
ORACLE®

Industry 4.0 - Innovazione e Trasformazione: la nuova misura del Tempo

It’s all about innovation

Patrizia Serini
Solution Consultant
Supply Chain
Oracle Italy

ORACLE

Copyright© 2014Oracle and/or its affiliates. All rights reserved. | Oracle Confidential – Internal/Restricted/Highly Restricted

Safe Harbor Statement

The following is intended to outline our general product direction. It is intended for information purposes only, and may not be incorporated into any contract. It is not a commitment to deliver any material, code, or functionality, and should not be relied upon in making purchasing decisions. The development, release, and timing of any features or functionality described for Oracle's products remains at the sole discretion of Oracle.

Copyright© 2014Oracle and/or its affiliates. All rights reserved. |

The innovation timeline...

In 1977, Color Television in Italy

In 1981 the first IBM PC

Mobile Phones, commercially introduced in Italy In 1991

Facebook was born the 4° of February 2004

2008
Apple iPhone

Copyright© 2014Oracle and/or its affiliates. All rights reserved. | Oracle Confidential – Internal/Restricted/Highly Restricted

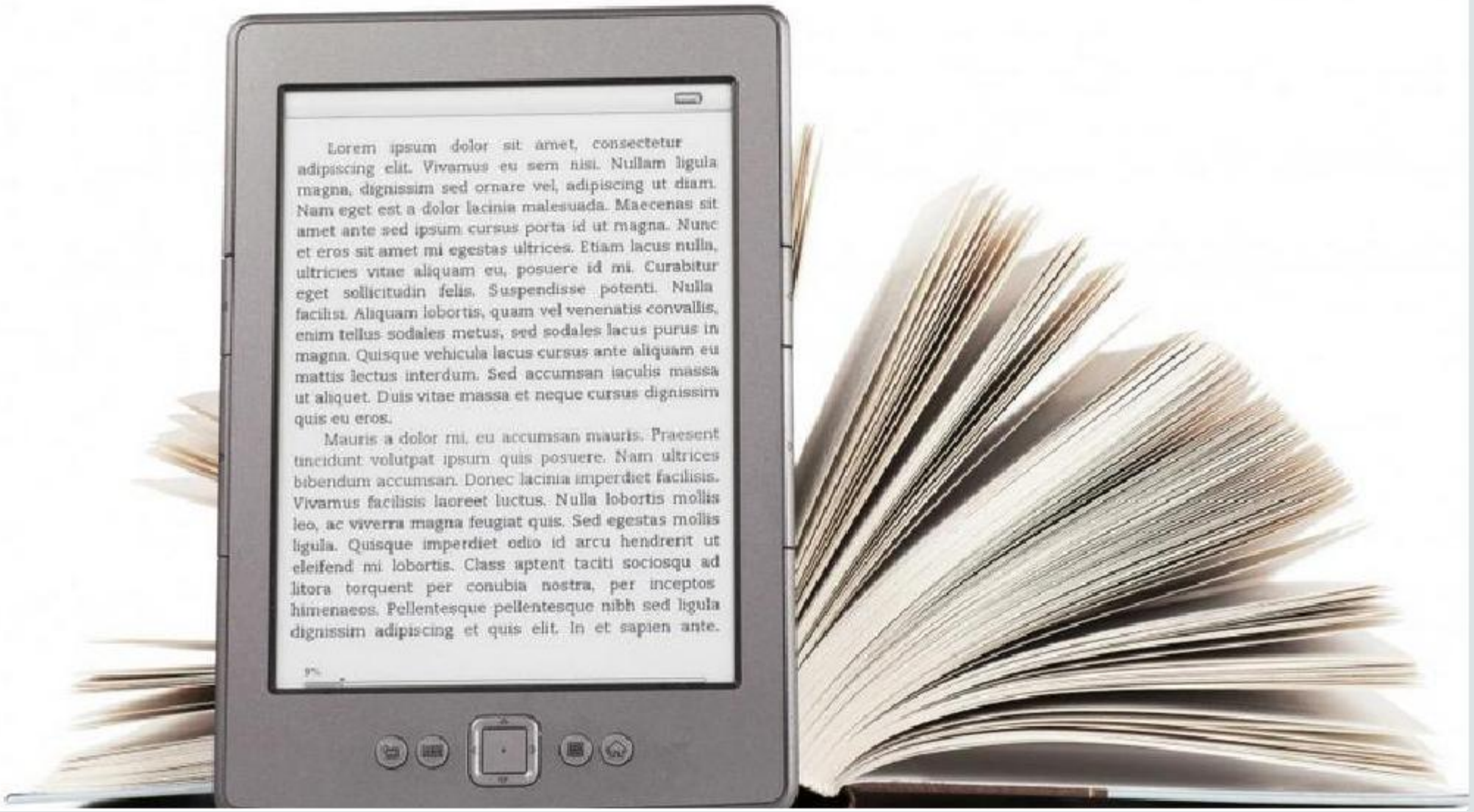
Digital Disruption is Happening Now, Everywhere

"New Distribution Model"

"A new media standard"

Copyright© 2014Oracle and/or its affiliates. All rights reserved. | Oracle Confidential – Internal/Restricted/Highly Restricted

