

Turning insight into action.



Transitioning the PI System as a Facility Ages and Ownership Changes

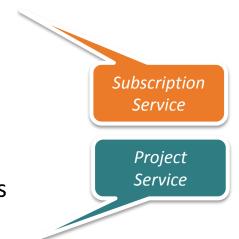
Presented by Simon Wright

Founder & CEO, Industrial Evolution

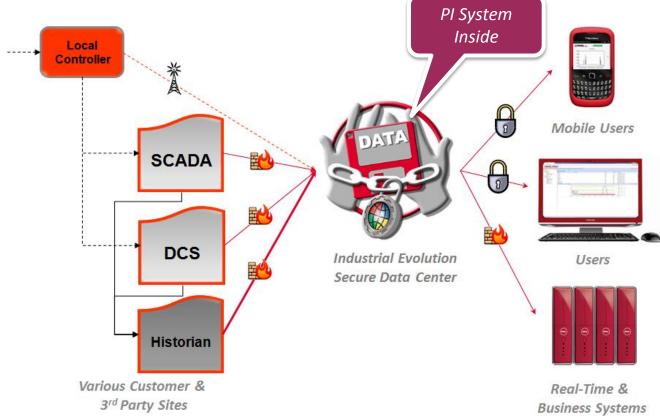
About Industrial Evolution



- Data-as-a-Service ("DaaS")
 - Well*Share
 - Meter*Share
 - Power*Share
 - Web*VMI
 - Web*Technician
 - Data*Rova
- Application Services
 - Consulting
 - Development
 - Implementation
 - Support

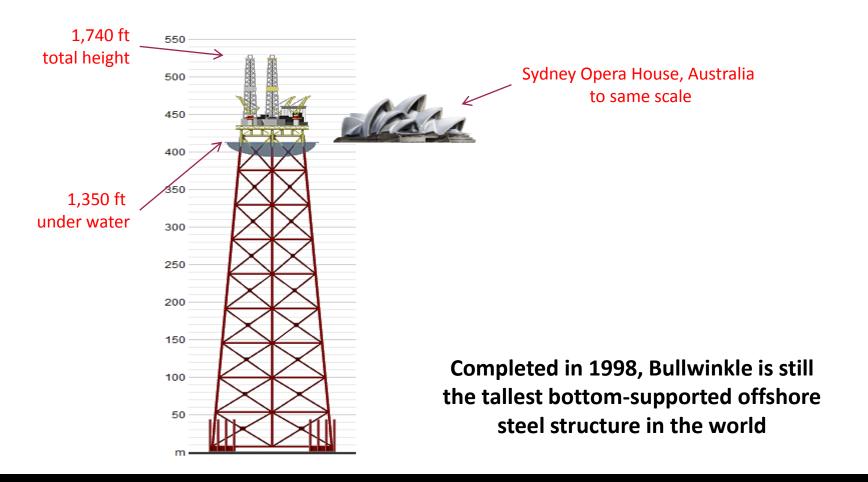


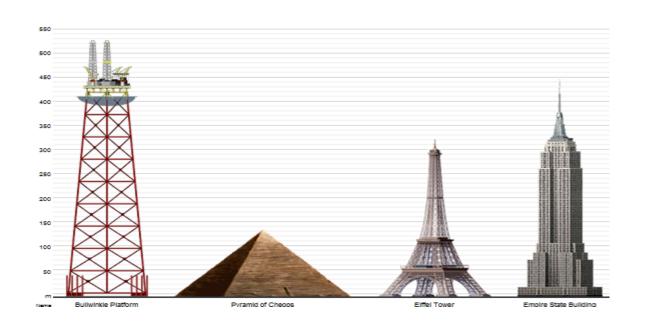
How does DaaS Work?





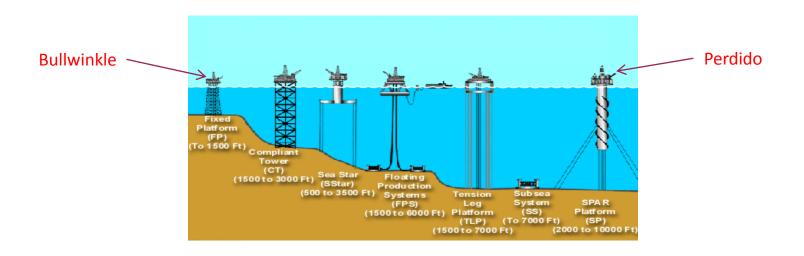
The Story of Bullwinkle Deepwater Gulf of Mexico





