ARROW | Internet of Things

(intel)

Retail Technology Solutions Guide

Five Years Out

Arrow Worldwide Fact Sheet

2017 Sales: $26.8 billion

Worldwide Locations: over 345

Fortune 500 Ranking: 118

Employees WW: over 18,800

Customers WW: 150,000

Industry: Electronic Components and Computer Products Distribution

Founded: 1935

Incorporated: 1946

Public: 1961 (ARW)

2017 Sales by Region

25%
ASIA/PACIFIC
$6.7 billion

46%
AMERICAS
$12.4 billion

29%
EMEA
$7.7 billion
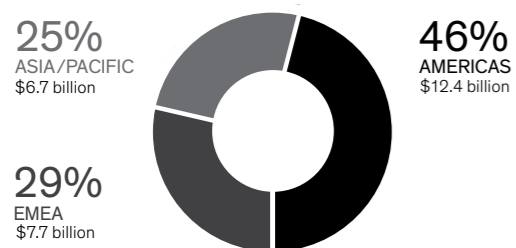
Engaging Arrow for Your Retail Technology Needs

From initial consultations to design expertise, Arrow brings technical depth and implementation expertise in digitization and business transformation. Arrow by bringing together partners like Intel® and Advantech, can now help retailers deploy complete store ecosystems that span multiple domains including inventory management, digital signage, store checkout systems and cloud analytics. To know how Arrow can make an impact contact us at iot@arrow.com.

Contact us:
iot@arrow.com
www.arrow.com/intel-retail

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Enabling an Intelligent Planet

ARROW

eInfochips
An Arrow Company

(intel)

NAVORI LABS

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Challenges in the Retail Industry

Overview

The retail store is making a strong comeback. Despite significant store closings and retail restructurings, customers increasingly like the physical act of shopping in stores. It is not surprising that the retail industry's technology leader, Amazon, has not only been dabbling with physical stores, but has just acquired the grocery chain Whole Foods. Simultaneously, incumbent traditional retailers like Walmart are making big moves online to deliver a seamless omni-channel experience to customers. Across the globe, innovation has become a priority for traditional retailers and they are becoming smarter about competing in a disruptive digital age. Dramatic technology driven changes to the in-store experience, retail inventory management and customer interaction have all created a new opportunity for retailers to entice customers, satisfy new needs and enhance profitability. In effect, the future of retail is about delivering a shopping experience that is responsive to the presence and needs of its shoppers

Inventory Accuracy

By far the top challenge retailers consistently cite is product availability. Having items that meets a customer's exact need is crucial for retail success. It is not unusual that a supermarket may miss out on 5% of sales through out-of-stock situations. A 3% improvement in inventory accuracy can lead to a 1% sales lift. Several new technologies have the potential to dramatically improve inventory accuracy
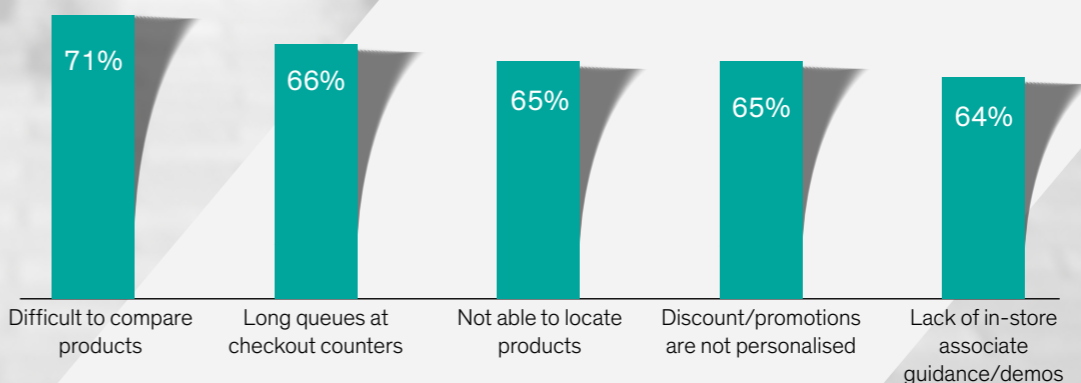
Human Capital

Hiring and retaining the right associates in the store to help customers has been an ongoing challenge for retailers. Characterized by high turnover, the retail industry has difficulties rapidly onboarding and managing people. To delivering reliably consistent experiences retailers can now employ various automated processes and even robots

Analytics

The ability to tailor in-store experiences to customers and make timely decisions on inventory, product placement and promotion requires customer insight. These insights need to be data driven. The challenge is in the ability of retailers to collect the right data and deploy analytical skills to derive insights that can improve the business economics

Customer Engagement

Customers develop deep emotional connections with brands and store experiences. Successful retailers continuously find new ways to engage customers. Starting with interactive signage and responsive in-store experiences to seamless multi-channel connectivity, engaging the customer has proven to increase sales dramatically

Top Frustrations Consumers Face in Retail Stores*

Difficult to compare products	Long queues at checkout counters	Not able to locate products	Discount/promotions are not personalised	Lack of in-store associate guidance/demos
71%	66%	65%	65%	64%