Change/Break the traditional channel

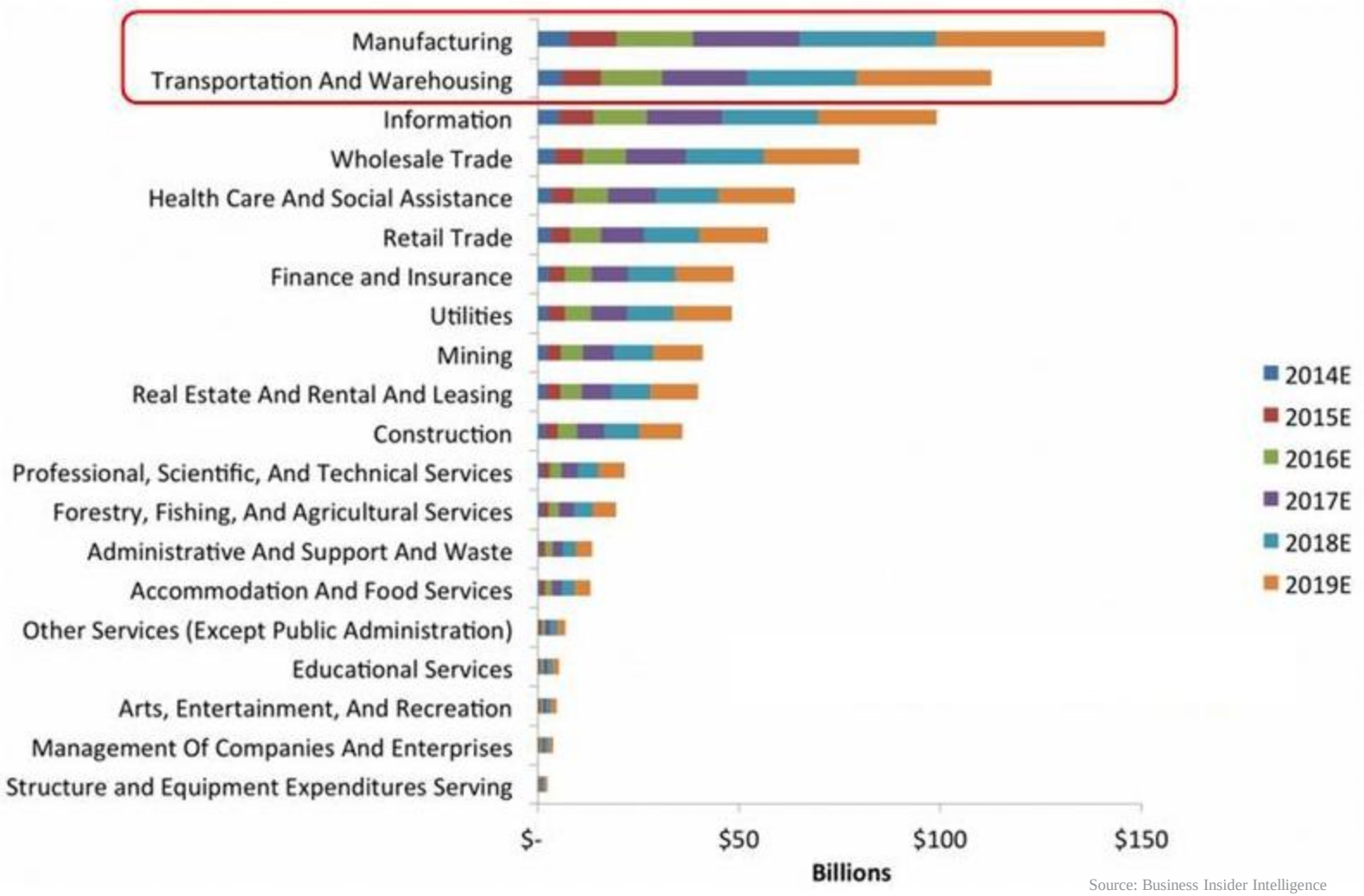


Copyright© 2014Oracle and/or its affiliates. All rights reserved. | Oracle Confidential – Internal/Restricted/Highly Restricted

Internet of Things is Here (and Everywhere)

Copyright © 2016, Oracle and/or its affiliates. All rights reserved. |

Investments in IoT Solutions by Industry



Source: Business Insider Intelligence

Copyright © 2016, Oracle and/or its affiliates. All rights reserved. |

Manual Processes Today…

IoT Devices

Current processes

Manual Processing

Reactive Controls

Today, many conditions are manually detected, and then manually entered into the application

Business Applications

Manufacturing,SupplyChain, Asset Mgmt

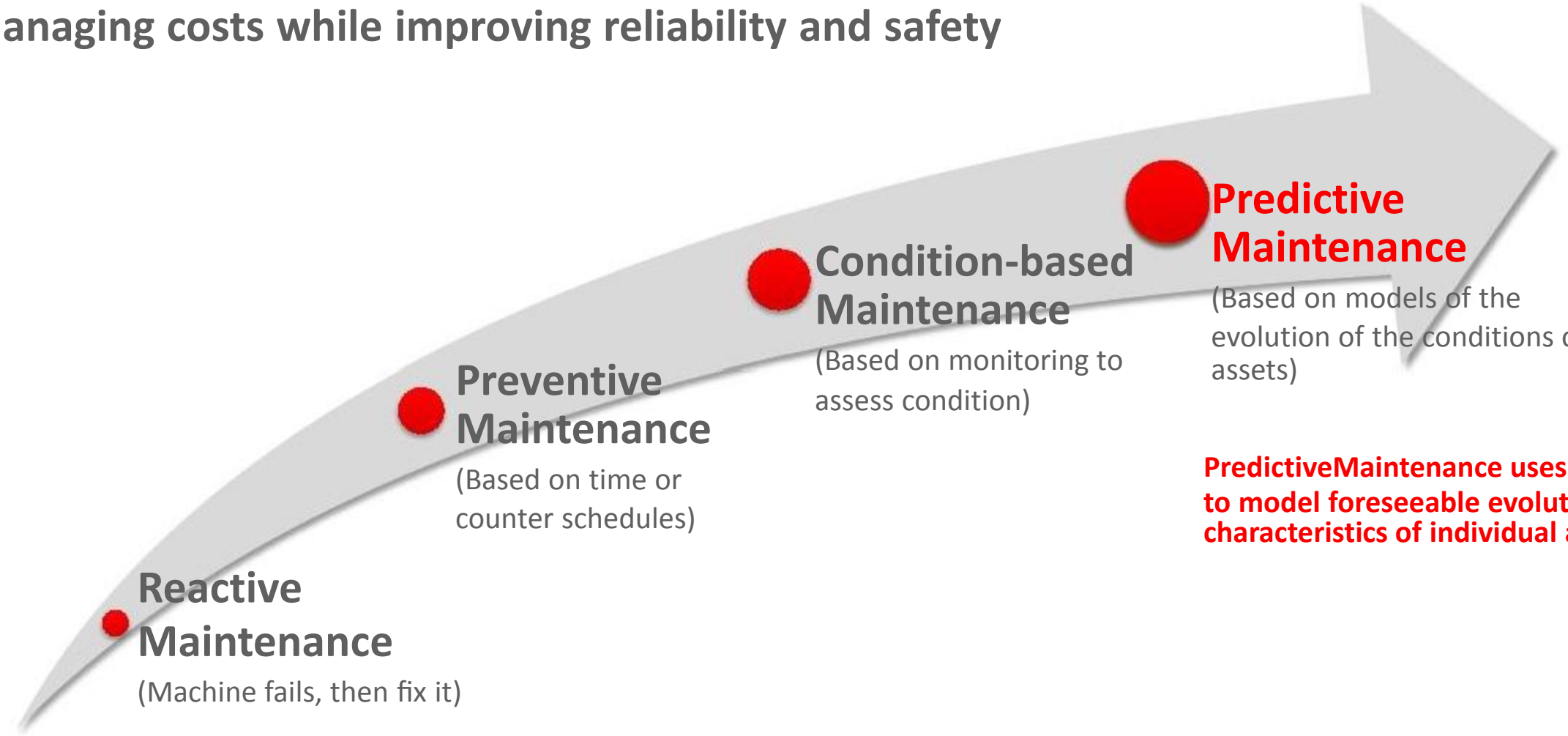
Customer RelationshipMgmt, Sales, Service