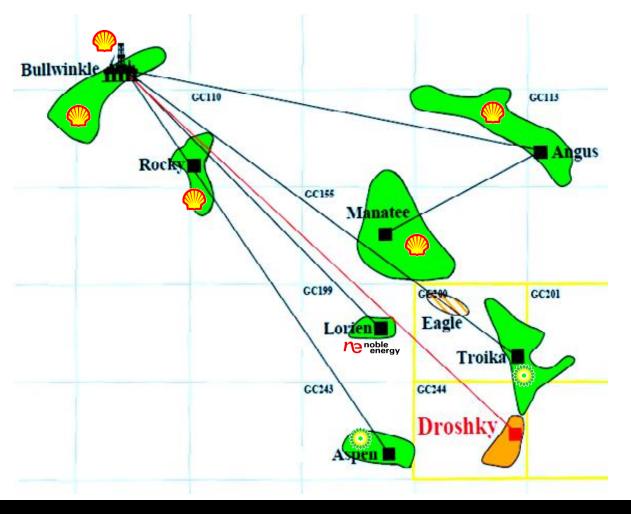






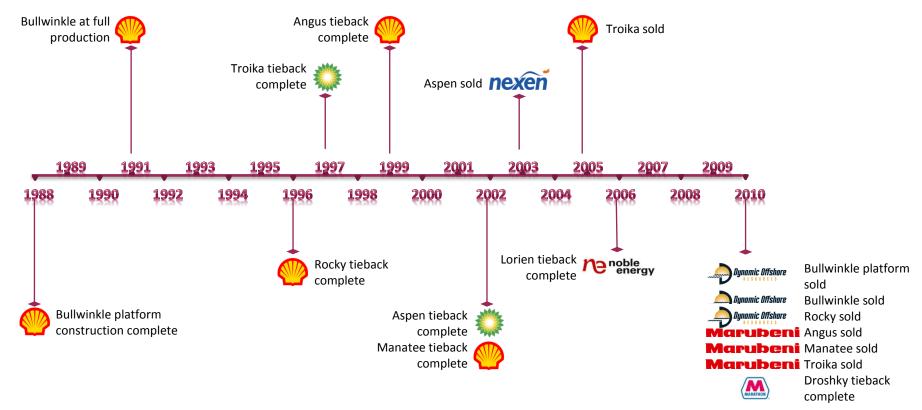
What was Required?

- Oil production from various fields was managed by one company, but owned by another – the owner needed real-time visibility of the operation
- Ownership of each field changed hands many times throughout the life of the field – visibility requirements kept changing
- A coherent, cost-effective solution that would survive multiple transition was required



