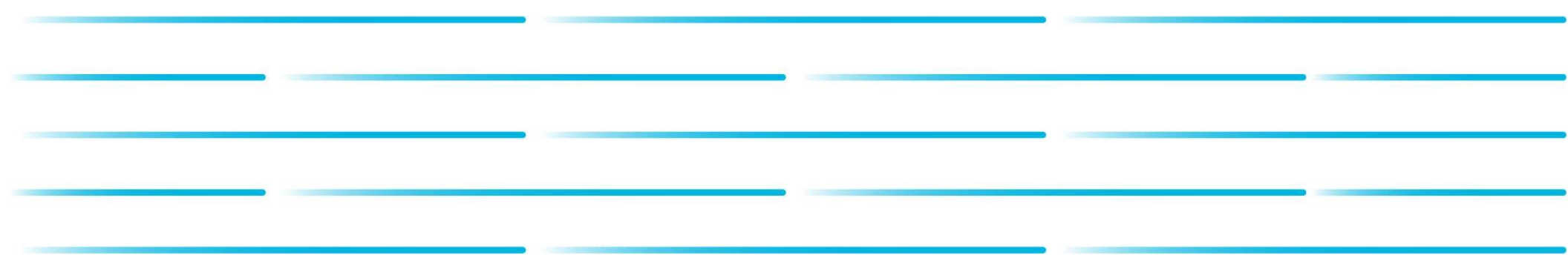




Reducing EHS incidents
at customer and manufacturing sites
by leveraging digital technology

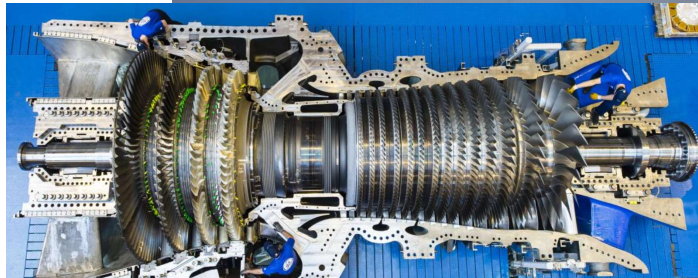
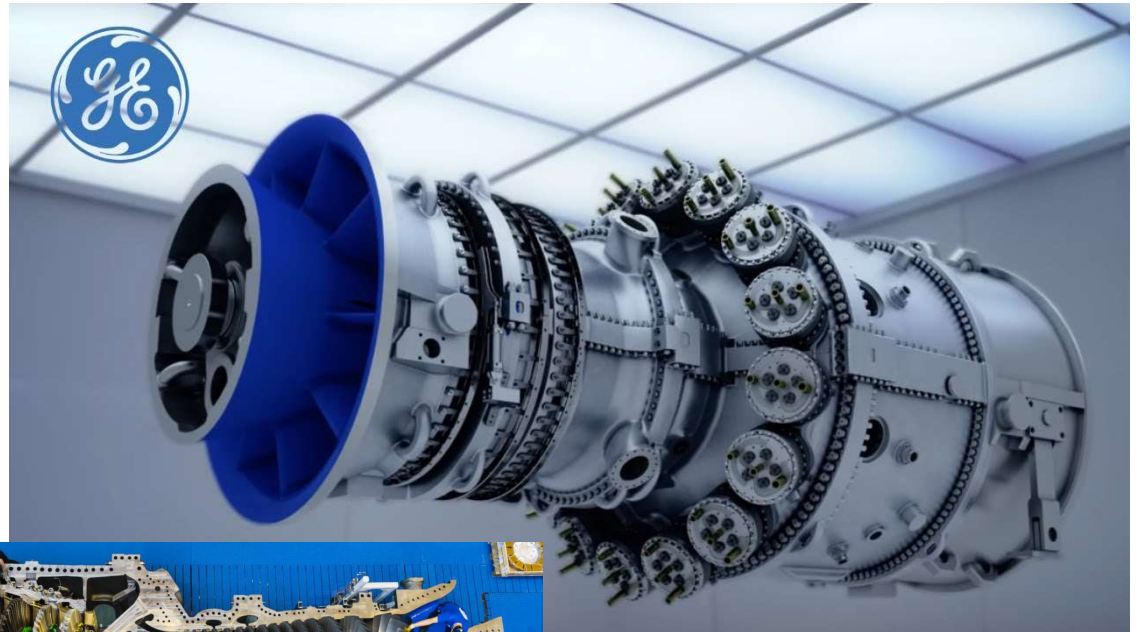


