knowledge
2017 Honeywell
Users Group

HUG

INTEGRATED TERMINAL AUTOMATION
Safety, Security and Operations

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Introduction

For decades, the number of systems being installed on terminals has been growing exponentially. Presently, most terminals operate on a variety of systems in various stages of their lifecycle. In the coming years, it's no surprise that the systems and their complexity is expected to grow further by legislation, HSE requirements and challenging market conditions. This will result in increased focus on efficiency improvement and operational excellence.

Terminals operate a variety of systems in various stages of their lifecycle

As a Consequence …

General

- Low level of integration
- Lack of consistency
- Piecemeal approach for system replacement

Operations

- Multiple systems to work with
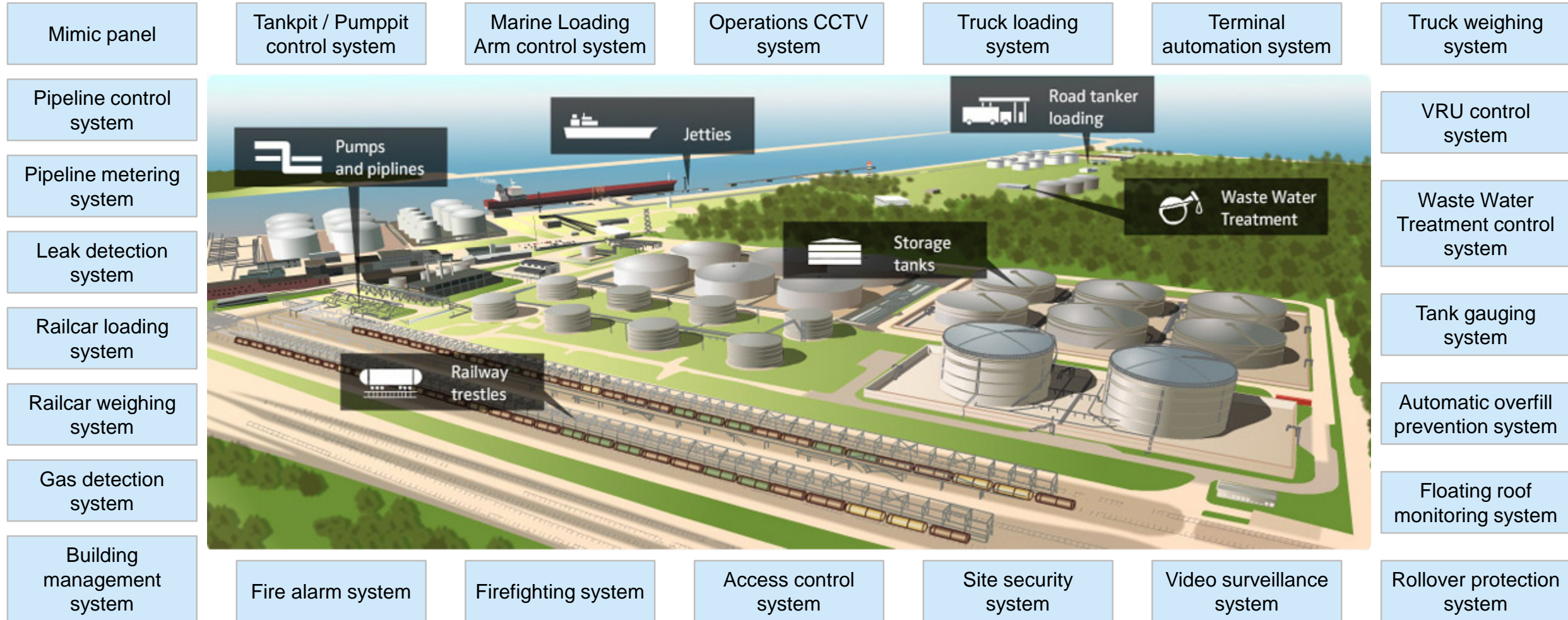- Multiple HMI's/UI's to work with

Maintenance

- Multiple systems from different vendors to support and maintain
- Multiple support contracts to manage

Management

- Manual collection of data for KPI reporting
- No dashboard to operate from
- Difficult to benchmark different parts of the organization