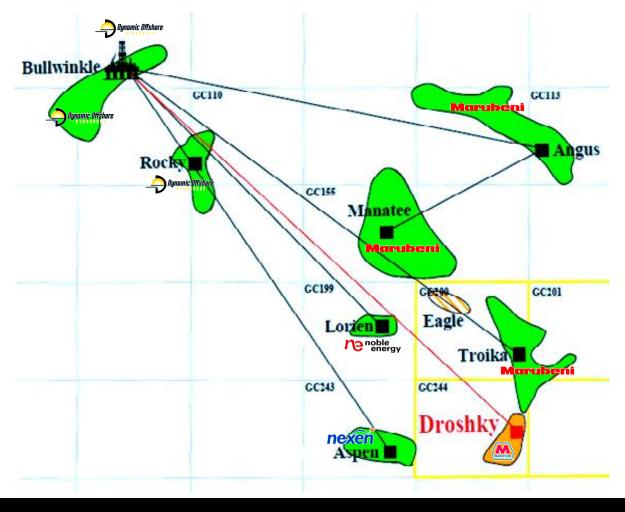
Before

Timeline



13

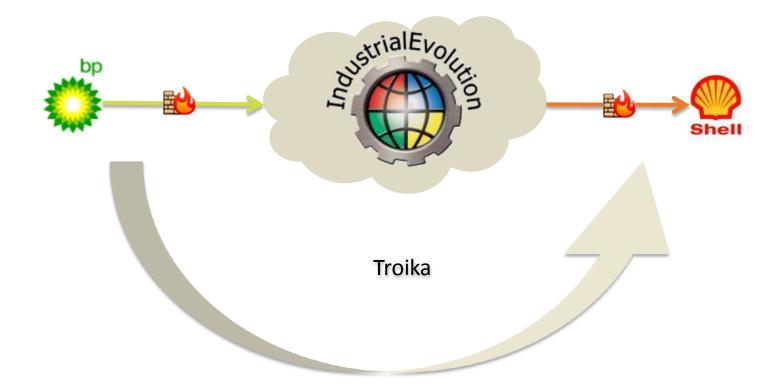
After



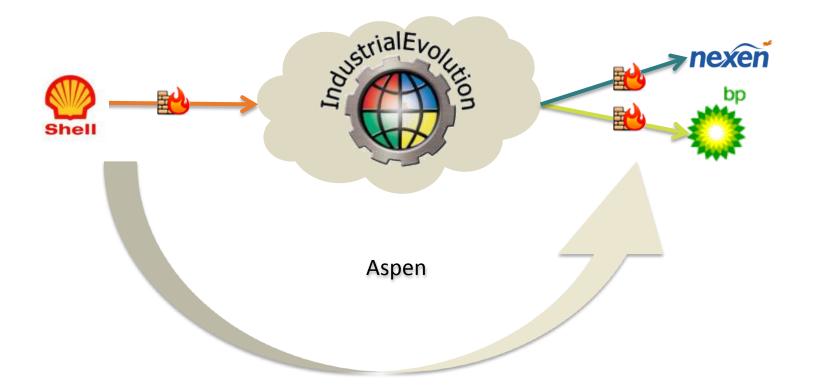
Initial Projects – DaaS Between Partners

- Shell used IE's Well*Share to receive Troika realtime data BP (from tie-back to BP's nearby Brutus platform)
- BP and Nexen used IE's Well*Share to receive Aspen real-time data from Shell
- Noble Energy installed telemetry devices from GlobaLogix (who used IE's Web*Historian as a front-end)

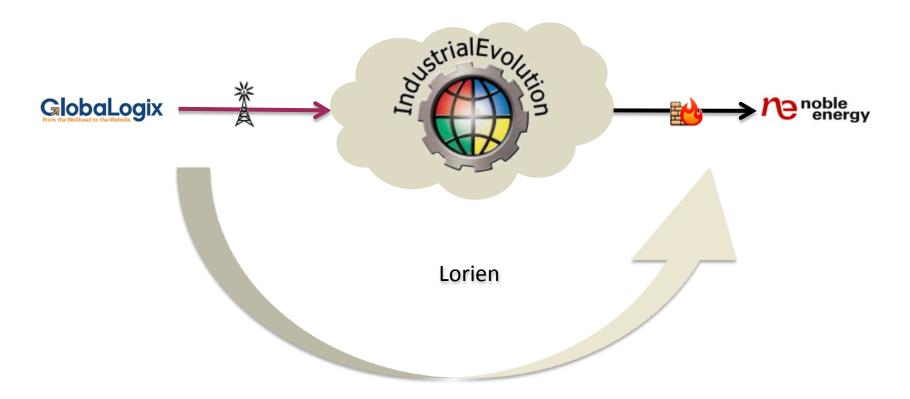
BP to Shell



Shell to BP & Nexen



Noble Energy's Telemetry Service



Change #1 - BP Sold Troika to Shell

- Troika tie-back to Brutus severed
- Troika directly tied back to Shell's systems on Bullwinkle



