



# Drive RICH Consumer experience

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# Fast Growing Marketing & Media Solution

*“...digital signage ascending to the world's second fastest growing ad medium.” (PQ Media)*

- **Average US consumer:** 47 minutes of weekly exposure in 2013, up from 27 minutes in 2007
- **Operator revenues:** In key markets, growing faster than consumer exposure
- **Budgets:** Marketers upping DOOH budgets to engage elusive consumers
- **Interactive DS networks:** One of the fastest growing applications

2017

**30 million** displays  
14.8 million Media Players



# AGENDA

**2016 KEY MARKET TRENDS**

**DRIVE RICH CONSUMER EXPERIENCE**

**INTEL INGREDIENTS**

**PROOF POINTS**

# 2016 Key Market Trends



**\$15T Retail Sector Transforming**

Engaging with Shoppers 1:1

90% sales still in physical stores

68% Shoppers leave brands for poor experience



**IOT Driving Every Aspect of Retail**

Re-Invent Business Models

Rise of Smart Retail Smart Cities

Digital Screens audience & context aware



**IOT will become Grander & More Ambitious in Retail**

Digital Screens, Smart Coolers, Intelligent Whiteboards with Data Analytics

Enable brands to engage with Consumers and measure



**Intel Moore's law impacting profoundly on IOT & the future of everything**

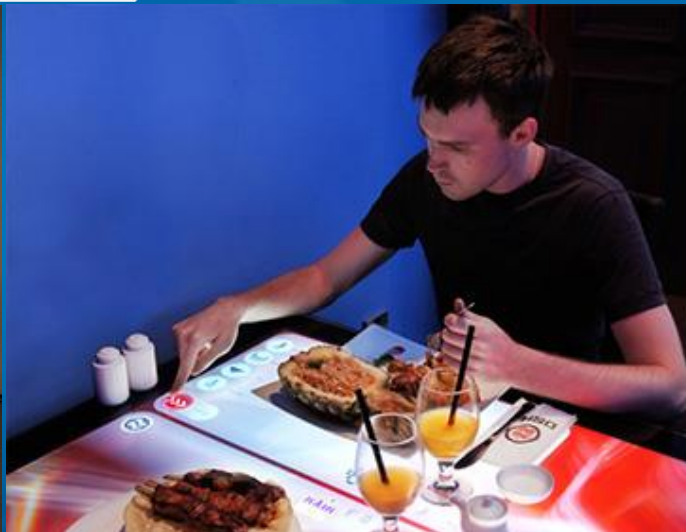
Drive Low-power, Rich Compute & small footprint

Enabling Smart Retail

# Deliver Engaging Consumer Experience



Interactive Video Wall powered  
By Intel's RealSense technology



Kodisoft Interactive Restaurant  
Technology powered by Intel® NUC



NCR Vitalcast powered by  
Intel® Core™ Processor &  
Intel® SSD

Great Experience is driven by Intel!

# Intel Ingredients

## COMPUTE

14nm 6<sup>th</sup> Generation Intel® Core™ Processor

### REMOTE MANAGEMENT

Intel® vPro Technology

### SECURITY

Intel® Platform Protection  
Technology

### MEASURE AUDIENCE

Intel® AIM



### RICH GRAPHICS

Intel® HD Graphics

### RICH MEDIA

Intel® Media SDK

### NATURAL INTUITIVE INTERACTION

Intel® RealSense Technology

# 6th Generation Intel® Core Processors (fka Skylake)



- 14nm technology using 2<sup>nd</sup> generation 3-D tri-gate transistors
- Up to 10%<sup>1</sup> additional CPU performance
- Intel® Rapid Storage Technology for PCIe\* Storage
- Up to 40% more high speed I/O than prior gen Intel products



- DDR4 Memory allows customers the flexibility to unify memory routing for ECC enablement in a single board design.<sup>2</sup>
- CSME (FW11) is a Unified firmware for all SKL platforms enabling faster development cycles and debugging capabilities.



- Up to 30%<sup>1</sup> faster graphics performance
- Up to 3 independent display and audio streams with video audio.<sup>3</sup>
- Gen 9 Graphics: GT4e for Halo, GT3e for ULT.
- Increased display resolutions<sup>2</sup> supporting Ultra HD 4K<sup>4</sup>
- Accelerated HW Media Codecs for Decoding and Encoding HEVC, VP8, VP9



- HW Based Security features with Intel® PTT, Boot Guard, Intel® MPX.
- SW Based Security introduces Intel® SGX.
- Intel® vPro™ technology support for self encrypting SSDs to protect data automatically
- Embedded Operating Systems and Support

1. Projection only. Not based on measured data.

2. DDR3L still require separate board designs for ECC.

3. Requires Skylake H or S based platform

4. On eDP/DP at 24bpp and 60Hz

5. On select SKUs

# Intel® vPro™ Technology (Intel® AMT)



REMOTE POWER ON/OFF

REMOTE REMEDIATE

SYSTEM INVENTORY

MINIMIZE SYSTEM  
DOWNTIME

LOWER TCO

REDUCE ONSITE VISIT

GREEN INITIATIVE

DIGITAL  
SIGNAGE

KIOSK

VIDEOWALL

Maximize Value  
With Intel® vPro



# Intel® Active Management Technology

Hardware based solution that provides state-of-the-art Out-of-Band (OOB) Remote manageability functions independent of system's power and OS state



