Partner Customer Case Study: Honeywell

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IoT in Action
DIGITAL EVOLUTION OF EPM

1970
- First Personal Computer
- Dot Com Begins

1980
- Y2K

1990
- CUSTOMER RELATIONSHIP MANAGEMENT

2000
- ENTERPRISE PERFORMANCE MANAGEMENT
- First iPhone
- First iPad
- IoT
- Big Data

2010
- The number of Internet devices surpasses the number of humans

2020
THREE PROBLEMS STAND IN THE WAY

COMMERCIAL BUILDING OWNERS NEED TO REDUCE OPEX, CAPEX AND GROW THEIR BUSINESS

1. SILOED OPERATING SYSTEMS
   Lack of enterprise-level KPI’s makes strategic decisions difficult

2. ENTERPRISE COMPLEXITY
   Custom systems require constant upkeep to stay modern

3. MANUAL CONTROL
   Human decisioning is expensive and can’t keep up with the pace of business
HONEYWELL FORGE

helps customers understand what drives their business, makes data-driven recommendations, and enables autonomous control

THE SECRET SAUCE

UNIFIED OPERATING MODEL

EXTENSIBLE FOUNDATION

AUTONOMOUS CONTROL
HONEYWELL FORGE

CYBER SECURE

PORTFOLIO MANAGEMENT
BUILDING OPERATIONS
OCCUPANT EXPERIENCE
SPACE UTILIZATION

SMART FLEXIBILITY FOR THE FUTURE

AI & MACHINE LEARNING
API ENGINE
AUTONOMOUS CONTROL
PREDICTIVE MODELS
ENRICHED DATA

SECURE, OPEN CONNECTIVITY BASED ON NIAGARA FRAMEWORK

METADATA CONTEXT DISCOVERY
VIRTUAL SECURITY ENGINE
REMOTE MGMT, EDGE COMPUTING
PROTOCOL, DRIVER NORMALIZATION

HARDWARE AND SOFTWARE AGNOSTIC

PUMP
VALVE
BMS
DCS
SECURITY
HVAC
FIRE
FLOW

ENTERPRISE APPLICATIONS
EXTENSIBLE PLATFORM
INTELLIGENT GATEWAY
SMART DEVICES

AZURE ENABLED

IOT ENABLED
CUSTOMER

EMAAAR

OWNER OF THE BURJ KHALIFA
LARGEST DEVELOPER IN THE UAE
$30B IN ASSETS
CHALLENGE

OPTIMIZE ENERGY CONSUMPTION & STREAMLINE ASSET MAINTENANCE

CUSTOMER

EMAAR
AUTONOMOUS CONTROL OF HVAC SYSTEMS

9.3M ACTIONS PER YEAR

= 25,536 ACTIONS PER DAY

96 ADJUSTMENT INTERVALS PER DAY

2 CONTROL POINTS

133 AHU’s & Heat Exchangers

× 9.3M ACTIONS PER YEAR
HONEYWELL AND MICROSOFT ARE ON A JOURNEY THAT WILL CHANGE THE WAY INDUSTRIES OPERATE