SAFETY & PRODUCTIVITY SOLUTIONS
AIDC Technologies & the IIoT Development
Manuel Haupt
2016
Honeywell at a Glance

Honeywell’s innovative technologies are making our world cleaner and more sustainable, more secure, connected, energy efficient, and productive.

- 1,300 sites, 70 countries
- Morris Plains, N.J. headquarters
- 130,000 employees
- Fortune 100

SALES BY REGION

- 47% UNITED STATES
- 22% EUROPE
- 6% CHINA
- 4% MIDDLE EAST
- 8% OTHER AMERICAS
- 2% INDIA
- 11% OTHER

$38.6B
2015 SALES

Aerospace

Home and Building Technologies

Safety and Productivity Solutions

Performance Materials and Technologies
“Silicon Valley might run the cloud, but Honeywell makes the things.” That gives Honeywell a “huge leg up in what’s going to be a macro trend for the century.” Barron’s
Industrial Transformation is Occurring

**TRADITIONAL INDUSTRIAL**

**Value Drivers:**
- Safety
- Productivity
- Availability
- Energy Efficiency
- Sustainability
- Asset Optimization

**CONTEMPORARY DIGITAL**

**Value Drivers:**
- Connectivity
- Visibility
- Frictionless Transactions
- Big data / analytics
- Speed & Agility of Connecting Supply to Demand
- Frictionless Workflow
- Autonomous Operations

**CYBER INDUSTRIAL**

**Superior Customer Value and Superior Business Performance**
- Empowerment
- Higher levels of interaction
- Smaller, lighter
- Visual
- Anywhere, anytime, anybody

Dual-drive toward new ways of doing business
Deeper look into AIDC Vision
The HON AIDC - History

1965: Data Capture Division of Welch Allyn is founded
1968: Metrologic founded
1972: First contact-wand bar code reader patented
1975: Metrologic’s first bar code scanner
1982: World’s first hand-held laser scanner with built-in decoder
1985: First fully integrated mobile bar code terminal
1990: World’s first triggerless hand-held laser scanner
1994: First non-contact CCD linear and PDF bar code reader
1996: World’s first omnidirectional hand-held laser scanner
1996: Dolphin 7200 mobile computer launched
1997: Launched first commercially viable hand-held 2D imaging device
1998: World’s first hand-held linear imager—IT3800
2000: Metrologic invents CodeGate trigger technology
2003: Dolphin® 9500 sets a new standard for mobile computers
2004: Omniplanar acquired
2007: World’s first presentation imager that reads all 1D & 2D barcodes—MS7580 Genesis
2007: Honeywell acquires Hand Held Products. Company becomes Honeywell Imaging and Mobility—part of the ACS business
2008: Honeywell acquires Metrologic and joins HHP to become Honeywell Scanning & Mobility
2010: HSM wins UPS DIAD V
2011: HSM Launches New Adapts™ 6.0 Imagining Engine
2011: HSM Launches Dolphin 99EX with Adapts™ 6.0
2011: Honeywell Acquires EMS/LXE
2013: Honeywell Acquires Intermec inc and Vocollect
2015: Honeywell Acquires Datamax-O’Neil
2016: Honeywell Acquires Movilizer
2016: Honeywell Acquires INTELLIGRATED

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### Strengths
Global Presence, Diverse Portfolio and Customer Base, Strong IP Position
2D Imaging, Managed Services, Warehouse, End to End Mobility Solutions

### Growth Focus
- **AIDC Products**
  - **Mobility**
    - Scanphones, EDA PDTs
    - Wearables
    - VMC
  - **Scanning**
    - Hand-Held
    - Hands-Free
    - Bioptic
    - Industrial
  - **Printer & Media**
  - **OEM**
- **Sensor Products**
  - **Sensing**
    - Sensors
    - Precision Aero
    - Test and Measurement
- **Workflow Solution Components**
  - **Software**
    - Managed Services
  - **Voice**
    - TotalFreedom
  - **RFID**
  - **Global Tracking**
    - Tracking
    - Search & Rescue

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Honeywell Design Language
... shaping the future.
### The S&PS Network

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<tr>
<th>Edge/Sensors</th>
<th>Software / Packaged Systems</th>
<th>Connected Solutions</th>
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<td>VOICE SOLUTIONS</td>
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<td>MICRO SWITCH</td>
<td>PRESSURE SENSOR</td>
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<td>FSA FORCE SENSORS</td>
<td>AEROSPACE FLAP TRANSMITTER</td>
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<td>LOAD CELL</td>
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<td>VEHICLE PERFORMANCE</td>
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Connected Workers, Machines & Assets

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Getting From Today to Tomorrow

• Honeywell understands the need for balance, performance and progress
  - we provide a stable long term partnership with our products to achieve **BALANCE** across new platforms, trusted durability and superior devices
  - Enable existing high **PERFORMANCE** workflows with high performance devices
  - Achieve **PROGRESS** to new technologies on customer’s terms

What can you expect from Honeywell?