Vertical Apps – Utilities, Healthcare, Retail

Copyright © 2016, Oracle and/or its affiliates. All rights reserved. |

Maintenance Maturity Model - Use Case

Managing costs while improving reliability and safety



PredictiveMaintenance uses analytics to model foreseeable evolutions of the characteristics of individual assets

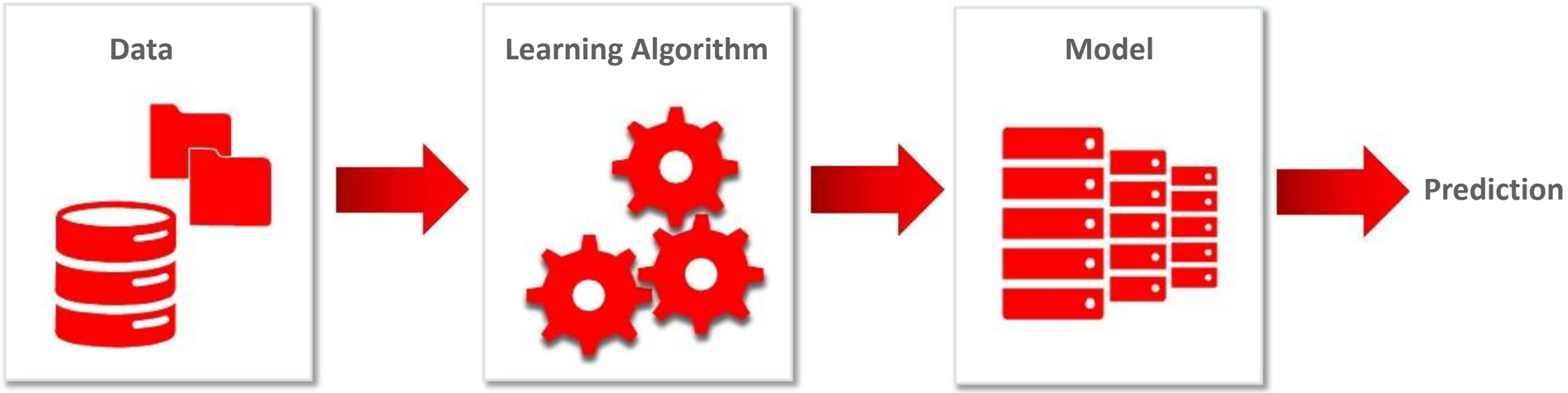
Source: Gartner

Copyright © 2014 Oracle and/or its affiliates. All rights reserved. |

New Artificial Intelligence Technology: Machine Learning