Change #2 - BP Sold Aspen to Nexen

BP no longer needed real-time Aspen data from Shell

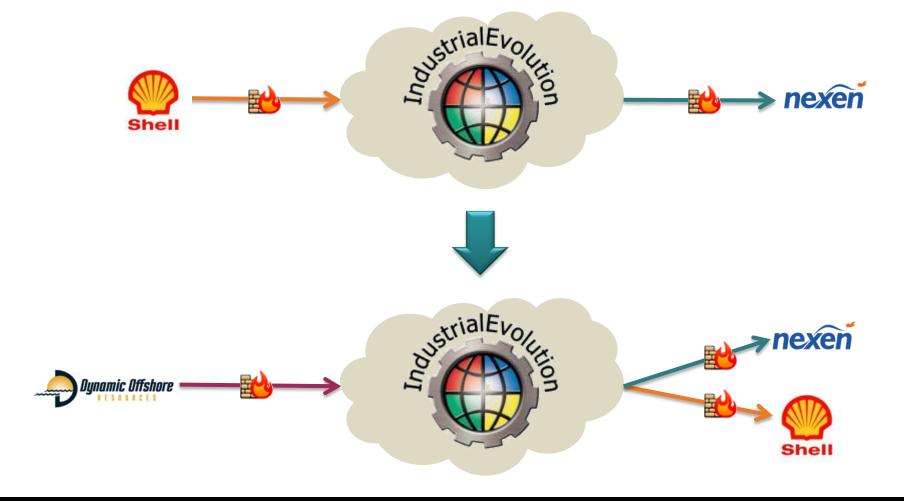


Shell Sold Bullwinkle Platform to DOR

- DOR became platform operator and owner of Bullwinkle & Rocky fields
- DOR needed a historian options were:
 - Use exisiting Wonderware or Intellution SCADA systems on platform
 - Buy PI System
 - Buy something else
- We (and Shell) recommended PI System
 - Can easily backfill Shell history
 - Can use corporately
 - Small PI Server pricing

Change #3 – PI System Transition

- Set up temporary PI Server in IE data center
- Identified subset of tags to be transferred to DOR
- Established PI to PI Interface to backfill history
- DOR bought PI System and installed it
- Wonderware & Intellution interfaces re-directed from Shell
- DOR sent clone to IE & IE reprocesses archive with history
- DOR copied archive to production server
- IE connected to DOR PI Server to continue Aspen feed to Nexen, started Bullwinkle/Rocky feed to Shell



Change #4 – Shell Sold Angus, Manatee & Troika to Marubeni Oil & Gas

- Marubeni bought PI System
- IE cloned DOR PI Server, copied to Marubeni production server
 & deleted tags not authorized for Marubeni

 IE connected to DOR PI Server to feed Angus, Manatee & Troika data to Marubeni



Change #5 – Marathon Completed Droshky and Tied Back to Bullwinkle

- Droshky field completed
- Subsea control system connected directly to Marathon
- Topsides controlled by Bullwinkle Wonderware system
- IE connected to DOR PI System to feed Droshky topsides data to Marathon



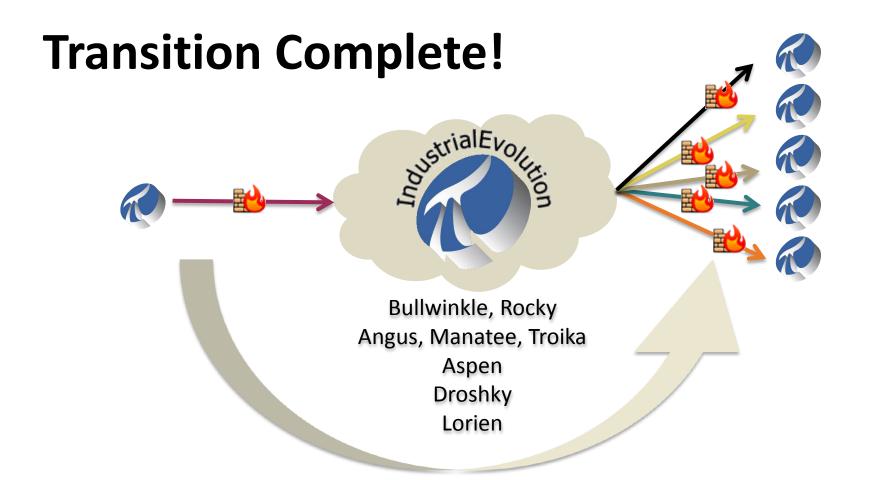
Change #6? – Noble Energy Replaces Telemetry Link?

- GlobaLogix telemetry damaged in Hurricane Rita
- Bandwidth issues meant performance had not been great, so telemetry was not replaced



Transition Complete! Marubeni Dynamic Offshore nexen Shell Bullwinkle, Rocky Angus, Manatee, Troika Aspen Droshky

Lorien



How Was This All Possible?

- Small system pricing of PI Server (initial DOR & Marubeni PI Servers were 5,000 tags)
- History recovery capability of PI to PI Interface
- IE's Well*Share service for data sharing
- Rapid deployment and switchover of PI System
- Rapid re-configuration of data sharing services to maintain data integrity

Turning insight into action.

Questions



ContactUs@IndustrialEvolution.com



+1 (888) WEB-PWRD



www.IndustrialEvolution.com



Thank you

Turning insight into action.