Briefing Note

CITY OF WOLVERHAMPTON COUNCIL

Title: Vibrant and Sustainable City Scrutiny Panel - Digital Technology in City Environment

Date: 25 March 2021

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Intended Audience: Internal ☐   Partner organisation ☐   Public ☒   Confidential ☐

Purpose or recommendation
The purpose of this briefing note is to inform the Panel of current Digital development within Environmental Services part of City Environment.

Overview
The use of digital technology within all sectors is accelerating at pace and this includes the enhancement of all modes of transportation. The potential subject area is vast so for the purposes Environmental Services the briefing note provides an outline to some of the key areas of development within CWC and is intended as a brief overview for discussion.

Background and context
The CWC digital transformation programme is helping to revolutionise the ways the council communicate with and provide services for our residents. But what does this mean for our workforce and workplaces?

Environmental Services have worked closely with the digital transformation programme supporting Customer Services and the Web team to ensure business rules, web content and back office digital tools and solutions have been implemented and continue to be developed to support the wider work to transform local public services. A number of digital solutions and new ways of working have been adopted to reduced paperwork and duplication and have delivered both back office and operational efficiencies, which in turn has improved the customer journey for members of the public.

Environmental Maintenance
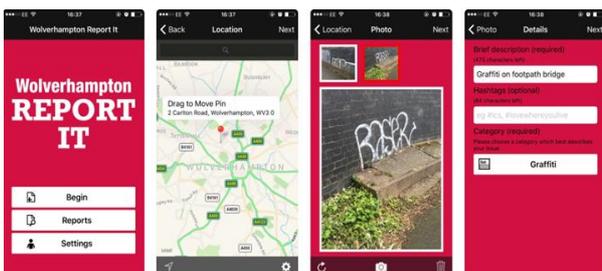
Wolverhampton Report It app makes it easy for members of the public to tell City of Wolverhampton Council about environmental problems in the area. From Graffiti to fly-tipping, abandoned cars or dog fouling to street lighting - it can all be done in three simple steps from your smart phone.
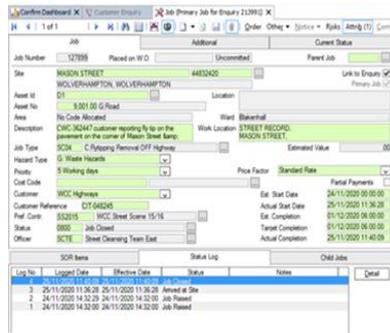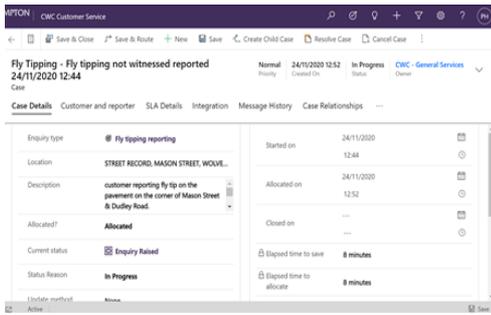
Electronic interface between Customer Services and front-line teams. CRM Customer contact centre enquiries interface with CONFIRM in real time with jobs raised to managers & front-line teams electronically via iPad. Job status messages updated by front-line teams on the iPad are updated within CONFIRM and CRM's enquiry case detail in real time with automated email updates to the customer.

Geowulf. GIS mapping of Environmental Services assets
Street cleansing/grounds maintenance assets that are maintained on programme are visual identifiable on the electronic map. Each asset has a plot number and description. Highway & Park assets detailed on Geowulf are also detailed within the CONFIRM's data base/map functionality. Geowulf is also in the process of becoming public facing.


Microchip Pet Scanner – used to scan dead cats/dogs collected by street cleaning teams. When the microchip number is detected we are able to log on-line with Pet Log to identify the owners name, address & contact details.

Waste & Recycling Services

Supatrak is used for:
- Tracking all waste vehicles
- Job management for Domestic, Recycling and Garden Waste rounds
- Sending routes to incab devices (Garmin)
- Live monitoring of round progress
- Highlighting assisted collections to crews
- Reporting waste exceptions, reasons for non-collection, delays and non-presentation
- Reporting on exceptions, number of lifts, location at a certain time/date
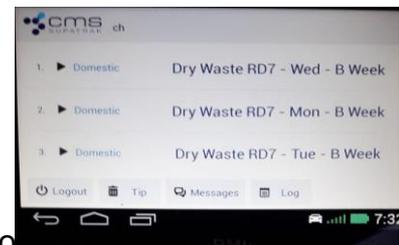
With further capability that can be developed:
- Bin delivery rounds (in conjunction with Customer Services CEP)
- Bulky Waste rounds (in conjunction with Customer Services CEP)
- Missed bin messages to crews (in conjunction with Customer Services CEP)
- Driver behaviour studies and league tables
- Fuel efficiency monitoring
- Vehicle "health" alerts including fuel levels, emergency stop and mechanical warnings
- Service and MOT recording and alerts
- Driver identification via dallas key

- **Automated renewal/payment** for 'Garden Waste' Collection – Annual direct payment method introduced for Direct Debit renewal 2022. The cost is the same as if you were to pay on-line £35 (£17.50 concession), but with direct debit you won't have to worry about logging-in online or calling us when you want to renew the service, it will be done automatically.
- **Adobe Signatures** for 'Commercial Waste' Collection - New customers agreements are signed using adobe. This enables Business Development to get the agreement to the correct signatory securely and electronically.