**Remote Remediation**  
Using Intel AMT KVM, SOLIDER



**Hardware & Software Inventory**  
Using Intel AMT Hardware Asset & NVRAM



**Monitor critical software**  
Using Intel AMT Agent Presence



**Store Critical data – Read anytime**  
Using Intel AMT NVRAM Area



**Save power – turn the system off at night**  
Using Intel AMT Power on & off

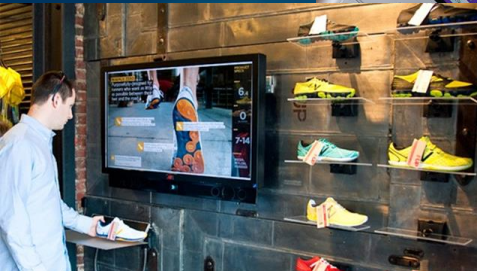
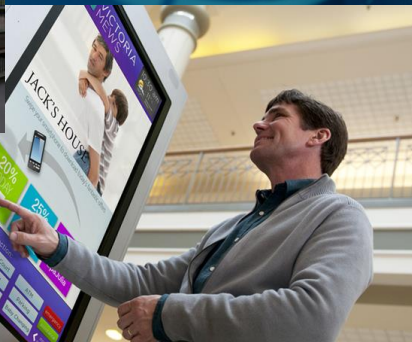
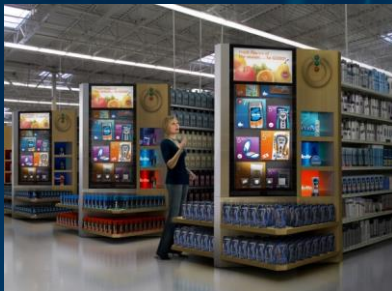


**Receive alerts remotely – OS Hang ...**  
Using Intel AMT Alerting



# Intelligent Solution Reference Kit for Digital Signage & Kiosk

Industry Open Spec. for Intelligent digital signage and kiosk features



- Audience Measurement/Analytics
- Interactivity
- Augmented Reality
- Remote Device Management
- Rich Media & Graphics Optimization
- Retail In-Store Analytics

**“READY FOR DEPLOYMENT” as Solution Kit**

Hardware (i.e. media player)

Software

Middleware

**NEXCOM**

**Quividi**

- Intel® vPro™ SDK
- Intel® RealSense SDK
- Intel® Media SDK

# Rich Media

## Value Proposition

- Compelling digital signage with rich and engaging media to attract and provide a 1:1 engagement with consumers

## Use Cases

- High Resolution video with multiple zones
- Video wall workloads
- Independent videos/images to multiple outputs (menu boards)
- Interactive applications: touch, gesture, holographic display

## Capabilities

- Ecosystem of solutions that support 4K playback
- Video playback via graphics hardware acceleration
- Enable content management companies (CMS providers) with Media SDK or DXVA at a minimum
- Leverage Ethernet controller driven time sync technology(IEEE 1588, 801.1AS) for video walls

# Intel® Real Sense™ Interactivity

## Value Proposition

- Drive new use cases with Real Sense for Interactivity and drive 1:1 engagement between Brands/Retailers and Consumers.

## Use Cases

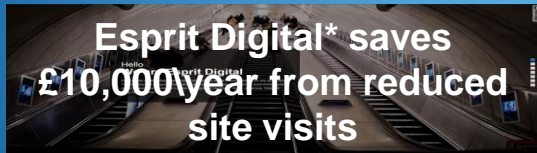
- Body Scanning: Fitting Room Measurement, Digital Apparel/Accessory Fitting, Shoes
- Gesture-Based Interaction
- Object Scanning: For Payments, Dynamic Content Triggering, Package Measurement
- Viewer Measurement: Gaze Tracking
- Background Environment Removal for Real-Time Online Assistance

## Capabilities

- R200 camera module with validated SDK supply chain
- RealSense SDK available to order through [click.intel.com](https://click.intel.com) – includes R200 with enclosure and USB 3.0 cable for initial Proof Of Concept (POC) development
- Enablement of ISVs with the RealSense SDK

# Proof Points

## Reduce Truck-rolls



Esprit Digital, global leading solution provide of out-of-home displays and digital signage solutions using Intel vPro Processor with Intel Active Management Technology to eliminate site visits at major installations around the world

## Save Energy



PilotTV\* sees  
**80%** Success rate with Intel® AMT  
power on/off remotely

PilotTV deploys media players with Intel® Active Management technology to remote Power on/off and fix Corrupted Software remotely avoiding Onsite visit

## Promote Engagement



Chow Sang Sang\* sees  
**100%** Increase in omni-channel sales, Improved staff efficiency,  
Greater customer engagement

Chow Sang Sang is a major jewelry retailer and integrated digital technology more deeply into the store experience to attract a younger audience.

# SUMMARY

Great Experience is driven by Intel

Intel Ingredients – Compute | Rich Graphics & Media | Interaction,  
Remote Management | Measurement

Digital Signage, Kiosk with Intel® vPro™, Intel® RealSense provide  
value End Users are looking for...

Sell Intel® vPro Based Digital Signage, Kiosk

# The Market Opportunity

**Digital signage** to grow to \$24 billion market by 2020

**Video walls** to grow to \$18 billion market by 2020

**Self-serve kiosks** to grow to \$70 billion by 2020

*According to  
Markets and Markets  
Research*



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