*Source: Capgemini Future of Retail Store Survey
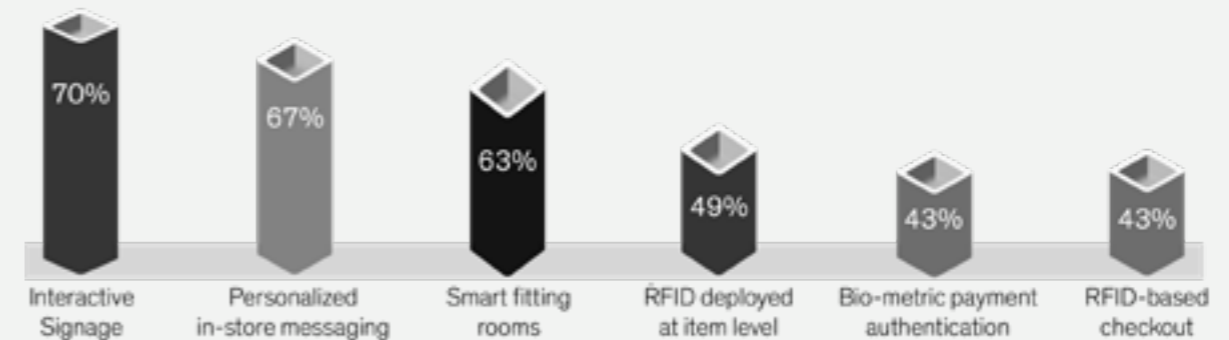
Top Predictions for Retail

- Mundane shopping will be easier and move more online, but the demand for a physical shopping experience will be stronger. Brick-and-mortar stores will continue to flourish

- Shoppers will demand more customization and personalization of products

- Customer expectations for item availability will intensify towards shorter time – same day

- Mobile shopping experience will separate the successful retailers

- Robots will be deployed in retail settings to deliver consistent and reliable shopping experiences

- Retailers investing in digitization will engage and deliver superior customer satisfaction

- Data will be the basis of all retail decisions

- Healthy and environment-friendly lifestyles will be a focus for many consumers

- Retailers that step up their social media strategies will thrive

- In-home services, delivery, and consultations will pervade the market

- Augmented reality technology will get even more sophisticated

In-Store Shopping on the Rise

Percentage of customers shopping in-store every week

38%	36%	40%	41%
2014	2015	2016	2017

Technology Adoption in Stores by 2020

70%	67%	63%	49%	43%	43%
Interactive Signage	Personalized in-store messaging	Smart fitting rooms	RFID deployed at item level	Bio-metric payment authentication	RFID-based checkout

Business Benefits of Technology in Retail Stores

| Interactive Signage	Real-Time Inventory	Self-Service Kiosks	Digital Menu Boards
20% increase in sales 35% improvement in customer satisfaction	Up to 11% increase in sales	10% increase in sales 95% will use Kiosk again	7% reduction in operating costs due to elimination of printed boards and related personnel expenses

Data Sources: PwC, Intel®, Advantech, Ovum

The Retail Store of the Future

Management

Inventory
RFID sensors
Surveillance
Store Traffic
Cold chain
Facility management
Loss prevention
Remote management
Productivity optimization
Warehouse robots

Headquarters

Warehouse

Retail Store
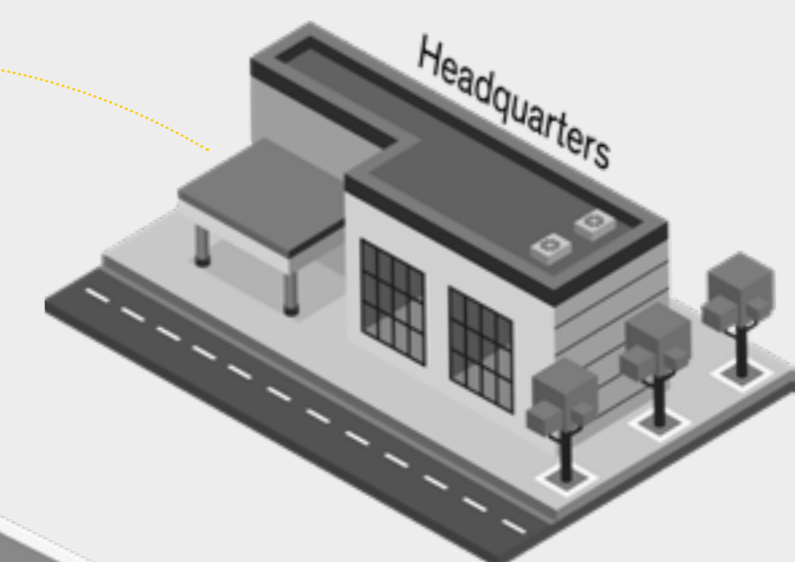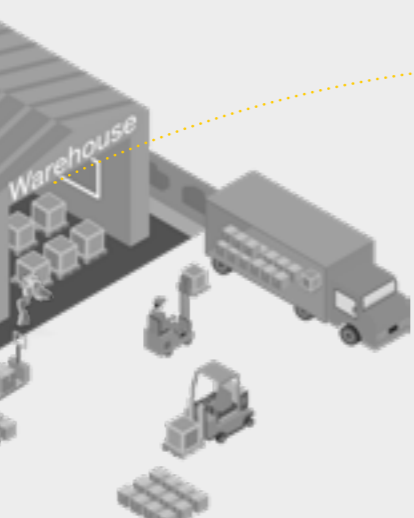
Info kiosks
Interactive signage
Menus
Welcome robots
Auto checkouts
Customized marketing
Omni channel engagement

Engagement

Analytics

Deep learning and AI
Pattern and trend recognition
Predictive maintenance of assets
Facial, gesture and mood recognition
New algorithms for precision targeting

50% OFF

Sensors
Gateway
Data Results
RFID Tag

Technologies for Retail Transformation

Engagement

Customers' purchasing decision is the result of multiple subtle factors. From attractive signage, timely display of items to enticing promotional programs, engaging the customers' attention and affording tools to customize their shopping experience is key to turn visitors into customers. Retailers have several avenues to foster engagement - digitally interactive displays, mirrors and catalogs are just a start. Thanks to sophisticated technology powered by the cloud and sensor integrations retailers can now ensure that the customers' motivations and preferences are incorporated into in-store experiences.