The lack of integration makes it hard to keep up with today's market demands

Systems Deployed on Terminals Nowadays

Mimic panel

Pipeline control system

Pipeline metering system

Leak detection system

Railcar loading system

Railcar weighing system

Gas detection system

Building management system

Tankpit / Pumppit control system

Marine Loading Arm control system

Operations CCTV system

Truck loading system

Terminal automation system

Truck weighing system

VRU control system

Waste Water Treatment control system

Tank gauging system

Automatic overfill prevention system

Floating roof monitoring system

Fire alarm system

Firefighting system

Access control system

Site security system

Video surveillance system

Rollover protection system

A scattered landscape of systems in various stages of their lifecycle

Systems Deployed on Terminals Nowadays
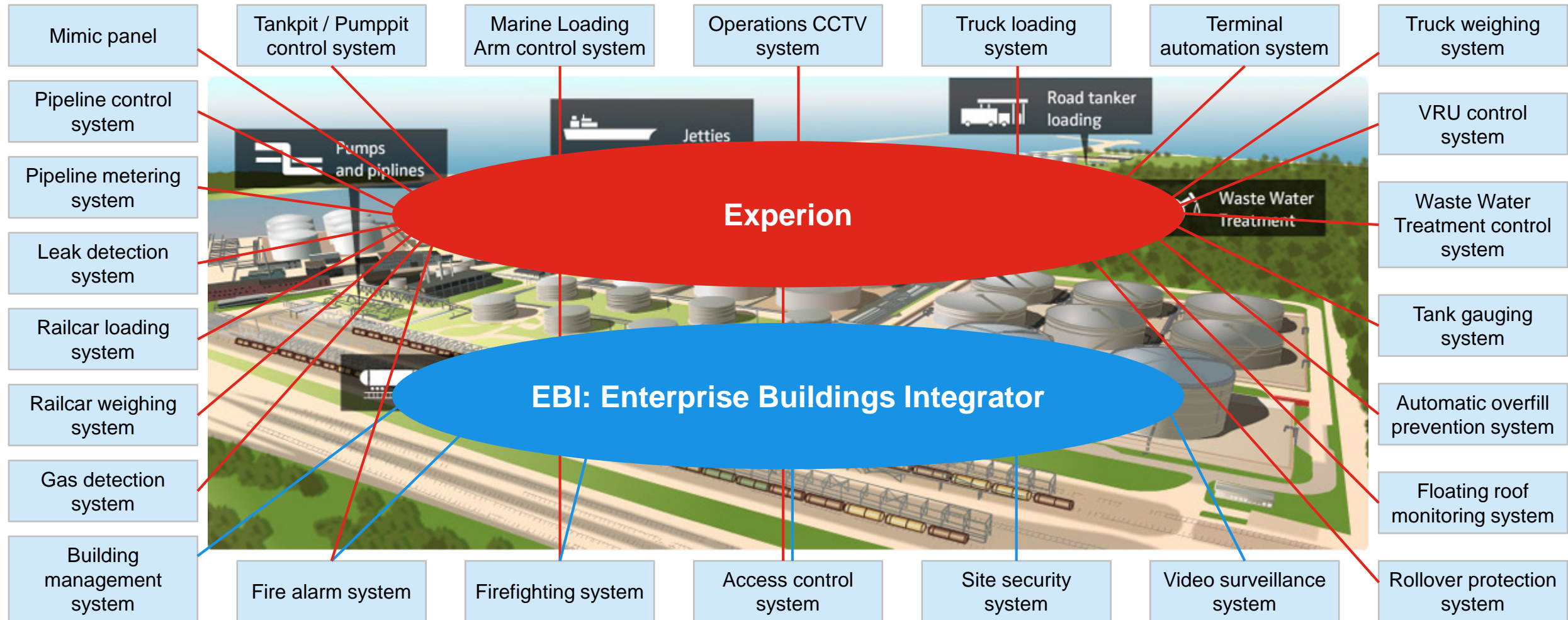
Honeywell's Experion /EBI platform can integrate all these systems!

