Intelligent Retail Consumer Analytics
Understanding your customers to drive better retail performance
Gaining insight from customer behaviour

Retail is transforming—fast. Widespread connectivity, smart devices, and e-commerce are changing the way we buy everything from cars to cosmetics. However, once a potential customer has looked at reviews and compared prices online, they may still choose to buy from a traditional bricks and mortar store. For most retailers, high street shops still deliver the majority of sales. It’s important that you understand the behaviour of your customers, so you can create future-proof solutions to keep them coming back.

You need a way to map who your customers are and how they shop in your stores so that you can take a proactive and data-based approach to in-store management.

The Internet of Things brings together the digital capabilities of online retail with the physical nature of high street shopping. This combination will give you a fresh look at your operational efficiency and improve your customer experience.

Bringing online data capabilities in-store

In-store analytics let you gather customer browsing data as they move throughout your shops, just like tracking customer clicks as they navigate a website. Using the data collected from in-store sensors, you can create behavioural maps which can be used to improve the customer experience, store layouts, and sales.

The BT approach: a range of technologies for different capabilities

Shopper path analytics

You can mix different hardware and software analytics to gather different types of data. We use a range of sensors, video, Wi-Fi and low-energy Bluetooth beacons to measure customer and employee movement. We then stitch the info together to create different shopper activity maps which can be used for different data insights:

- Entrance traffic analytics—understand footfall in and out of your stores by placing cameras above doors. You can compare conversion against footfall by connecting your entrance traffic analytics with your POS system. Reports can also show the demographic of customers for each store so you can tailor stock quantities and displays based on your average customer profile.
- Kinetic heat maps—use multiple cameras to create maps of traffic volume around the shop. These maps show how much time customers spend in each part of the shop, so you can position products and change store layouts to make the most of these patterns

Comprehensive in-store analytics

3-tier model purpose build for retail and based on multiple data / sensor inputs

- Conversion
- Traffic counting
- Opt-in only
- Staffing exclusion
- Shopper analytics
- Staffing optimisation
- In-store performance analytics
- Kinetic maps
- Product placement
- MDD
- Video analytics
- POS exception
- Full path analysis
- Real-time alerting
- Conversion
- Gender
- Cross-store spending
- Geo-origin
- Loyalty
- New vs. Repeat

In addition to understanding customer activity, we can also use in-store analytics and improved monitoring technology to improve ops processes and help with security and loss prevention.

Our Consumer Analytics solution jumpstarts your understanding of how your customers shop so you can create a shopping experience that suits your market. It does this by combining on-premises hardware analytics with software analytics through the Cloud (and, in some instances, at the customer premises).
## Understanding insights for better customer engagement

### Customer mobile data analysis

Using mobile analytics solution gives you rich insights into consumer behaviour both online and in-store. Working through existing mobile assets, it analyses unique customer patterns, drawing information from one-to-one customer interactions, without the need for customers to hand over any personal information.

<table>
<thead>
<tr>
<th>In-store optimisation can:</th>
<th>Increase shopper yield up to</th>
<th>Increase loyalty sign ups up to</th>
<th>Increase same store sales up to</th>
<th>Cut theft up to</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>40%</td>
<td>10%</td>
<td>35%</td>
<td>75%</td>
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(RetailNext Comprehensive In-Store Analytics)

### Loss prevention analytics

Loss prevention features help you to spot fraudulent transactions and improve your current monitoring set-up. Track incidents of theft and fraud with ease via a web-based platform that blends with your existing set-up, or by upgrading to the latest hardware:

- **POS exception reporting** – to track and analyse suspicious behaviour at the point of sale. Certain high-risk behaviours, like cash refunds, voids and discounts, are automatically logged to reduce theft and fraud
- **“No shopper present” integrated analytic** – brings together POS data and video to immediately detect when an exception transaction, like a ‘no sale’ or a refund, is made without a customer present at the POS. You can also view transaction data and shopper video at the POS for each transaction
- **Security event monitoring** – automatically records video footage when security systems, like Electronic Article Surveillance (EAS) systems and door alarms, are triggered. Video feeds can be viewed from a web-based interface that has technical support to give you the best quality available
- **Mobile capability** – access the security platform through a mobile app. Store managers can view saved POS transactions and watch video evidence without needing to be in an office.

Some US retailers have seen an increase of up to 1,100% in offer redemption rates as a result of using in-store analytic solutions.

(RetailNext Comprehensive In-Store Analytics)

### Complete solutions, whatever your needs

Access the smartest software for existing systems and leading-edge hardware with our Consumer Analytics solution in these five key areas.

1. **Traffic and shopper path analytics**
   - Track shoppers and passers-by, excluding staff, to create traffic data, dwell-time data and customer profiles with interior kinetic and direction maps. Includes limited video recording for auditing only. With the Interior Analytics license, use multi-camera cross-camera stitching and kinetic maps for a look at the entire store. For a bigger picture, count shopper Wi-Fi devices with enterprise Wi-Fi access points or RetailNext sensors, including API-access.