Management

Inventory availability and avoiding stock out situations is paramount for any retailer. To drive efficient availability, tracking, locating, and managing inventory with precision is essential. Automating tasks and data analysis are key to discovering opportunities not only for cost reduction but also for greater customer satisfaction. A key element of effective store operation is also deploying seamless integration between enterprise management systems and store operations. This makes store associates effective and reduces time for fast on-boarding of new personnel. Implementing integrated store management platforms that become the central nervous system, connecting every part of the retail operation is an important first step. Further collecting and processing information from various parts of the operation and identifying inter-relationships is key to derive insights.

Analytics

Optimizing store layouts, responding to evolving customer demands and driving a modern retail operation requires broad digitization and new skill-sets. Next generation retail platforms are combining the intelligence gathered from store level devices and sensors eg. foot traffic, with powerful cloud-based data-analytics engines. These new paradigms enable predictive management of store demand, and identify the right points for promotions and displays. Immediate and accurate insights to transform in-store experiences on a near-real-time basis is now possible. Cost effective deployment of analytics is a crucial aspect of the store of the future.

Intel®
Technology provider with a vast ecosystem, enabling secure and scalable solutions from the network edge to the cloud.

Core Technology

Advantech
Known market leader in retail, Advantech offers solutions to optimize store operation management, shopper engagement and business intelligence.

Solutions and Cloud Platform

Seneca and Navori
Together, Navori and Seneca enhance customer experience with rich personalized content and targeted messaging.

Digital Signage Kit

TouchSource
Industry leader in electronic directories that connect people with information and capture consumer data for a more tailored and personal shopping experience.

Retail Digital Directories

Wonderstore
Wonderstore's technology platform captures customer characteristics and behaviors across both on-line/off-line channels.

Data Collection Platform

e-Infochips
Offering comprehensive retail solutions from the storefront to the back office by leveraging an extensive portfolio of IPs and frameworks.

Technology Services for Retail

Arrow
Global provider of products, services, and solutions enabling retailers to accelerate digitization and adapt to changing customer needs.

End-to-End Solution Provider

Intel® RFID Sensor Platform (Intel® RSP)

## Intel® RFID Sensor Platform (Intel® RSP) Delivers Near 100% Inventory Accuracy

Intel® RFID Sensor Platform (Intel® RSP) is a low-cost RFID based solution designed to help system integrators and retailers quickly create and deploy innovative retail solutions informed by analytics. This simple-to-install solution manages RFID sensors through a general edge compute gateway and supports analytics capabilities from the edge to the cloud. It helps system integrators deliver applications that can boost retail profitability and provide new insight into product demand, consumer behavior and store logistics.

Intel® RFID Sensor Integrated Technology Components

Solution facilitates data collection from multiple stores and builds an end to end IoT platform with edge analytics based on the RFID event data. The Intel® RSP interrogates the tag population within its field of view and passes RFID-tag information as well as information from other various on-board sensors to the RFID Gateway, which is based on Intel® RSP SW toolkit (open source).

Key Features of the Platform

- Affordable Cost: Intel® RFID Sensor Platform is available through distributors at a price point significantly less than many RFID technology and retail sensor solutions
- Easy Install: Intel® RSP can be easily affixed to any wall or ceiling using a variety of compatible mounting mechanisms
- High Performance: Intel® RSP offers high performance with optimization enhanced to improve tag read/s accuracy compared to other market solutions in similar price range
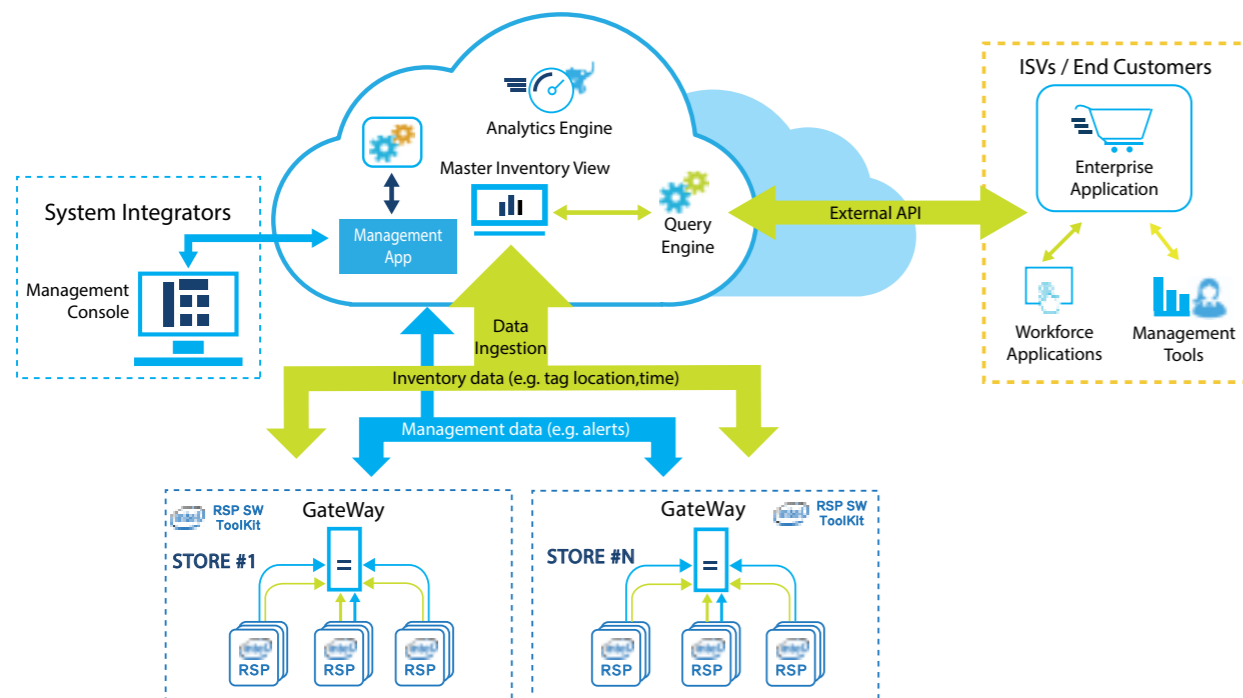
Benefits to Retailers

Retailers can proactively adjust to supply and demand dynamics. Delighting customers by making product available, retailers can build brand loyalty and increase sales. In addition, by being able to track and locate inventory, stores can reduce waste and loss of sales caused by misplaced items.