The Same Platform but Different Functionalities

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Pipeline metering system

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Experion

DSA

EBI: Enterprise Buildings Integrator

Fire alarm system

Firefighting system

Access control system
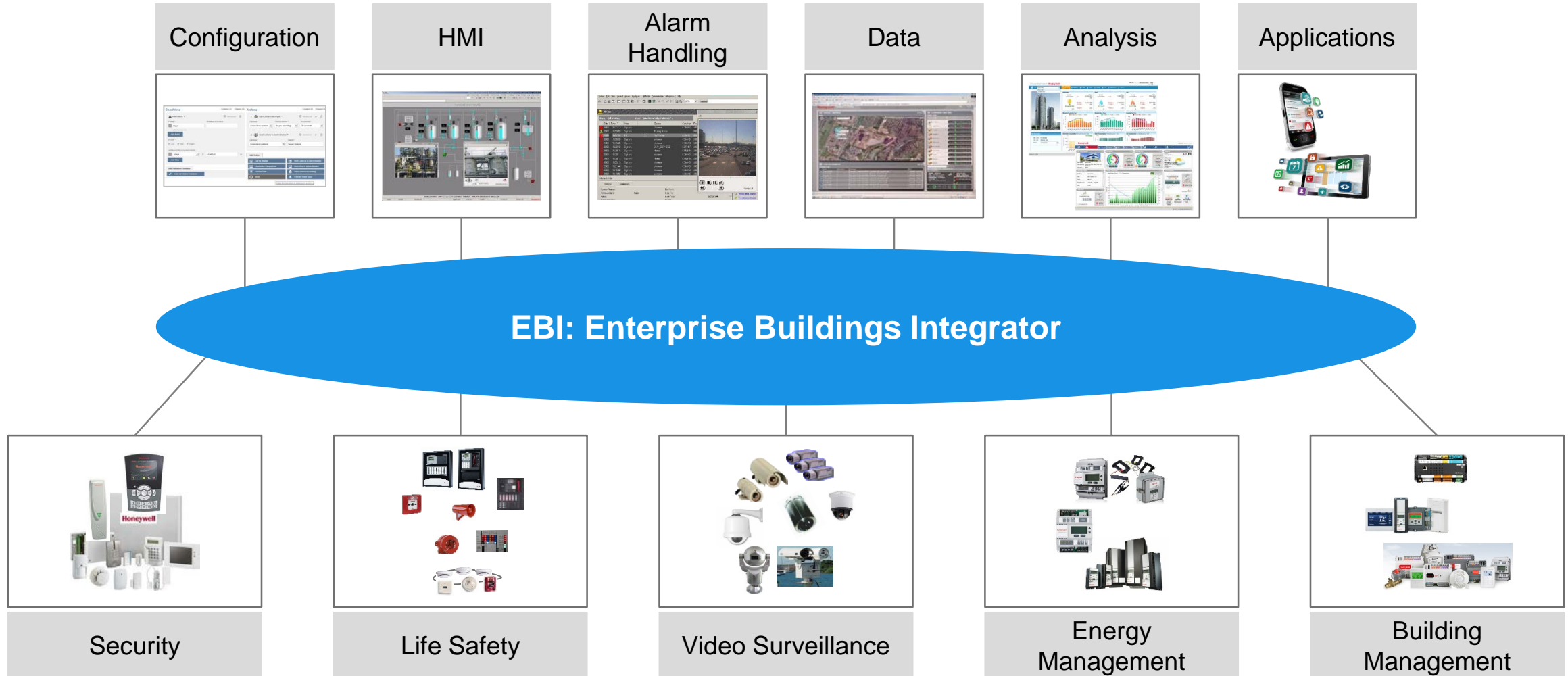
Site security system

Video surveillance system

Experion and EBI share the same platform. Integration via DSA.