2. **Observation and loss prevention**
   - An observation and loss prevention video licence lets you record on one camera, with a POS terminal link, dashboard and reporting to help with loss prevention.
   - Timestamp security-related events for quick access to video footage.

3. **Mobile mail analytics**
   - For a large-scale solution, combine up to 50 access points with opt-in Wi-Fi to capture internet usage en masse. Get greater insight into website and e-commerce activity for one mall.
   - The access points also let you count shopper Wi-Fi devices (or by using Wi-Fi sensors) and give you zone path analysis.

4. **Mobile analytics**
   - Give you a guest Wi-Fi registration portal to analyse website and e-commerce activity (required hardware varies depending on Wi-Fi vendor).
   - Create department path analysis with Wi-Fi and/or beacons for a fuller picture.

5. **Access**
   - Real-time email traffic alerts (or to support in-store systems) with the Entrance Traffic Analytics or Interior Analytics license. Mobile apps for iPhone, iPad, or Android, priced per store.
The benefits

In the future, every business will be a digital business. As a retailer on the front line – and with your customers embracing new ways to browse and shop – the prospect can be daunting. Wherever you are in your digital journey, BT is here to help you build a strong foundation for future digital innovation.

An estimated 24 billion devices will be connected to the internet by 20201, often working in multiple ways, serving several parts of the business at once. By using in-store analytics and the Internet of Things, you can benefit from the same information in physical retail stores as you can currently gather about customer browsing habits online. With BT’s solution, you can:

• build store layouts that can maximise your traffic; up your average customer spend and improve conversion across your stores
• tailor customer-centric floor plans for each store so that the right products are always in the right place
• monitor customer behaviour data in pin-point areas where you can strengthen customer engagement personalised, targeted offers in real time.

Some US retailers have seen an increase of up to 1,100% in offer redemption rates thanks to in-store analytics, and it’s estimated that beacon-triggered messages will generate $44.4 billion in sales in the US alone.

All this helps you to deliver a better in-store and online shopping experience that translates directly into more sales. Plus:

• merchandise tracking works towards loss prevention. Stores are routinely seeing shrinkage decrease by 10%2
• digitisation of store inventories means you can spend less on operations
• you can easily test and measure promotional campaigns, plus you can engage with shoppers through several different channels with better customer behaviour insights.

Your global digital innovation partner

We’re a partner for retailers unlike any other. We’ve made it our business to understand yours, helping retailers across all industries, all around the world. But it’s our core strengths that really set us apart:

1. Scale. There’s little point in doing something great in a few stores – your retail experience needs to exist for every customer. Our global network and cloud services mean you can implement digital store technologies anywhere. And our experience means you can do it easily. With 48 data centres around the world, you’ll have choice about where to store sensitive information that may be subject to compliance requirements.

2. Knowledge. Most retailers have to overcome the challenge of integrating legacy applications alongside new digital solutions. We have the skills and know-how to make your existing technologies work smoothly with our Intelligent Retail solutions. When this happens, the data you make decisions with becomes richer and you get a greater return on investment.

3. Services. Providing a truly engaging digital experience relies on seeing beyond a single solution. With our understanding of big data and the whole IoT ecosystem, we’re well placed to help you integrate new technologies as they’re developed and make sure your business is future-ready. Always. We offer proactive monitoring to ensure your services are up and running 24/7 365 days a year. With one of the world’s largest cyber security practices, we’ll be able to help you take appropriate measures to keep data and applications secure.

4. Security. The biggest threat to the IoT is security. In an increasingly digital environment, you need great cyber defences because the bad guys have good technology too. We have 2,500 security experts working proactively to assess threats, protect against them and keep your business secure. By partnering with us, you can ensure your inventory, customer data and reputation stays safe.

5. Experience. Adopting new technologies shouldn’t mean working with unproven partners. We’re a reliable, global business. As one of the world’s leading providers of communications services and solutions; we serve 5,500 large corporate and public sector customers in 180 countries, on every continent. With us, you’ll have a partner in innovation that’s always with you, so you can be sure of the support you need today and tomorrow.

Acuitas Digital Alliance

The alliance is focused on providing a secure, cloud-based and future proof solution for businesses that want to take advantage of big data and the Internet of Things. It brings together the expertise and experience of BT, Valmarc, Intel, NexGen Packaging, RetailNext and SATO Global Solutions to deliver specialist networking, hardware, software, analytics, content management, security and cloud service solutions.

With the support of the Alliance, you can:

• optimise your supply chain, improve employee performance, cut waste and better manage compliance
• more accurately predict customer behaviour and create a better experience for consumers in store.

Who are RetailNext?

RetailNext are the market leader in big data solutions for traditional retail challenges. Their patented technology provides comprehensive, real-time analytics to help you collect and visualise store data, letting you see and better understand customer and staff behaviour.

More than 350 retailers in over 60 countries have adopted RetailNext’s analytics software and retail expertise to increase sales, reduce theft and eliminate unnecessary costs.

1 BI Intelligence, 2016 https://whatisbigdata.com/2016/08/16/iot-facts-and-figures/
2 https://retailnext.net/en/blog/the-five-key-ways-in-store-analytics-benefits-society/