Introduction



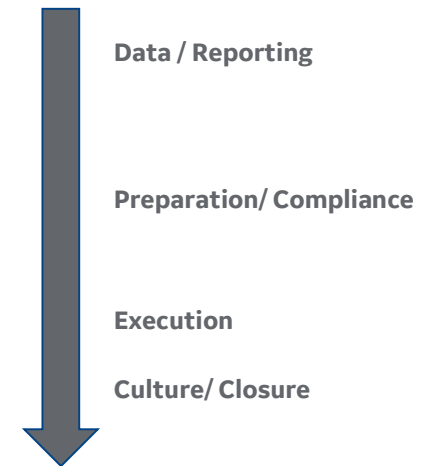
GE POWER

customer and manufacturing sites



Agenda

1. The role of Data and Analytics for providing actionable insights
2. Prediction for work planning – leveraging historical data
3. Contractor Document Assessment (CDA)
4. How Digitalization can improve training
5. Detection of hazards at the site
6. Driving EHS culture through Digitalization



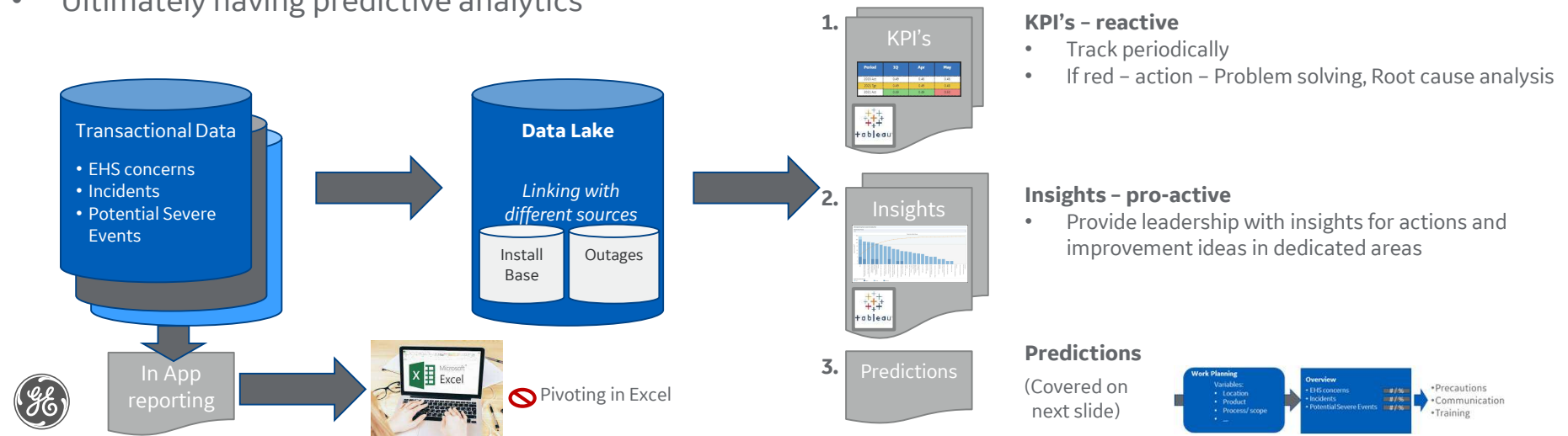
The role of Data and Analytics for providing actionable insights

Goal

- Free up EHS experts from working on data
- Move away from: downloading from transactional systems and pivoting in Excel
- From reactive to proactive - from KPI's to actionable insights

