# Welcome to Smartalk;
## the latest newsletter from TBS that keeps you connected.

Each month we will bring you the recent updates from TBS and explore the digital technologies that will shape the business of the future. This month we focus on public services, specifically:

- Healthcare; and
- Transport

As consumer-based services, it is exciting to see how digital technologies will be used to enhance our experience and improve overall efficiencies. Over the last few months, TBS have been greatly involved with public services; showcasing leading innovations in healthcare technology at iLINKS Innovations, and running Innovation Workshops with leading providers in the transport industry.

In this issue, we will show you how digital enabling technologies are driving transformational change for healthcare and transport services.

## To download the Smartalk, please click here.

# iLINKS Innovations – Leading Innovations in Healthcare

TBS are pleased to have supported Samsung as key sponsor at the iLINKS Innovations Conference, Aintree. The event attracted the most senior healthcare leaders to experience the technologies that are being used in the industry to drive transformational change.

With an open exhibition zone, to get hands on with the technology, and an informative session where TBS and Samsung delivered a presentation on Smart Healthcare, delegates discovered the potential impact the following digital enabling technologies could have on their services.

## Cloud
Allows healthcare providers to store and process volumes of data which can be analysed to:

- Improve performance
- Provide valuable insight
- Improve the overall patient experience
- Derive new ways of working as part of a business's continuous improvement programme
- Removes interoperability barriers

## Mobile
Clinicians and frontline staff can be empowered by Cloud connected Tablets, Smartphones and Wearable devices to capture and access, real-time data in care settings. Information from these devices can be used to:

- Improve operational efficiencies and enhance productivity
- Deliver a consistent, compliant, levels of care
- Improve the effectiveness of care

## The Internet of Things
Allows data to be captured from assets, which



can be analysed using data analytics and processed by a rules engine to automatically trigger and allocate tasks to:

- Save time
- Introduce new ways of working
- Provide new levels of insight not thought possible
- Provide real-time, crucial, information to key stakeholders to increase awareness surrounding the operations of the care setting and the patient

## Conversation as a Service (AI)
This has the potential to transform the way we request help and services. Since this technology is now very capable, we will see a range of voice and messaging based business applications being developed over the short to medium term. From requesting assistance to making an appointment, conversation based services will provide user-friendly service that will:

- Save time and money
- Improve operational efficiencies and patient experience

With insight into these technologies, and an understanding on how they are being used within their provision, the audience were encouraged to participate in an ideation session; to uncover unique ways as to how these technologies could

be used within their setting. The audience delivered some inspirational ideas, including:

- The introduction of a nationwide mobile NHS App that would provide healthcare professionals (HCP) with vital access to information on the person's health, by use of NFC; to ensure the appropriate care is administered. The first HCP would simply tap their device on the patient's mobile phone to receive key information on the patient.
- The implementation of wireless sensors on asthma inhalers to monitor the patients' usage patterns and vital signs to optimise doctor visits and detect anomalies to improve care.
- Using wireless sensors to provide the remote administration and monitoring of chemotherapy treatment for those cancer patients who live in remote locations with no local facilities. This would allow self-administration of the drugs with the control and monitoring being undertaken remotely by clinicians who can monitor the process and patient's vital signs.
- The enhancement of a way finding system in hospitals, which would use internal Wi-Fi Network and locations based algorithms to locate their exact position, via the visitors or patients' Smartphones; to provide a visual system like satellite navigation to guide them

to their target location in the hospital. The system could be extended further to include alerts when the patient leaves home so the hospital knows they are on their way.
- The introduction of an auto-translation voice service, using AI services, such as Chatbot and Voice Recognition. This would remove any language barriers faced by non-English speakers, by automatically translating in real time, allowing the patient to describe their symptoms in their own language and be translated accordingly for the health care professional.
- The wireless connection of sensors and artificial intelligence within the homes of those suffering from mental health issues to promote independent living, whilst alerting care providers of out of routine events.

With the success of the session, TBS will be running workshops with healthcare providers; enabling these organisations to identify areas of their business that could benefit from the deployment of technology. If you want more information on how enabling technologies could transform your services, or would like to hold a workshop, please email rebecca.evans@tbsmobility.com

## The Future of Transport

TBS have run many workshops with leading providers in the transport industry; exploring the impact digital technologies will have on their business. With a focus on digital transformation, the top four objectives have been:

- More revenue from better operations
- Cost reduction
- Engaging and empowering employees
- Procedural compliance

Faced with increasing pressured to deliver quality, cost effective services, and expectation for businesses to do more to encourage growth and deliver results, transport providers have worked

with TBS; deploying the following proof of concepts to practically demonstrate how technology can underpin their specific business benefits.

## UK Train Company – South

The turnaround process is of critical importance, failure to depart on time can result in hefty fines. Traditionally, information on train swaps would be sent from the Control Centre to the Information Controller (IC) and then relayed to the team via the despatcher. This process was flawed due to the risk of error and delay. TBS deployed a wearable solution which enables the IC to send tasks directly to platform staff and third party service providers, to improve the efficiency of communicating train swaps throughout the platform and to:

- Assure that trains depart on time
- Reduce the risk of imposed fines
- Enhance the customer experience

## UK International Airport

The timely-removal of snow and ice from an airport surface is imperative to the safe and efficient running of airports; failure to remove such hazards can result in serious downtime and serious implications for airports. To avoid such risks, TBS have streamlined this airport's snow and ice removal process. Harnessing wearables, the airport is now empowered with access to vital forecasts and data to:

- Ensure the timely removal of snow and ice
- Limit downtime and save money



- Ensure the safe running of the airport
- Reduce the risk of incidents and delays

## Midlands International Airport

Facilities are of crucial importance to transport providers. In such busy environments, the quality of facilities can soon become compromised. Facilities at this airport were previously cleaned on a rotational basis, meaning facilities were being cleaned even if they did not need cleaning or be left in disrepair when over used. TBS deployed wirelessly connected sensors within their toilets to monitor the number of visits and allocate jobs automatically to mobile devices once a threshold has been met to:

- Maintain the high standards of facilities
- Reduce operating costs
- Improve KPI performance and process compliance
- Ensure safer facilities with real-time notifications of slips, trips and hazards

## UK Train Company – North

Passengers want to travel on networks that are safe, secure and reliable. With a duty to perform security checks at regular intervals, this train operator decided to streamline their paper based process. With support for NFC, TBS have deployed a mobile solution for this train operating company that:

- Ensures compliance with compulsory checks
- Enhances reporting of exceptions
- Improves operational efficiencies
- Protects the welfare of passengers

With the proof of concepts complete, the businesses have the information required to make an informed decision.

## For more information visit:

www.tbsmobility.com or email info@tbsmobility.com