



## HOW TO BRING WASTE MANAGEMENT INTO THE DIGITAL AGE

It seems like every mobile worker you see today has some kind of new device that helps them to complete their job in a more effective and efficient manner.

So why should waste management be any different?

After all, the key benefits experienced in other sectors all apply. Warehouse, supply chain, delivery and even retail have seen an evolution in the way that technology has improved visibility, communication and collaboration.

Other industries have been slower to dive into the latest solutions, but still rely on technology to some degree. Waste Management, for example, often leverages GPS solutions to locate vehicles.

But in other areas they may well still rely on pen and paper management methods, which can be a serious block to creating accurate and efficient workflows.

## SO, WHAT'S NEW?

In a waste management scenario, a situation can rapidly become complicated with drivers and other staff managing vehicles as well as providing a service. There's routes and pickups to be considered, documents and reports to update and deadlines to meet.

New technology is digitising many of these processes, removing the chances of mistakes being made and simplifying drivers' lives.

Having a mobile device, usually a tablet, means drivers can download routes and be told exactly where to stop. Updates can then be sent back and forth from a central management hub. These processes include:

- **Optimising routes:** Building on the GPS solutions, the latest technology can help to optimise the routes taken by vehicles, monitor for overlaps and perform the same actions more efficiently.
- **Re-route:** As well as optimisation, managers can track vehicle telematics and ensure the smooth running of operations. If they become aware of an incident or heavy traffic, other drivers can be re-routed to keep the operation moving.
- **Providing confirmation:** One issue often encountered in waste management is customers who insist their collection had been missed. New tablet devices allow drivers to take pictures of locations that have been forgotten, meaning customer service staff can deal with these customers rather than drivers having to juggle jobs.
- **Customer service:** In addition to making sure the customer service team is updated with missed collection, they can also access time/location data and even make data available to customers. This means they can check when a collection is expected or see if there is enough time to put out containers.

So it's clear that new technology serves many purposes in a waste management situation. But perhaps the most attractive benefit is that it often saves money in the long run. Rugged devices are often easy to maintain and provide the accuracy and efficiency that many businesses need to stay competitive in today's market.



## WHAT DEVICE OPTIONS ARE THERE?

When it comes to rugged devices to be used in a waste management setting, the three key consideration are durability, safety and ease of use.

It's around these principles that TouchStar designed the **TS3200** rugged Android tablet, which is housed in an ultra-shock absorbent rubber matrix. The result is unparalleled protection from the shockwaves and vibration that can reduce the lifespan of crucial hardware.



The device cradle's magnetic dock and lock system offers one-handed docking, locking and rapid removal in landscape or portrait orientation. Once docked, the **TS3200** provides maximum driver visibility with minimal dashboard clutter.

The tablet is easy to manoeuvre due to the lightweight, ergonomic shape and 7" glare-proof screen, and is operational in even the harshest environments thanks to its IP65 rating provides full protection against dust, water and oil ingress.

Crucially, it is also fully compliant with the ATEX IECEx directive, allowing safe use in potentially explosive environments. The unit can also withstand drops of up to 1.5m on to concrete and operate in temperatures of -20°C to +50°C, marking it among the most rugged terminals in its class.

The **TS3200** runs on Android with additional features including front and rear-facing cameras, a high specification barcode imager and 3G, Wi-Fi and Bluetooth communication systems.

TouchStar also offers the **TS5000**, designed for all tough and heavy-duty tasks. Drop tested, dust-proof and water-proof, the IP67-rated **TS5000** provides industry leading ruggedness and reliability. Running on Android, the tablet offers precise and powerful scanning combined with the embedded high-resolution camera to provide startling productivity gains.

The **TS5000** is available with an array of communication options. Supporting Wi-Fi 802.11 a/b/g/n, Bluetooth and 2G/3G/4G radio and the inclusion of a high volume 5000mAh battery enables users with the power, time and ability to stay connected wherever they are and whatever task they are performing.

## MANAGING DEVICES

Of course, selecting devices is only one side of the coin. To get the best out of rugged technology, a system needs to be in place to allow management teams to communicate with drivers and provide updates, such as re-routing.

TouchStar's solution enables a live connection between drivers, transport staff, accounts teams and customers. Sharing live data regarding vehicle position, collections, routes and more enables both better operational decision making and a reduction in administration.

If you need advice on what solution what be best for your operation, visit TouchStar today or email enq@touchstar.co.uk



TouchStar Technologies Ltd, 7 Commerce Way, Trafford Park, Manchester, M17 1HW United Kingdom

Visit: www.rugged-mobile-computers.com Email: enq@touchstar.co.uk Tel: +44 (0) 161 874 5050