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## **Chevron's Digitalization Journey**

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## an enterprise focused on competitive advantage



#### our vision

To empower all of Chevron to harness the benefits of information technology through an enterprise operating model that focuses on competitive advantage.

#### why we must change



- 40+ IT orgs means disparate efforts; high-value initiatives are not always prioritized
- High IT costs due to duplication, complexity, and limited scalability
- Opportunity for increased innovation and faster development times
- Business customer insufficiently involved in digital decision-making
- Inconsistent talent development across the IT workforce







operating model IT Chapter Roles Data Engineering Data Science<sup>4</sup> Software Engineering Cybersecurity Leadership Aaile Cloud Engineering & Infrastructure

Solutions delivered through 13 digital platforms that enable business capabilities, supported by talent from IT Chapters

<sup>2</sup>Product Line Manager <sup>3</sup>Product Owner <sup>4</sup>Data Science & Analytics

#### benefits

Competitive advantage

> Accelerated value • through scale and innovation



 Cross-ora opportunities \$450MM cost

savings by 2021

uncertainty



changes Confusion & New skills & anxiety due to

processes to adopt

challenges we face



Conclude transition to new op model of Wave 1 (from 2020) by completing handover and optimizing staff augmentation resources



Complete design and global roll-out of org & operating model (Waves 2 & 3)



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Ensure stability of new operating model, addressing priority gaps / refinement needed from initial design

Enable platforms, chapters and data teams to deliver Digital Value aligned to business / Leading Performance goals



Achieve \$450MM run rate savings across all levers including modernization, software, hardware and labor vendor rationalization

#### As transformation

continues into 2021, we are focused on five kev outcomes

what to expect



## Digital transformation will be enabled by modernization and cost reduction (conceptual representation)



## **HoloLens**

The Microsoft HoloLens is a stand-alone holographic headset and uses an abundance of sensors to help you interact with reality, using holograms to blend ideas with the real world.

### Value Proposition



#### **Reduce Cost**

Having remote experts for planning, execution and review of field work will eliminate various unnecessary travel expenses

#### **Reduce Exposure**

Remote work can be performed with one individual in the refinery, reducing the number of people exposed to units

#### **Increase Collaboration**



MS Teams can be leveraged with the Hololens to have more collaborative meetings and tools/resources



### Examples



Collaborate between CABGOC and UK subject matter experts to troubleshoot issues with the cathodic protection system



#### Fox

Utilize HoloLens to replace the turbo expander, leveraging vendor expertise remotely



## **Data Science & Analytics**

#### Harness data to add value to every aspect of the business, improving safety, performance and cost efficiencies



Source: Drew Conway, IA Ventures



#### Intelligent Production Analysis

Identify factors that affect production, provide early warning detection of well issues and implement alarms for early remediation.

#### Decline Curve Analysis & Forecast by Exception

Use existing historical production data to establish variance thresholds to help make quality decision for production forecast.



#### **Optimization of LPG Plant Operations**

Adjust process engineering parameters to improve product quality (on-spec) and LPG recovery.

#### HSE data mining

Using natural language processing to find insights from HSE impact database to place and manage safeguards effectively.