Customer Successes

A Levi's® store, fully equipped with Intel® RFID Sensor technology to track inventory in real-time through RFID tags

Interactive Digital Signage Solution

Advantech's Digital Signage Solution: Increase Shopper Engagement and Sales

Advantech's UShop SRP-130 interactive digital signage solution delivers dynamic & immersive multimedia content, and increases customer engagement by broadcasting content specifically targeted to the customer. Using a variety of IoT sensors, including facial detection cameras, RFID readers, and in-store heatmaps, UShop SRP-130 adds interactivity to a digital signage network.
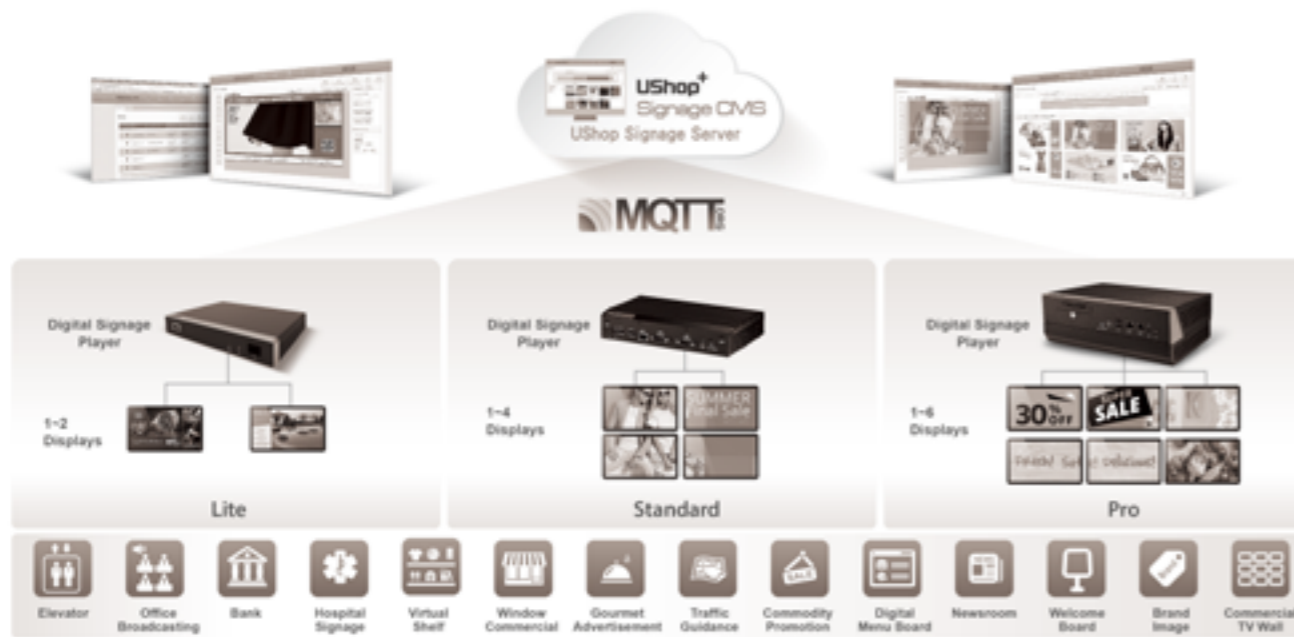
Solution Components

The solution combines industrial grade digital signage players with UShop+ SignageCMS, a web-based content editing/publishing software and remote management. Features include:

- UShop Signage Players: Industrial-grade digital signage players based on Intel® processors. Three hardware options support up to 6 displays

- UShop+ SignageCMS: A web-based content management system to deliver high-resolution multimedia in diverse formats. Users can centrally layout, schedule, and dispatch signage contents up to 500 remote display clients. Platform allows for easy integration of 3rd party sensors for additional functionality such as facial recognition, RFID readers, etc.

Benefits to Retailers
Increase customer engagement and revenue by using intelligence provided by the platform and interactive multimedia to broadcast content targeted to the customer. Streamline operations and react rapidly to changes with remote management capabilities.

Customer Successes

LANCÔME PARIS

mamaway

G-Super

TOYOTA

![Advantech - Enabling an Intelligent Planet]

Intelligent eMenu Board

Advantech Intelligent eMenu Board: Boost Sales with Dynamic and Appealing Content

Advantech's SRP-131 allows business owners to easily promote services and products via real-time advertisements. Managers can remotely edit and dispatch content to the eMenu board system, which then disseminates the content to multiple client devices (across stores). By integrating the eMenu board system with a restaurant's POS data, customers can make order updates using the POS system or mobile app, increasing engagement.

Solution Components

The solution combines industrial grade digital signage players with UShop+ SignageCMS, a web-based content editing/ publishing software and remote management. Features include:

- Ushop+ Signage Players: Industrial-grade digital signage players based on Intel® processors. Comes with two hardware options with support for up to 3 displays.

- UShop+ SignageCMS: UShop+ SignageCMS is a web-based remote content management system capable of delivering high resolution multimedia to UShop+ signage players, while also providing diverse menu templates for easy editing and real-time broadcasts.