Computers Learning Based on Patterns in the Data

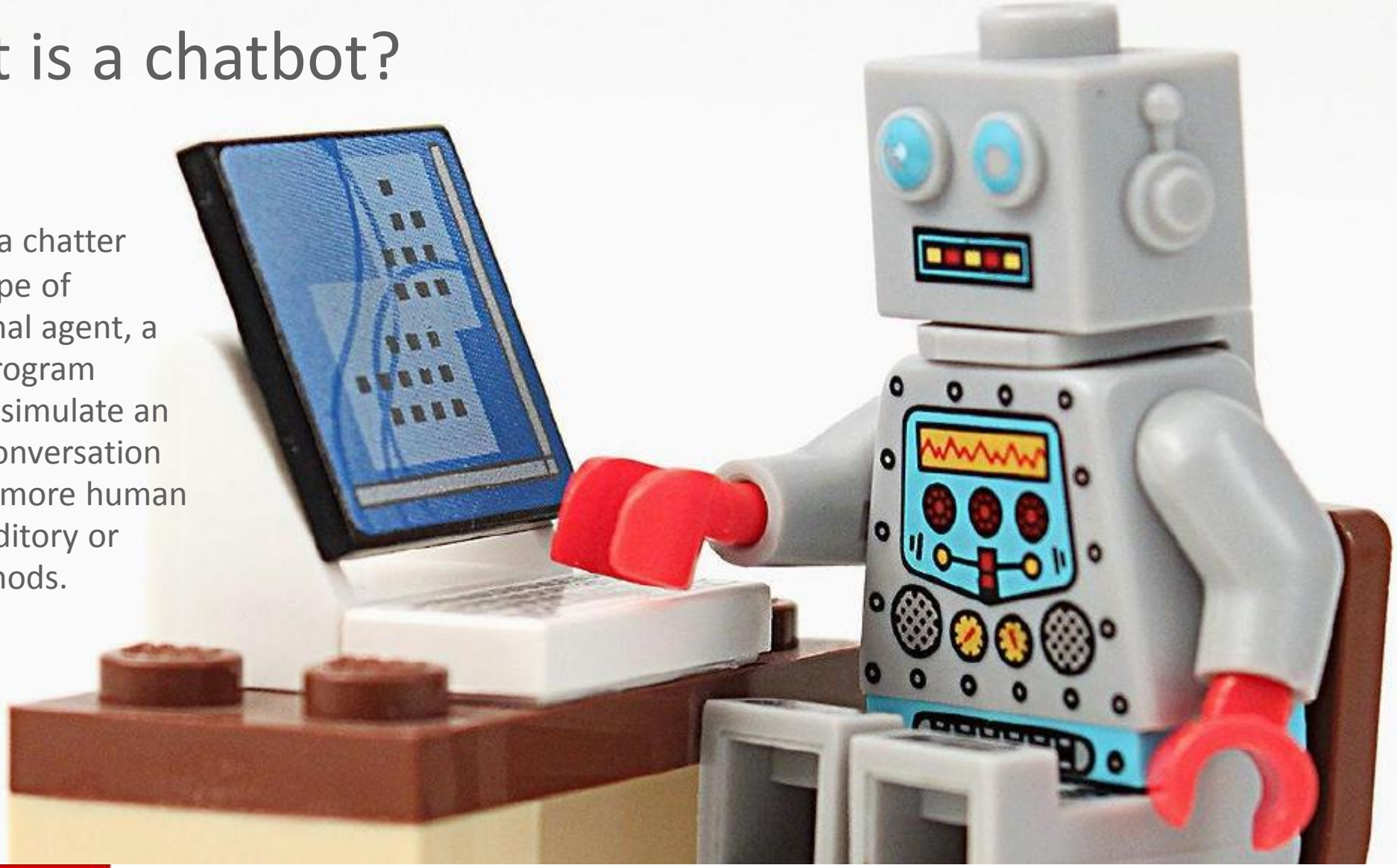
New Data



Copyright© 2014Oracle and/or its affiliates. All rights reserved. |

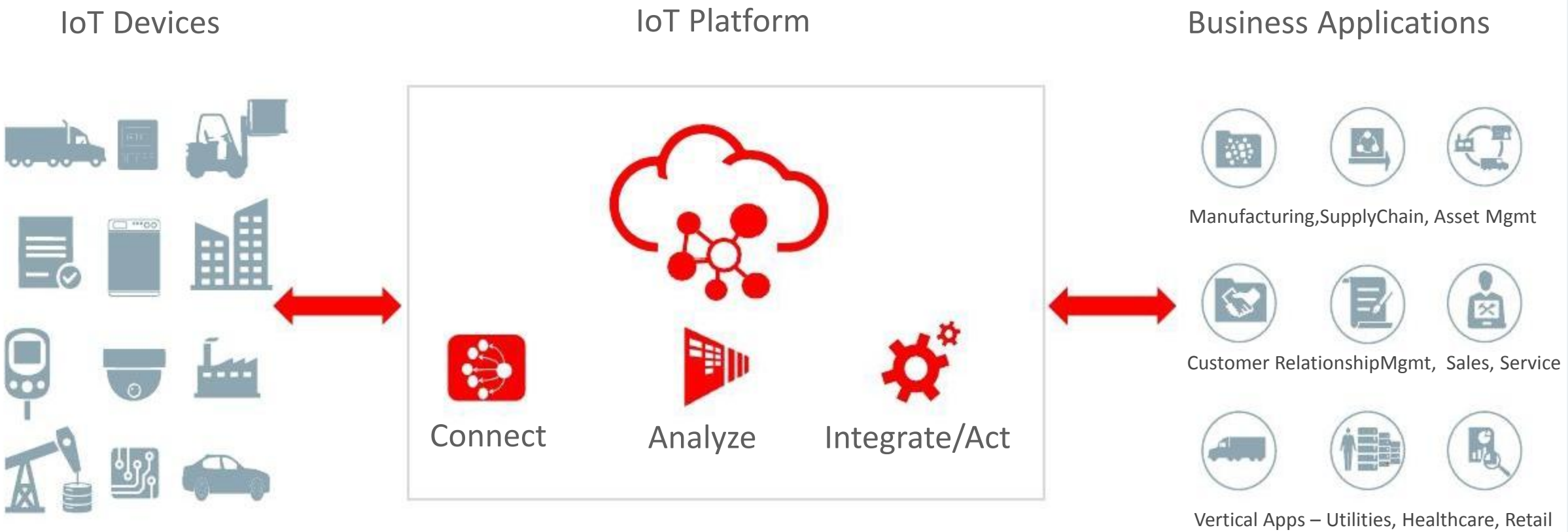
What is a chatbot?

Chatterbot, a chatter robot is a type of conversational agent, a computer program designed to simulate an intelligent conversation with one or more human users via auditory or textual methods. *(Wikipedia)*



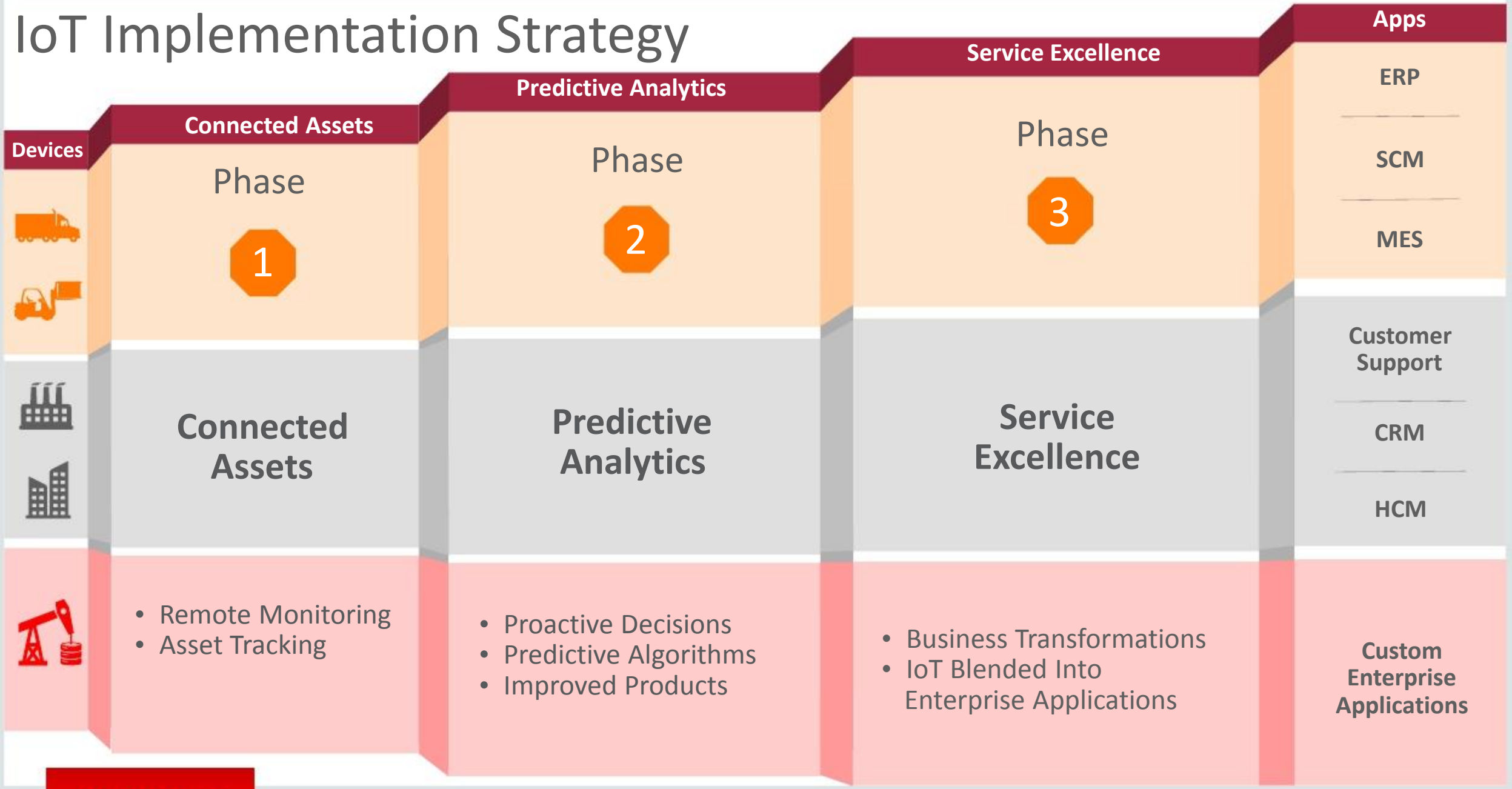
Copyright© 2014Oracle and/or its affiliates. All rights reserved. |