Approach

- Provide the data from different transactional systems in one 'data lake'
- Ultimately having predictive analytics



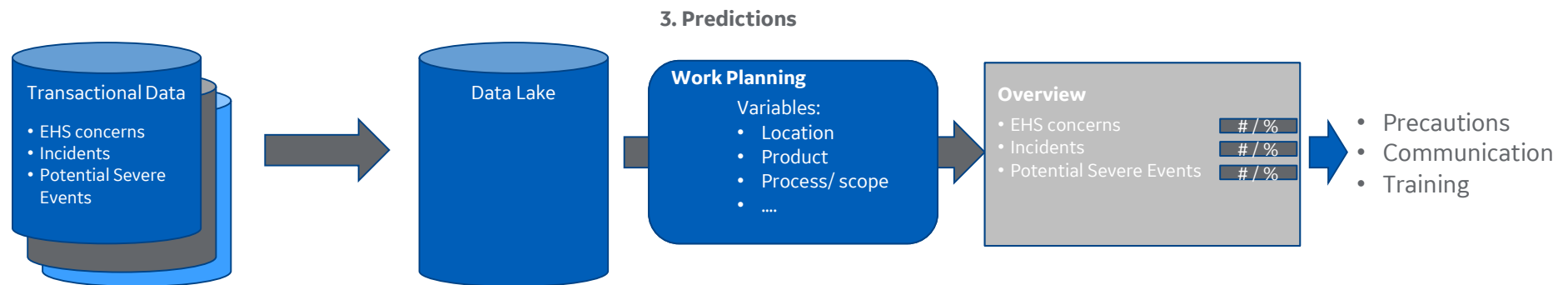
Prediction for work planning – leveraging historical data

Goal

- Reduce EHS events through prediction
- Enable planning of EHS at upcoming work.

Approach

- For the planning purpose, variables indicating a scope, need to be entered
- Data will be returned showing which events/ concerns happened/ could happen at similar scope



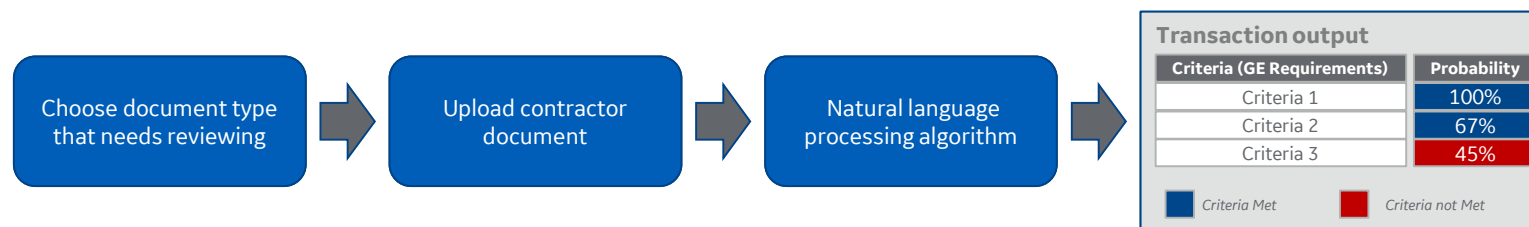
Contractor Document Assessment (CDA)

Goal

- Use Case - Compliance and free up EHS professionals to focus more of their expertise on field execution and higher-value EHS work

Approach

- To confirm that GE contractors had robust EHS programs in place, GE reviews contractor documentation.
- The contractor onboarding process requires specific EHS skills and was labor intensive.
- AI-enabled Contractor Document Assessment (CDA) application was implemented
- CDA uses natural language processing algorithm



How Digitalization can improve training

Goal

- Reduction of the most common types of onsite injuries
- Greater retention of training topics and procedures
- Reduction of training costs Employees; less time training->billable
- Increase employee satisfaction by innovating the training experience