The Platform for Process Automation: Experion
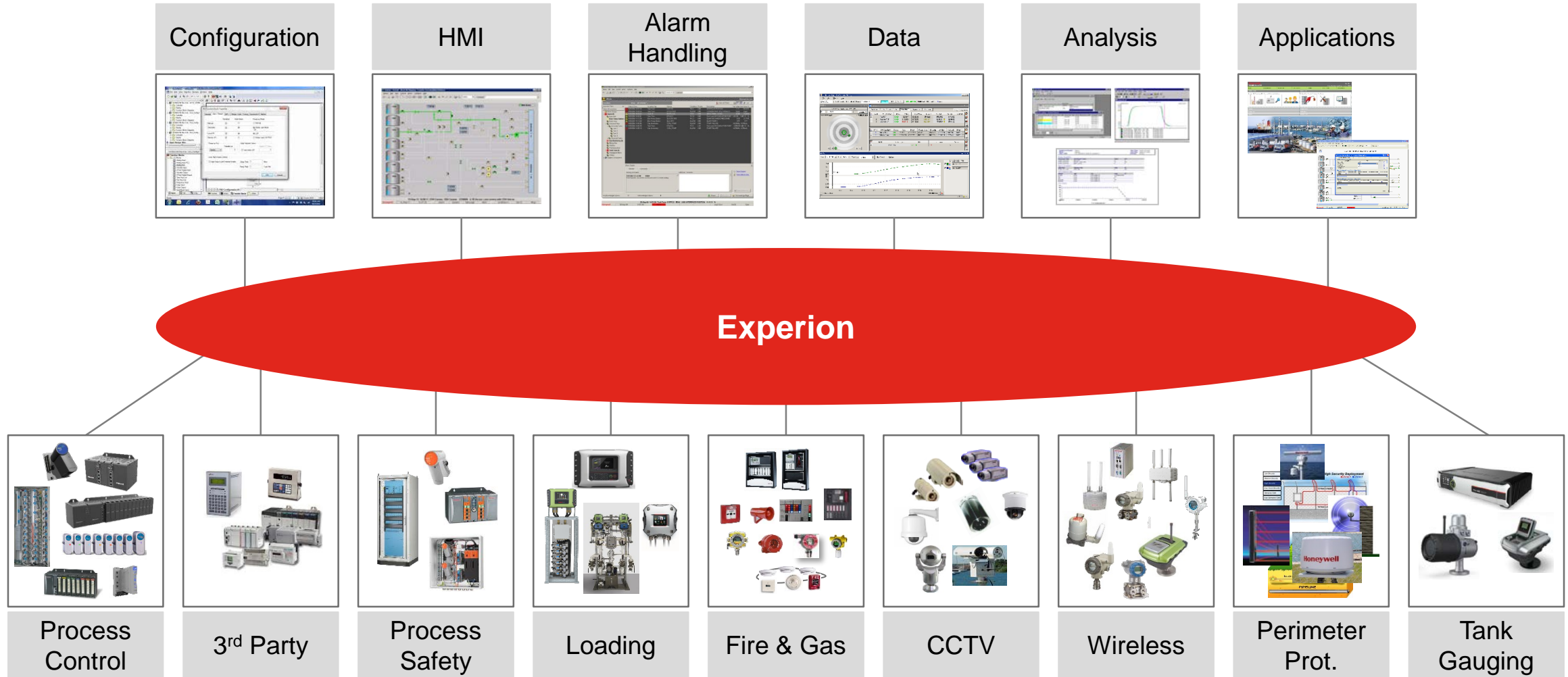
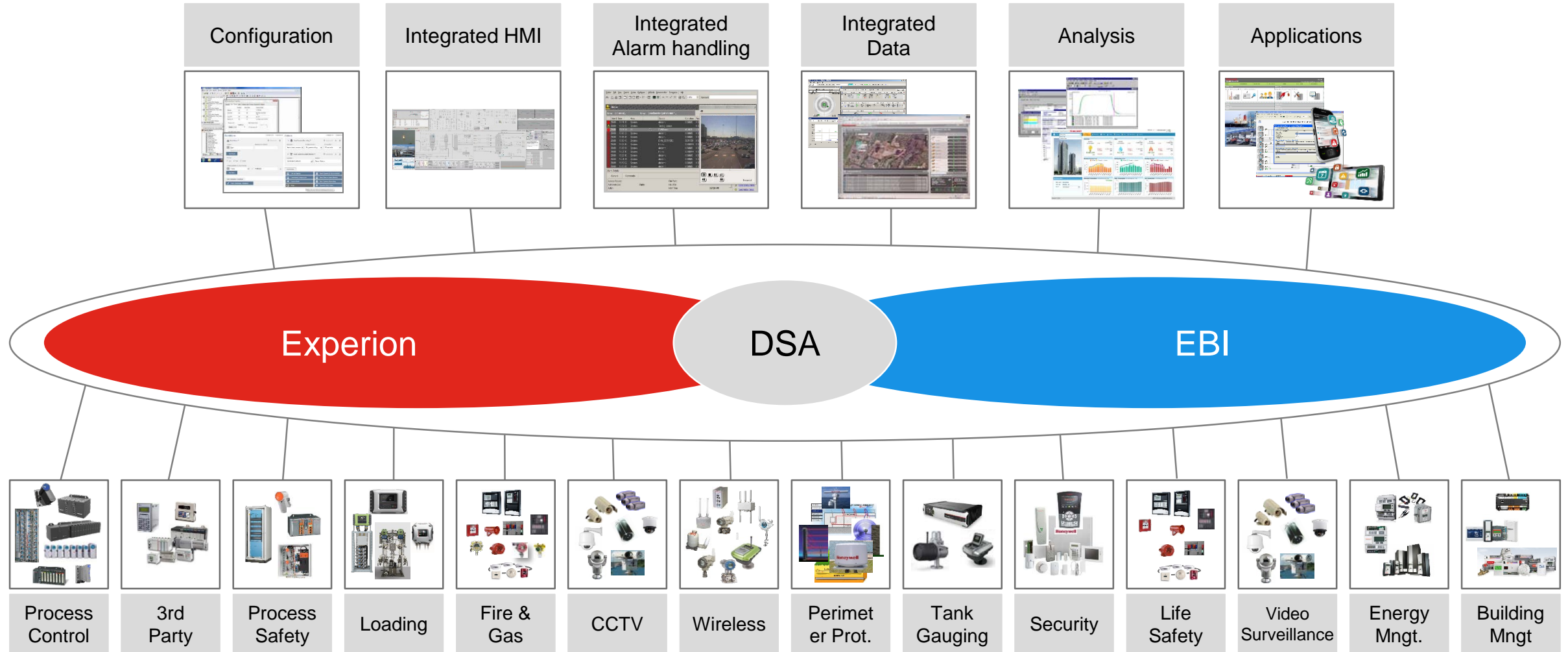# The Platform for Site Security and Building Automation: EBI