• Flexibility and a lot of Options
  - Like in Mobility to upgrade from different OS
• Ecosystems of accessories
  - From HON and from HON Partners
• Smart development, deployment and maintenance tools
  - Movilizer, Sentience IIoT Cloud, Voice, Apps
• New suite of edge devices
  - Data loggers, Sensor Units, Enterprise Gateways, Mobility, Scanning, RFID, …
Capturing Data – Technology Outlook
Honeywell LOBs to Capture Data

<table>
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<tr>
<th>Mobility</th>
<th>Scanning</th>
<th>Voice</th>
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<td>Scanphones, EDA PDTs</td>
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<td>Wearables</td>
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<tr>
<td>VMC</td>
<td>Bioptic</td>
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<td>Test and Measurement</td>
</tr>
</tbody>
</table>
Scanning – diversity (only example)

Xenon 190x series
- high performance
- color imaging
- digimarc, OCR, DPM
- SR, HD, ER
- Healthcare

Voyager 12/14 series
- midrange
- 12xx - Laser
- 14xx Imager with upgrade feature

Industrial Scanning
- Granit

hands-free solutions
- new Vuquest 3320g
- Genesis 7580g update
- Solaris 7980g
- Orbit update
Scanning – Battery Free Technology

1202G-2USB-5BF

CAPACITY OVER TIME

After 10 Years Super-capacitors retain nearly 80% capacity

Li-Ion battery needs replacement

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Scanning – dimensioning (AutoCube)

Create Value for Customers

Courier Customers
- Accurately bill customers
- Increase productivity
- Increase customer satisfaction
- Vehicle Space Optimization

Warehouse Customers
- Increase productivity by optimizing
  - Put away, Picking, Packing & Shipping
- Accurately bill customers

Through Key Features

- Measurement Accuracy: 10mm
- Object Size Range: 6cm x 6cm x 6cm – 90cm x 90cm x 90cm
- Irregular Object Measurement: Supported
- Measurement Cycle Time: 1 sec (typical)
- Image Capture: Supported
- Integration: SDK and API (C++, C#, Java)

AutoCube will have the following metrology certifications:
NTEP (USA), Measurement Canada (Canada), OIML (Europe), MID (Europe)
Mobility – OS Support

Multiple OS Support

- iPod touch 5
- iPhone 5
- iPhone 6
- iPhone 6 Plus
- iPad mini
- iPad Air

Captuvo SL22
Captuvo SL42
Captuvo SL62
N/A

- Windows Embedded CE
- Windows Mobile 6.5
- Windows Embedded Handheld
- iOS
- Jelly Bean
- Windows Embedded 8.1
- Windows 10
- Android 4.4.4

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## Mobility – Device Strategy

### Local Area Network Devices
- CK71
- MX7
- CK3X
- D75e
- D6510
- etc.

### Wide Area Network Devices
- CK70
- D99EX
- CN75
- CN51
- CT50
- EDA50
- etc.

### Vehicle Mounted Computers
- CV41
- VM1
- CV31
- VM2
- VM3
- etc.

### Vehicle Mounted Computers
- CV41
- VM1
- CV31
- VM2
- VM3
- etc.

### Other Devices
- Captuvo
- etc.
Movilizer Solution
The many Movilizer Connectors and Cloud help you Connect:
- Your closed and locked backend systems
- Your isolated silo systems with each other
- Your business partners (suppliers, distributors and customers)

The Movilizer Cloud helps you, the VP Operations, and all your down-line managers, Supply Chain managers, Plant/Warehouse managers and Service/Maintenance managers orchestrate and inter-connect your Field Operations.

The Movilizer App connects your sales reps., service technicians, delivery drivers and machines with their managers and with each other. The Movilizer App is a single, role-based, app that works both offline and on 8 different platforms.
Thank you!