Benefits to Retailers

Reduce operating costs by up to 7% by eliminating poster printing and decreasing human resource costs with remote management capabilities. Enable real-time advertising to promote services, products and limited-time offers.

Customer Successes

SUBWAY®

Advantech Intelligent Menus implemented at 16 Subway® franchise stores in Thailand. Using this solution, content is updated remotely for all locations. Special offers based on time of day can be easily promoted.

Store Traffic Analysis

Advantech's Digital Signage Solution: Increase Shopper Engagement and Sales

Advantech's UShop SRP-700 Store Traffic Analytics solution enables retailers to evaluate sales potential and establish customer service and marketing strategies for maximizing profit. UShop SRP-700 integrates 2D and 3D video analysis technology with POS transaction data for further analysis.

Solution Components

Solution combines smart cameras for people counting with software that integrates several capabilities that enables retailers to increase profitability. Solution components include:

Edge Computing Devices

- 2D and 3D Cameras: Smart cameras with high counting accuracy. Easy to install, built-in human head identification capabilities, and many more.

- Wi-Fi Analyzer: Senses shopper intent based on analyzing Wi-Fi signal of shopper mobile device within 5 - 15 meters. No Wi-Fi connection or APP installation needed.

UShop+ Store BI Software

- Management Center: Store,device and user management

- BI Dashboard: Statistic widgets, data investigation, user-defined dashboard, cross platform support, data security, third party software integration

- Enterprise System Architecture: Public and private cloud support, robust redundancy and auto backup

Benefits to Retailers

Increase customer engagement and revenue by using intelligence provided by the platform and interactive multimedia to broadcast content targeted to the customer. Streamline operations and react rapidly to changes with remote management capabilities.
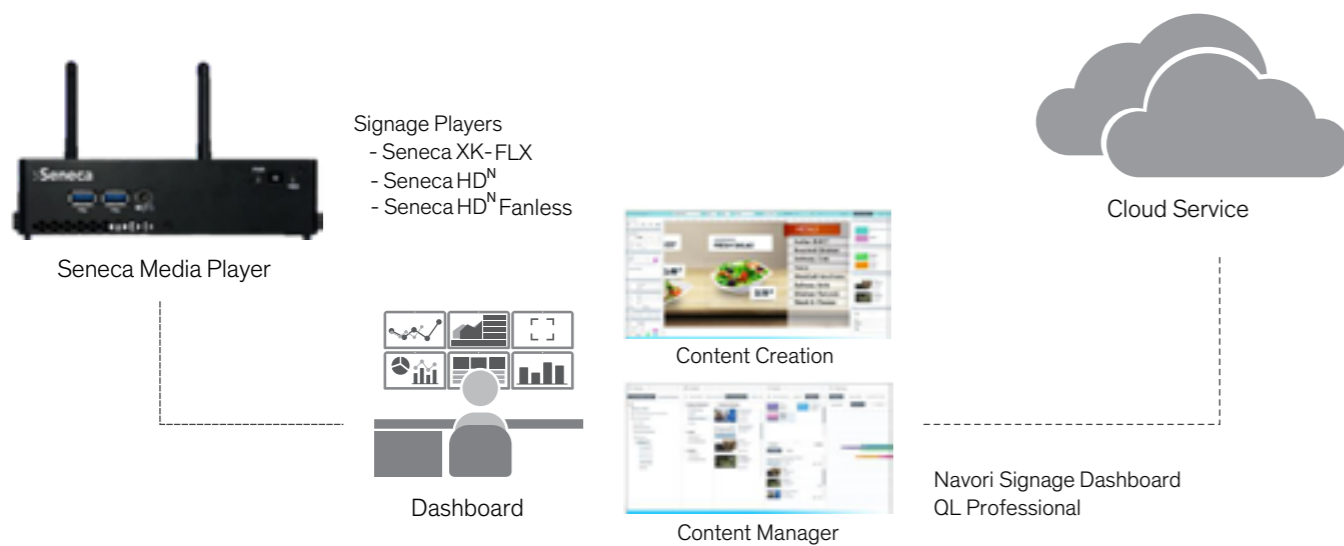
Customer Successes

![NAVORI LABS]

Digital Signage Kit

Seneca and Navori Digital Signage Kit

Seneca and Navori Digital Signage Kit is a synergy between Navori QL digital signage software and Seneca media players. Together, Navori and Seneca enhance customer experience with rich personalized content and targeted messaging. This signage kit is a content management and distribution tool that allows authorized users to standardize or customize content, anytime and anywhere. It offers a user-friendly interface and a multi-user cloud-based platform facilitating live streaming of data and real-time decision making.

Features

- Precise playback accurate to 1/30th of a second with frame synchronization capabilities
- State-of-the-art HTML5 user interface with designer, data feed manager, and preview
- Standard software solution with over 800 features + SDK +API
- Hardware agnostic, professional performances and features on video wall, multi-display, LED, System-on-Chip display
- Incorporate live data from RSS feeds, XML and self-hosted data
- Display live news, events, sports scores, and more

Signage Players
- Seneca XK-FLX
- Seneca HD^N
- Seneca HD^N Fanless

Seneca Media Player

Content Creation

Cloud Service

Dashboard

Content Manager

Navori Signage Dashboard
QL Professional

Key Retail Applications
Sales and advertising, video walls, customer data collection, product information, branding, interactive tablet displays

Benefits to Retailers

- Real time data support
- Fully web-based CMS
- Available in cloud and on premise
- All popular media formats are supported
- Built-in support for data feeds including social media, Google Calendar and more
- Offers custom triggers, content interactivity and gesture support
- Easy integration with 3rd party systems to display live data streams
- Best pre/post sale support for partners and customers globally

Customer Successes

![esprit digital logo]

Retail Digital Directories

TouchSource and the Future of the Shopping Mall Experience

TouchSource, the industry leader in in electronic directories, wayfinding systems and digital public displays has set its sights on the retail industry, creating an innovative turn-key solution designed to disrupt and evolve the retail industry as we know it. TouchSource specializes in simple, turnkey solutions, by handling the hardware, software, content design, installation and support. As of 2018, TouchSource's Retail Kiosk, will not only connect people with directions, maps and information, but also provide shopping centers the ability to use analytics to capture consumer data and create a more tailored and personal shopping experience.