The 3 levels of the Internet of Things Platform



Copyright © 2016, Oracle and/or its affiliates. All rights reserved. |

IoT Implementation Strategy



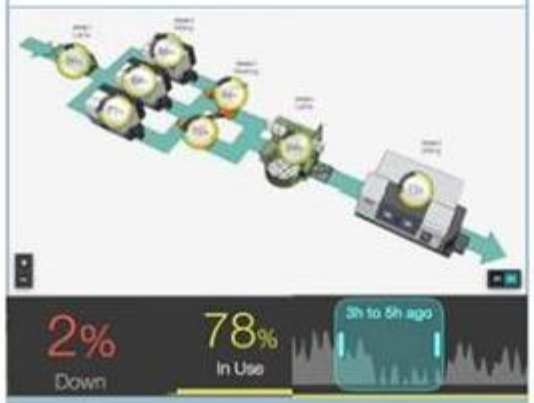
Copyright© 2014Oracle and/or its affiliates. All rights reserved. | Confidential – Oracle Internal/Restricted/Highly Restricted

Oracle IoT Applications

Asset Monitoring

For monitoring assets, their utilization, availability, and data from connected sensors

Production Monitoring



Manufacturing factory floor equipment monitoring and prognostics

Fleet Monitoring

For medium sized business who have fleets of vehicles (trucks, buses, maintenance vehicles, delivery vehicles)

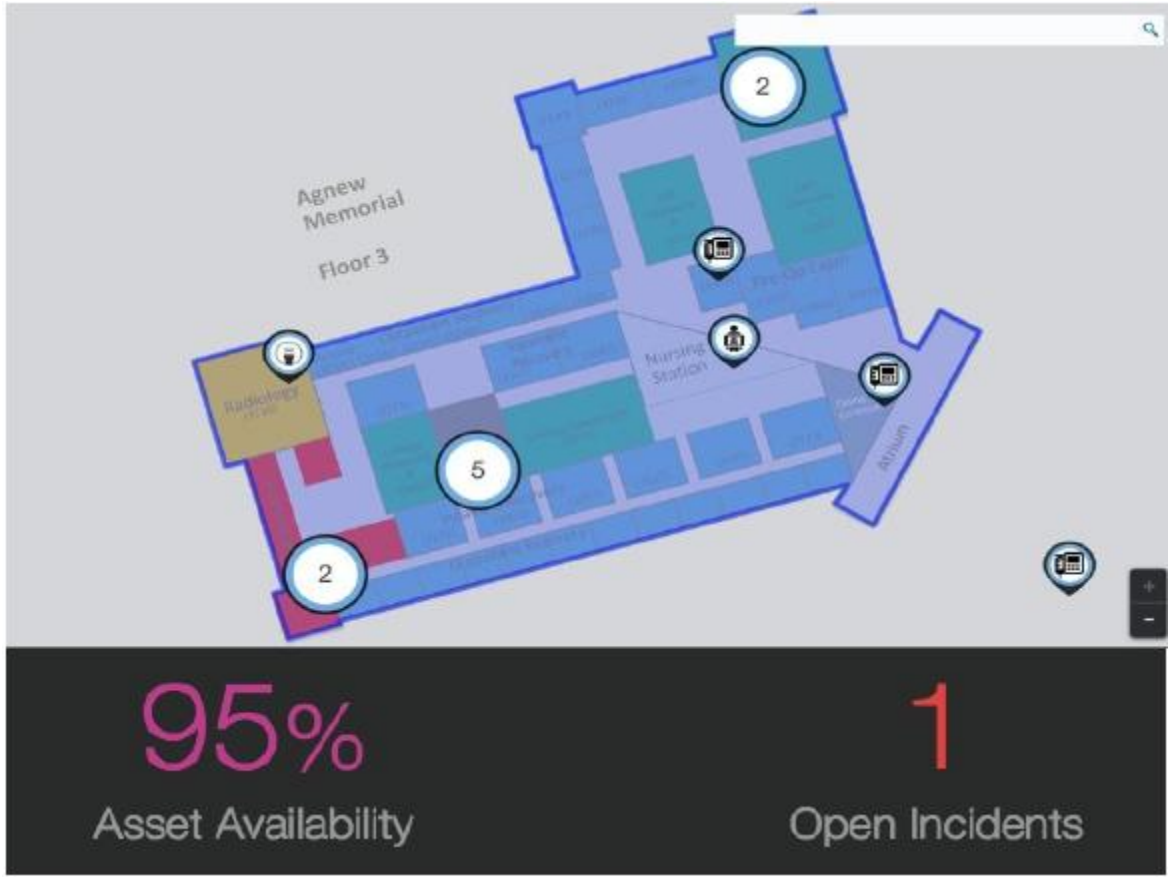
Connected Worker

For tracking employees in Mining industry, Engineering and Construction industry

Copyright© 2014Oracle and/or its affiliates. All rights reserved. | Oracle Confidential – Internal/Restricted/Highly Restricted

IoT App – Asset Monitoring

For monitoring assets, their utilization, availability, and data from connected sensors



Location Tracking

- Tracking of indoor and outdoor location using BLE beacons, RFID readers
- Where is the nearest available asset?

Asset Health

- Are my assets working?
- Are any alerts and incidents open against my assets?

Asset Performance

- Are my assets connected and online?
- Geo-fence based business rules
- Are my assets being misused?