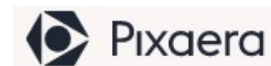
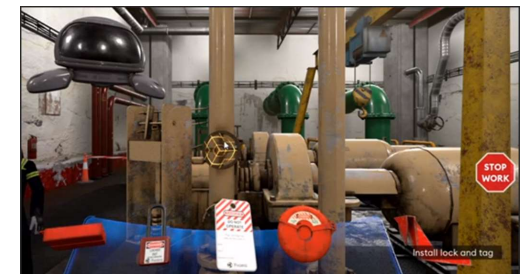
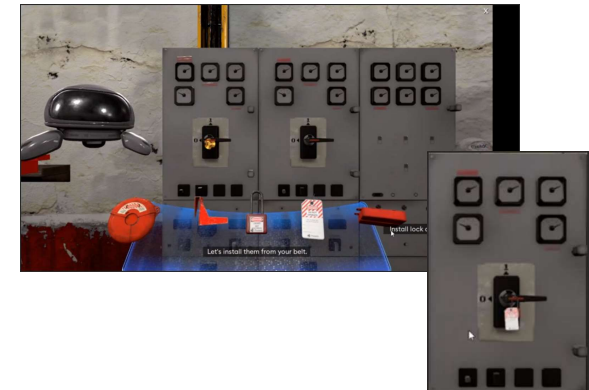
Scope - Energy Isolation – Lock Out, Tag Out(LOTO)

Approach

- Develop 3D training with Pixaera.

Outcome:

- Rating **4.72** avg. (0 poor –5 excellent)



Detection of personal protective equipment at the site

Goal

- Ensure Employees and contractors wear their PPE when entering the site – Reduce the number of incidents by ensuring compliance at entrance and enforce a culture.

Approach

- Install Camera's at the entrance that detect PPE Equipment



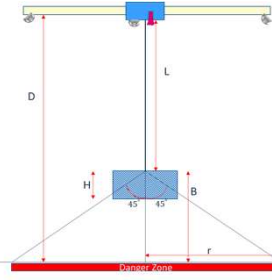
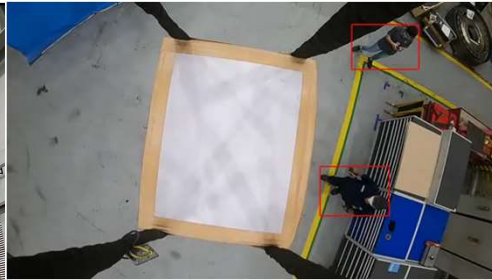
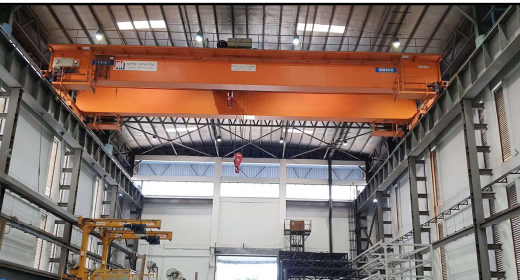
Detection of hazards during lifting at the site

The detection

1. Detecting if the safety latch of the crane hook is open



2. Detecting whether a person is standing under the suspended weight or in the danger zone during lifting operation



Goal

- Detection of hazards during lifting at the site



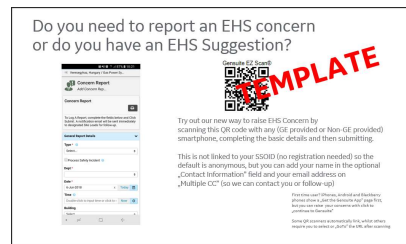
Approach

- Install Camera's on the lift and around to detect:
 1. Safety latch closed
 2. No people under the suspended weight or in the danger zone



Driving EHS culture through Digitalization

- EHS is a behavior/ culture. It is everybody's responsibility
- Ensure everybody feels empowered to raise a concern
 - Using QR code scanning using any device with as few as possible questions to raise a concern



- Open meetings with a safety moment
 - Having a repository of which learnings have been shared