Configuration	HMI	Alarm Handling	Data	Analysis	Applications

EBI: Enterprise Buildings Integrator

Security	Life Safety	Video Surveillance	Energy Management	Building Management

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The Integrated Terminal Platform

Configuration	Integrated HMI	Integrated Alarm handling	Integrated Data	Analysis	Applications

Experion   **DSA**   **EBI**

Process Control	3rd Party	Process Safety	Loading	Fire & Gas	CCTV	Wireless	Perimeter Prot.	Tank Gauging	Security	Life Safety	Video Surveillance	Energy Mngt.	Building Mngt

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Platform Characteristics

Experion	EBI

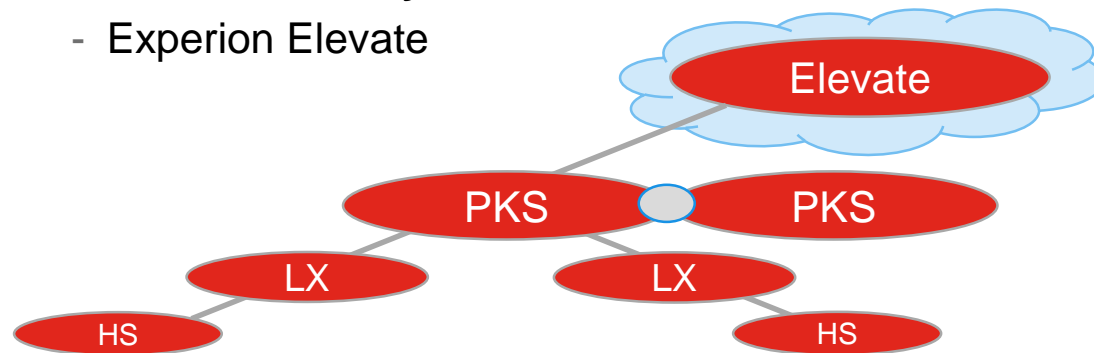**Experion**

- **Scalability**
  - 3 sizes (large – small): PKS, LX and HS
  - Licensed by modules and number of points
  - Distributed System Architecture
- **Redundancy**
  - Redundant servers
  - Redundant networking
  - Redundant controllers and I/O
- **Cloud connectivity**
  - Experion Elevate

EBI

- **Scalability**
  - Licensed by modules and number of points
  - Distributed System Architecture
- **Redundancy**
  - Redundant servers
  - Redundant networking
- **Cloud connectivity**
  - Remote monitoring and tuning
  - Mass notification

Flexible, scalable and reliable platform

The Benefits of Honeywell's Integrated Solution

General

- A single, integrated platform for all your terminal automation needs
- You can start with a single application and expand over time by adding more systems and applications to it
- Easier to implement, support and maintain
- Lesser training required

Maintenance

- Single platform to support and maintain
- Common infrastructure is easier to maintain
- Common/similar maintenance tools
- Easier to sign a performance based support contract

Operations

- Single operator window, uniformity in user interfaces, common look and feel
- Common alarm management, all alarms and events combined in a single list
- Automatically triggered responses to events across systems

Management

- Combined data collection enables combined data analysis, KPI reporting and a single dashboard
- Possibility of a step-by-step migration delivering benefits right from the start
- Easier and more cost effective way to expand and add functionality
- A flexible automation platform supporting corporate agility

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