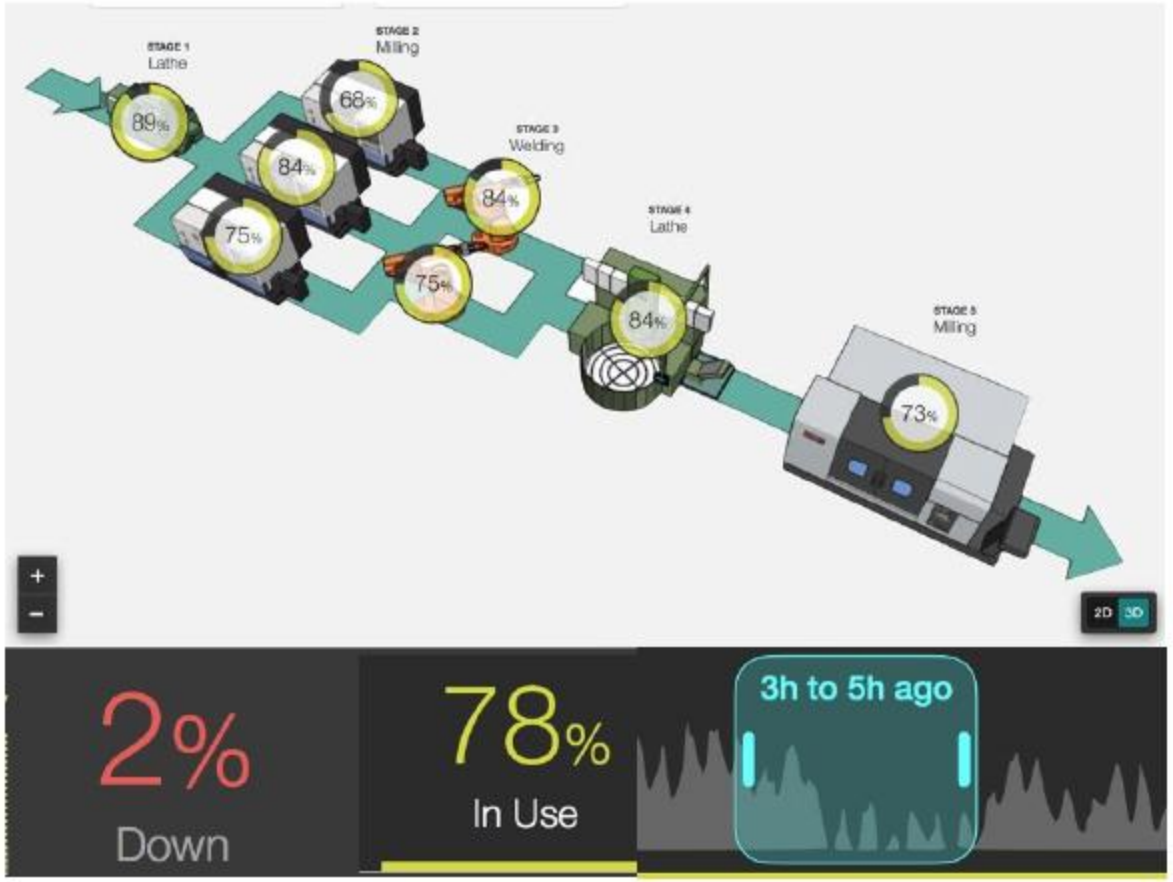
Utilization

- Are my assets available?
- Are my assets utilized?

Copyright© 2014Oracle and/or its affiliates. All rights reserved. | Confidential – Oracle Internal/Restricted/Highly Restricted

IoT App – Production Monitoring

Manufacturing factory floor equipment monitoring and prognostics



Factory Monitoring

- Monitoring of the factory floor
- Track the number of reporting assets, in use and down

Production Line View

- Visualize and monitor a production line
- Track actual production output versus the production plan

PredictiveAlgorithms

- Can you predict potential problems with my equipment?
- What is the effect of that on my production plan?

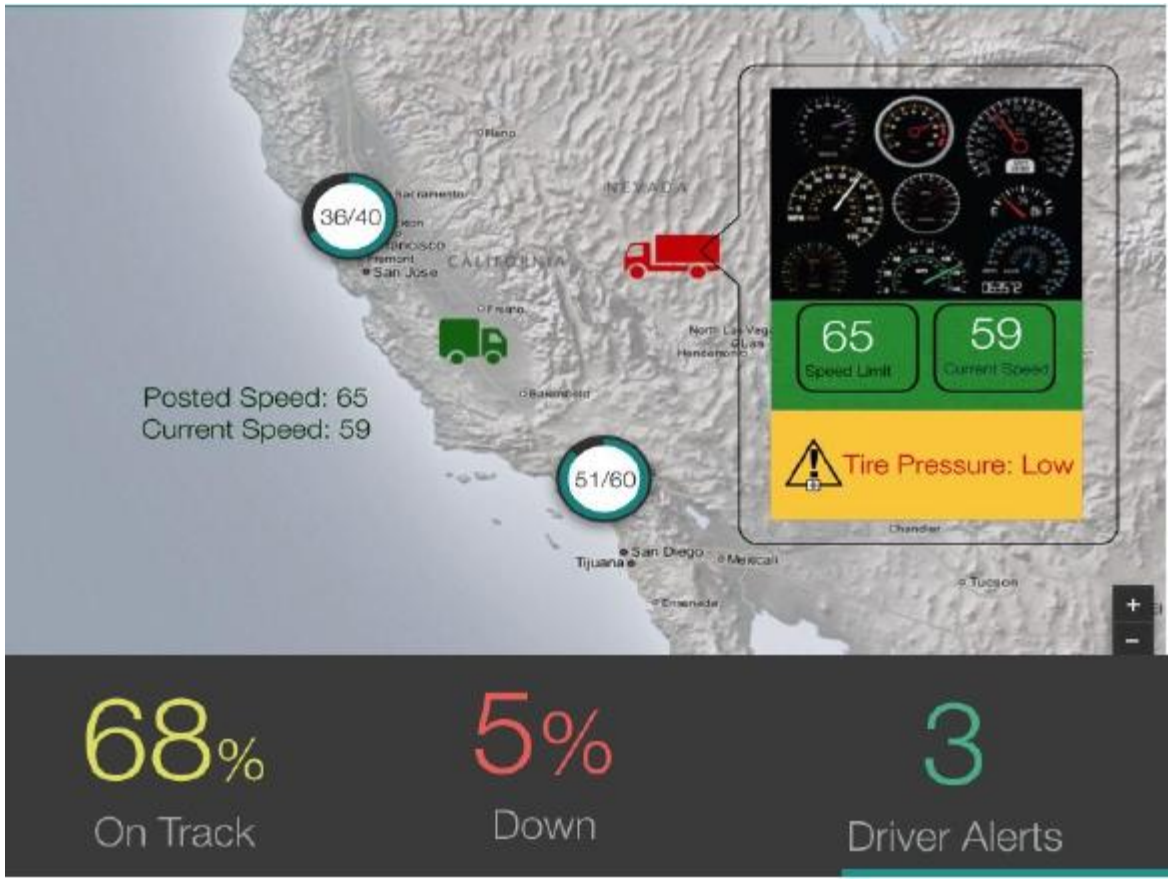
Maintenance

- What are the maintenance needs for my equipment?
- What is the best maintenance schedule w.r.t. production plan?