Key Features of the TouchSource Retail Kiosk

- A full turnkey solution including all aspects of software and hardware
- Dual-sided 65" QLED displays with PCAP touch and dynamic brightness
- Integrated proactive support, remote monitoring, and diagnostics
- "No touch" management with full integration to Placewise
- Digital marketing API

- Tailored, integrated ads, offers & events including offers from national retailers
- Integration with mobile users through SMS, BLE, QR, NFC, and other emerging formats
- Integrated and customized wayfinding and mapping
- Outdoor & indoor dual sided solutions
- Marketing data collection & actionable analytics

Benefits to Retailers
- Retailers and mall operators can recognize greater revenue potential by combining national and 3rd party ad networks with local promotional content
- Enhanced brand intimacy and customer experience by providing capabilities for customer to download promotions directly from the kiosk
- Integrated way finding and search provides customers with a smooth shopping experience
- Actionable analytics that can also combine real-time google analytics offer guidance on user insight, overall usage, interaction, and demographics

Customer Successes
- Prudential Center (Boston)
- 900 North Michigan (Chicago)
- The Colorado Center (Denver)
- The Bank of America plaza (Dallas)
- Ridgehill Mall (NY)

Visitors Data Collection Platform for Enterprise

Wonderstore – Visitor Data Collection Platform for Retail

Everyday millions of customers enter and leave stores, but retailers have very little insight into who these customers are, their preferences, demographics and needs. With an aim to offer retailers deeper insight into their customers, WonderStore's technology platform captures customer characteristics and behaviors from the instant a customer enters a store and integrates the buyers journey across the on-line/off-line continuum. WonderStore's technology is particularly effective as customer behavior evolves – customers today might browse online and shop in a physical store or browse in a physical store and shop on-line. Since WonderStore can detect the store visitors gender, age, facial characteristics (mood, glasses, etc.) and the visitors dwell-time in various parts of the stores, rich information can be compiled regarding the effectiveness of various marketing and promotional strategies employed by the retailer.

In-Store Analytics Features

- Visitor counts
- Store traffic distribution by time if day
- Conversion rates of various promotional efforts
- Dwell-time measurement at various parts of the store
- Comprehensive map of the visitors movement inside the store
- Correlations with factors like weather

Wonderstore technological innovations allow compilation of relevant information from shop visitors and combine it with **smart data analytics** and **machine learning.** This gives the capability to really understand customer behaviour and promote the best offers and services

Benefits
- Personas
  - Develop a profile/digital face-print of the visitor using physical characteristics of the visitor - demographics, gender, facial expressions and age
  - On-line/ Off-line profile integration to derive insight on customer buying journey
- Global visitor management
  - Integrated management of visitor profile and analytics across stores in multiple geographies from one central interface
- Conversion rates
  - Improve window conversion rate,
  - Improve displays to ensure that storefronts draw in shoppers, increase shop entrance to sale conversion rate,
  - Lower operational running cost through better staffing
- Marketing measurement
  - ROI assessment of multi-channel advertising promotions using dwell-time and conversion metrics
  - Facial recognition based customer loyalty metrics

Wonderstore technology implementation scenario for building an on-line/off-line continuum profile of a store visitor or customer

1. Wonderstore classifies **Visitors** who come to visit the store extracting the main KPI: age, gender, emotions, etc.

2. In front of a monitor, Wonderstore can push a **QR code** combined with his **FacePrint**.

3. Or at the cashier Wonderstore can also push a **QR code** to the classified **Visitor**.

4. The Visitor, with his/her mobile frames the code, a **social login** page will loaded, so he/she can signs on. Now Wonderstore connects the **offline** with **online**.

5. At home, navigating the brand e-commerce website, **user** can accept to make a **selfie** for a best in-store service.

Services for Retail

Experts in both In-Store and Online Retail Technologies

eInfochips offers retailers a variety of services that harness data to drive customer engagement, satisfaction and the store bottom line. eInfoChips retail solution span the storefront and the back office by leveraging an extensive portfolio of IPs and frameworks. Implementations often involve deploying a variety of cloud-connected hardware systems that generate data on customer interactions. From tracking coupon use and customer footfall analysis to enhancing customers' experience with unique auto-checkout solutions, eInfochips is the leader in technology services for retailers.

Services for the Retail Industry

eInfoChips specializes in deriving unique insights from data to drive store level decision making. Services span four key areas – Customer Experience, Marketing Effectiveness, Operational Efficiency and Loss Prevention. Examples of implementations include:

Hardware

- Auto checkout solutions
- Handheld scanners
- Digital shelves
- RFID-based tracking systems
- Loss prevention and monitoring cameras
- Temperature monitors and other sensing solutions
- IoT Gateways

Software and Applications

- Video analytics
- Online payment applications
- Shelf price auditing
- Inventory management
- Cart trackers
- Visual search algorithms

Developed in-store surveillance solution for the world's 4th largest grocery store chain

40% savings on operational costs for order and inventory management for largest retail grocery store in the US

Enabling image search for a large eRetail company. 10% growth in order conversion

"Top 10 retail security solutions provider"
- Retail CIO Outlook magazine 2016

Benefits to Retailers

- Integrating and harmonizing data to optimize retail activities across supply, marketing, and sales.
- Continuous measurement of in-store traffic and store interactions to derive insights on conversion rates, marketing effectiveness, customer satisfaction and replenishment cycles.
- Constant vigil on the freshness of food and preventive maintenance through remote analysis of equipment performance.
- Protection from thefts and threats, by preventing unauthorized control and deploying video analytics.