Copyright© 2014Oracle and/or its affiliates. All rights reserved. | Confidential – Oracle Internal/Restricted/Highly Restricted

IoT App – Fleet Management

For medium sized business who have fleets of vehicles (trucks, buses, maintenance vehicles, delivery vehicles)



ConnectedFleet

- Monitor and visualize entire fleet
- Driver compliance (electronic logging, odd hour driving)

Location Tracking

- Tracking of each vehicle round the clock
- Analyze stops, speed
- Geo-fencing

Utilization

- Are my vehicles utilized?
- What are the most and least utilized vehicles?

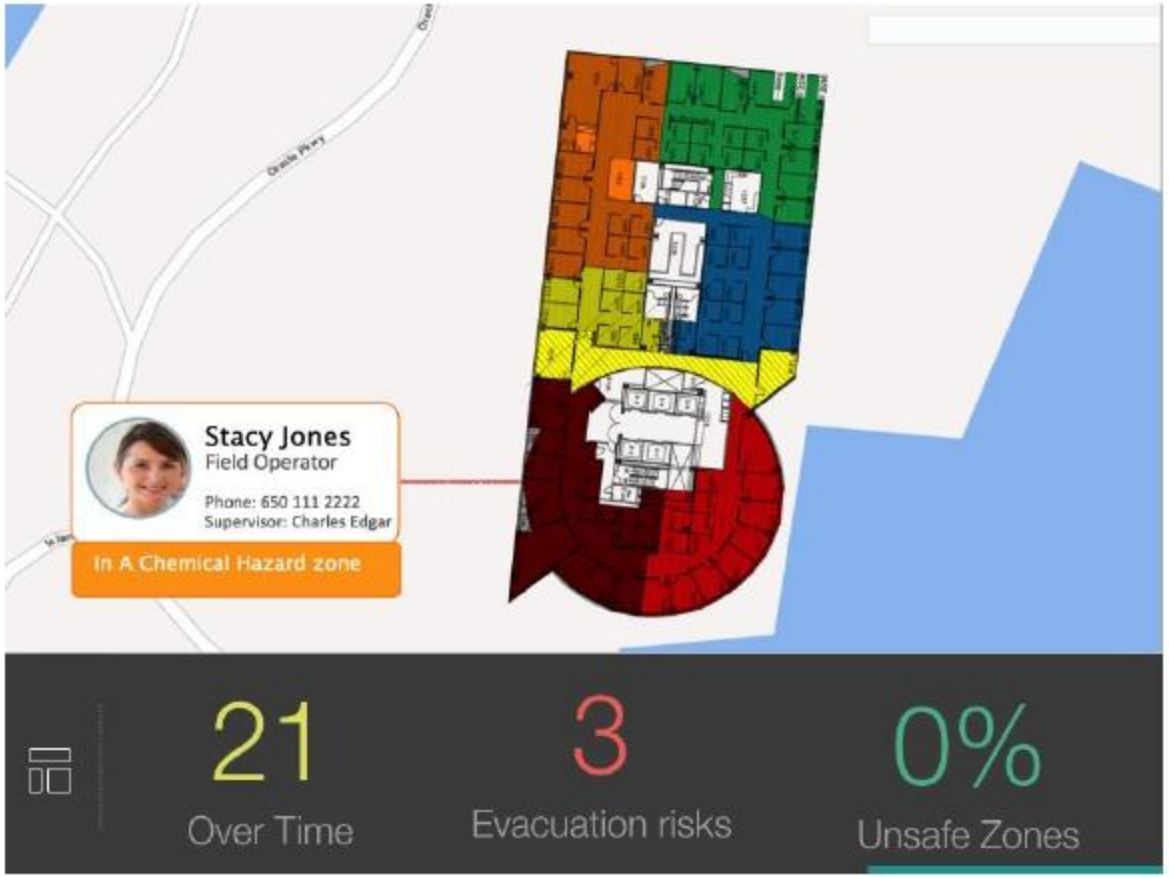
Fleet Performance

- How is my fleet performing?
- What maintenance do I need to perform?
- Are my vehicles abused?

Copyright© 2014Oracle and/or its affiliates. All rights reserved. | Confidential – Oracle Internal/Restricted/Highly Restricted

IoT Insights App – Connected Worker

For tracking employees in Mining industry, Engineering and Construction industry



ConnectedWorkers

- Tracking of each employee through wearable devices
- Automated check-in / check-out

EmployeeSafety

- Ensure that employees are in the safe zone
- Identify and act on unsafe behaviors

Location Tracking

- Track location and dwell time
- Identify evacuation risks

Performance

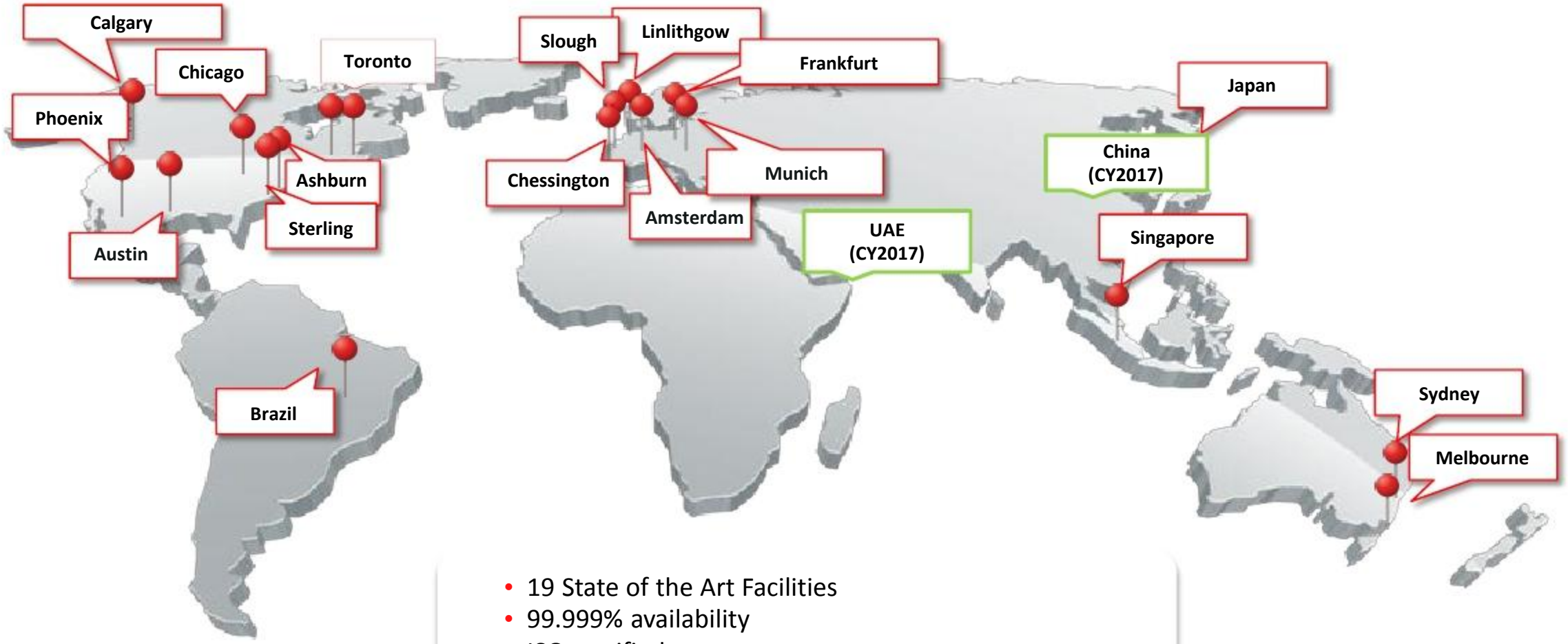
- How is the performance of my workforce?
- How can I improve my operations?