Freshness Meter

Scanning....

Customer Successes
Customer names cannot be revealed due to NDAs

Part Numbers and Ordering Information

Intel® RFID Sensor Platform (Intel® RSP)

Type	Description	Part Number
	RRS, Black Color, US Band	RSP9000W-SKU-ROW BLACK
	RRS, White Color, US Band	RSP9000W-SKU-ROW WHITE
	RRS, Black Color, European Band (ETSI)	RSP9000W-SKU-EU BLACK
	RRS, White Color, European Band (ETSI)	RSP9000W-SKU-EU WHITE
	White FCC	H4000WF 962071
	White ETSI	H4000WE 962081
Sensors	Black FCC	H4000BF 962104
	Black ETSI	H4000BE 962093
	White FCC	H3000WF 962055
	White ETSI	H3000WE 962056
	Black FCC	H3000BF 962115
	Black ETSI	H3000BE 962059
	Black FCC/ETSI	H1000B 985819
Discrete Mounting Plates (2× mounting kits available)	Bracket, Single Flange, Sheet Metal, Unit Mounting, White (For RSP 9000 sensors also need to add a Mounting kit from below)	9220-03^HARDWARE-NMO-20682
	Bracket, Single Flange, Sheet Metal, Unit Mounting, Black (For RSP 9000 sensors also need to add a Mounting kit from below)	9220-04^HARDWARE-NMO-20682
	Plate Mounting POS RSP 9800/ AL ALLOY 5052-H32,.09 Thick (For H1000 sensors)	2024-xx_001
	9615 BOM, Mounting Kit, VESA 75, Wall, White, 6.0"L - (For H4000, H3000 sensors)	9615 ASSY
	9627 BOM, Mounting Kit, VESA 75, Wall, Black, 6.0"L - (For H4000, H3000 sensors)	9627 ASSY
	9645 Mounting Kit, VESA 75, Wall, White, 3.0"L - (For H4000, H3000 sensors)	9645 ASSY
	9647 Mounting Kit, VESA 75, Wall, Black, 3.0"L - (For H4000, H3000 sensors)	9647 ASSY
Mounting Kits (8× mounting kits available)	9649 Mounting Kit, VESA 75, Track Light, White, 4.0"L - (For H4000, H3000 sensors)	9649 ASSY
	9653 Mounting Kit, VESA 75, Track Light, Black, 4.0"L - (For H4000, H3000 sensors)	9653 ASSY
	9633 Mounting Kit, VESA 75, Track Light, White, 3.0"L - (legacy mtg for RSP 9000 sensors) (not ideal, but will work for H4000, H3000 sensors)	9633 ASSY
	9643 Mounting Kit, VESA 75, Track Light, Black, 3.0"L - (legacy mtg for RSP 9000 sensors) (not ideal, but will work for H4000, H3000 sensors)	9643 ASSY

UShop SRP-130 Interactive Digital Signage

Solution Type	UShop+ Signage Player Hardware Part Number	UShop+ Signage Server Software Part Number
Lite	**UBX-310UDS1-G1E-C** J1900, 4 GB DDR, 500 GB HDD, 1 × VGA, 1 × HDMI	
	UBX-310UDS1-S1E-C J1900, 4 GB DDR, 64 GB SSD, 1 × VGA, 1 × HDMI	
Standard	**DS-570UDS1-G1E-C** J1900, 4 GB DDR, 500 GB HDD, GT730M, 1 × VGA, 2 × HDMI, 1 × DP++	**968SPUDSS0** (UShop+ SignageCMS) interactive functions included
	DS-570UDS1-S1E-C J1900, 4 GB DDR, 64 GB SSD, GT730M, 1 × VGA, 2 × HDMI, 1 × DP++	
Pro	**DS-980UDS1-G1E-C** Core i7-6700TE, 8 G RAM, 500 GB HDD, GT730M, 3 × HDMI (GT730)	
	DS-980UDS1-S1E-C Core i7-6700TE, 8 G RAM, 64 GB SSD, GT730M, 3 × HDMI, 3 × HDMI (GT730)	

UShop SRP-131 Intelligent eMenu Board

Solution Type	UShop+ eMenu Board Player Hardware Part Number	UShop+eMenu Board Server Software Part Number
Lite	**DS-080UDS1-G1E-C** J1900, 4 GB DDR, 500 GB HDD, 2 × HDMI	
	DS-080UDS1-S1E-C J1900, 4 GB DDR, 64 GB SSD, 2 × HDMI	**968SPUDSS0** (UShop+ SignageCMS) interactive functions included
Standard	**DS-780UDS1-G1E-C** i3, 4 GB DDR, 500 GB HDD, 3 × HDMI	
	DS-780UDS1-S1E-C i3, 4 GB DDR, 64 GB HDD, 3 × HDMI	

UShop SRP-700 Store Traffic Analytics

Solution Type	Edge Computing Device Hardware Part Number	Store BI Cloud Report Public Cloud Part Number	Private Cloud Part Number
UCAM-2D	**UCAM-120A-U01**		**968SPUSTS0** Max. 25 channels
UCAM-3D	**9680016713**	**968SPUSTL0** (annual license fee)	**968SPUSTS1** Max. 50 channels **968SPUSTS2** Max. 300 channels
Wi-Fi Analysis	**968SPUSWL0** (Service activation fee)	**968SPUSWL1** (annual license fee)	**Private clouds not supported**

Digital Signage Kit

Kit #1	Kit #2	Kit #3
• Seneca XK-FLX series Kit • NAVORI-PLAYER-CLOUD (1 – Year License)	• Seneca HDN i3 Kit • NAVORI-PLAYER-CLOUD (1 – Year License)	• Seneca HDN i5 Kit • NAVORI-PLAYER-CLOUD (1 – Year License)

Retail Digital Directories & Visitor Data Collection Platform

Contact Arrow for ordering information and part numbers for Touchsource and Wonderstore solutions.

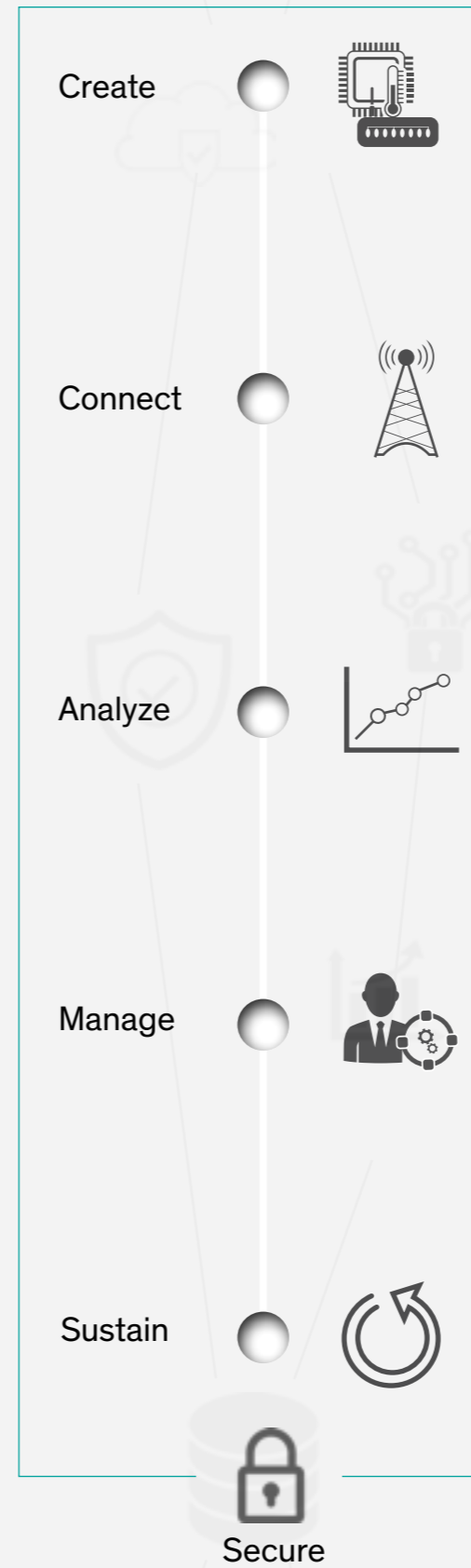# Arrow Electronics: Your Retail Technology Partner

Arrow has been investing in a variety of capabilities that are aimed to help retailers adopt next generation paradigms for store management. With the recent acquisition of eInfoChips, Arrow has gained a strong portfolio of solutions to drive retailer success.

How Arrow Helps Retailers

1. Global provider of products, services, and solutions specializing in
   – Hardware and software development
   – Security, data analytics, and application development
   – Enterprise software support
   – Value-added services in design, integration, manufacturing, logistics, billing, and managed services
   – Sustainable technology and end of life cycle disposition
2. Large partner and supplier network consisting of global and regional solution providers
3. Successful customer deployments include leading retail brands in supermarket chains, shopping malls, the drink & beverage industry, and quick serve restaurants

Create
Things, platforms and solutions

Connect
Applications and networks

Analyze
Data streams from multiple sources

Manage
Devices and usage

Sustain
Asset disposition and recycling

Secure
Assets, data, IP and network

Arrow Supports Customers – From Sensor to Sunset®

Create

Connect

Analyze

Manage

Sustain

Secure

Arrow Retail Deployment Successes*

*For a **leading supermarket chain,** assisting with the customer in-store shopping experience and new methods for frictionless auto-check and self-serve payment solutions.*

***Hospitality and Recreation Venues,** building new sensors and devices to auto detect unwanted rodents and trash collection pickup.*

*At **top OEM beverage company,** monitoring temperature, flow and content mix along the manufacturing process to ensure quality.*

*With **Mall Entertainment Complexes,** implementing connected parking garage visualization, auto payment systems to improve the shopping experience.*

*At **Quick Service Restaurants** for monitoring cold chain, tracking shipments and customer demographics.*

Contact us:
iot@arrow.com
www.arrow.com/intel-retail

*Customers under NDA, names cannot be revealed.
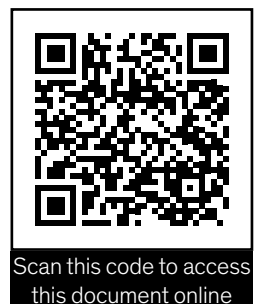
Are You Five Years Out?

Most people live in the present. The world of now. But a handful of us work in a unique world that doesn't quite exist yet—the world of Five Years Out.

Five Years Out is the tangible future. And the people who live and work there know that new technologies, new materials, new ideas and new electronics will make life not only different, but better. Not just cheaper, but smarter. Not just easier, but more inspired.

Five Years Out is an exciting place to be. So exciting that, once you've been there, it's hard to get excited about the present. Because we know what's coming is going to be so much better.

Five Years Out is a community of builders, designers, engineers and imaginers who navigate the path between possibility and practicality. Creating the future of everything from cars to coffeemakers.

Are you one of them? Then you're probably working with us.

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