Copyright© 2014Oracle and/or its affiliates. All rights reserved. | Confidential – Oracle Internal/Restricted/Highly Restricted

Oracle Cloud – Where do we keep your data?

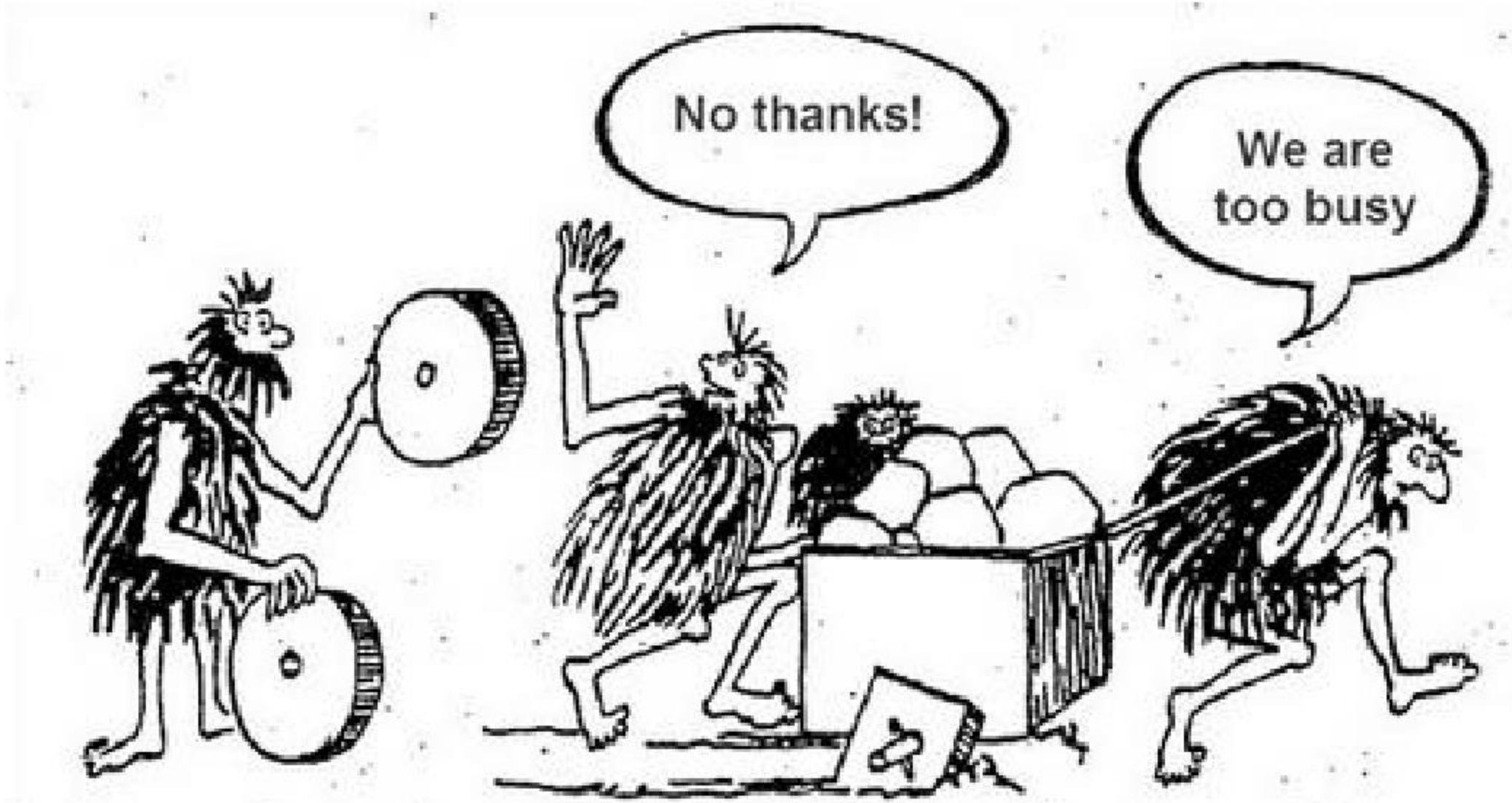
Copyright© 2014Oracle and/or its affiliates. All rights reserved. |

Oracle Cloud – Global Data Centers



- 19 State of the Art Facilities
- 99.999% availability
- ISO certified

Copyright© 2014Oracle and/or its affiliates. All rights reserved. |



Copyright© 2014Oracle and/or its affiliates. All rights reserved. | Oracle Confidential – Internal/Restricted/Highly Restricted

“Destiny is not a matter of chance; it is a matter of choice. It is not a thing to be waited for, it is a thing to be achieved”

William Jennings Bryan

Copyright© 2014Oracle and/or its affiliates. All rights reserved. | Oracle Confidential – Internal/Restricted/Highly Restricted

Hardware and Software
Engineered to Work Together

Copyright© 2014Oracle and/or its affiliates. All rights reserved. | Oracle Confidential – Internal/Restricted/Highly Restricted


ORACLE®