Parks and Open Spaces

Playsafe is our smarter way to capture, manage and maintain park play equipment and conduct inspections. Operationally the parks team and maintenance team use Playsafe for regular playground inspection and repairs. Playsafe audit trails also assist with the defence of any personal injury claims as evidence can be provided quickly in relation to inspection dates, risk rating and repair dates etc.

The Love Exploring app (Active, Educational and Fun) - It is a tech trail that uses augmented reality to enhance a walk. Provides users with free games, trails around West Park, an interactive map and information about the park, its history and the conservatory as you walk. The app is designed to encourage families to get active and enjoy the parks and green spaces in our City.
Each dinosaur holds a quiz question so everyone learns as they play!

Public Protection and Environmental Crime

CCTV – The number of cameras has increased recently with additional cameras are planned later in 2021. These are primarily used to detect and deter fly tipping offences.
- Rapidly deployable CCTV and ANPR solution
- High Definition video 1080p at 25 frames per second
- 360 degree field of view with pan, tilt and zoom
- Low light infra-red ANPR camera
- Remote access through 3g/4g data sim
- Remote access on mobile device
- Full data encryption and security-controlled access

Body cams are now available for enforcement staff to wear. These will assist with evidence gathering and provide additional safeguards for staff and members of the public.
- Full HD 1080p recording video and audio at 30 frames per second
- Fully encrypted internal storage holds 6 hours, 20 minutes recording
- 120 degree field of view
- Pre-record available (When camera is switched on the previous 20 seconds is also recorded)
- Unique serial number stamp within video for evidential trail

Shop a tipper re-launch Spring 2021- the Council is aiming to re-launch an initiative to encourage residents to provide information regarding fly tipping offenders. Images of offenders caught on CCTV will be displayed on the Council Website and social media platforms will be used to increase viewing figures. A spending voucher to the value of £100 for use in local shops will be available to anyone that provides information leading to the successful payment of a Fixed Penalty Notice or prosecution. Anonymous reports will also be considered.

Idox/Uniform - Specialist software to support inspection and enforcement of standards, including environmental health and is the primary database used by Public Protection and Enviro-crime staff. There is also a two-way interface with Customer Services CEP 'CRM4' to ensure reports & enquiries from the general public are dealt with efficiently and effectively.

The team are looking to enhance their digital technology and role out our tablet applications to enable officers to remotely retrieve and upload data and documents whilst on the move and drive productivity.

Bereavement Services

Obitus Music Media System and Webcasting - a new and improved package that not only allows music and hymns to be downloaded for funerals at Bushbury Crematorium, but also enables visual tributes to be displayed on new screens in both chapels.

In addition, webcasting facilities enable families who are unable to attend, to view the streamed service remotely from anywhere in the world which has been beneficial during Covid restrictions.

Digital Autopsy - partnership with 'iGene' who provide Digital Autopsy facilities in Sandwell on behalf of the HM Coroner for the Black Country four authority jurisdiction.

A Digital Autopsy is a non-invasive post-mortem in which digital imaging technology, with Computerised Tomography (CT) images, are used to develop cross-sectional images for a virtual exploration of a human body.

Through Digital Autopsy we can reduce the need for invasive procedures and help to minimise the pain for bereaved families. Digital Autopsy can establish cause of death 75% of all post-mortems ordered by the Coroner. The procedure is conducted by an iGene radiographer and reported by a UK based GMC registered radiologist on the post-processed CT images of the deceased to produce a radiological interpretation in the form of a Digital Autopsy report that will then be then sent to the Coroner and their pathologists.

The use of a DA facility is still in its infancy within the UK, but the City Of Wolverhampton Council is keen to support the use of the system and save the need for invasive Post Mortems, which are obviously upsetting for families and can ultimately cause delays to funeral services being arranged.

Things to come
- Use of technology to reduce the carbon footprint i.e. move to battery powered hand tools and electric vehicles/machinery and offset carbon emissions with tree planting. CWC has committed to planting 4,000 trees following the launch of the council's Tree and Woodland Strategy which also supports the city council's recently declared climate emergency.
- Tree maintenance – Further develop the CONFIRM data base of tree assets to record inspections and process customer enquiries.
- Develop further the Park council web pages to provide map details, park locations and real-time updates using digital technology and promote parks through Social Media. Use technology to record footfall and help us understand more accurately reason(s) for visiting the park. Introduce Wildlife cameras to record wildlife activity after the park closes (badgers West Park etc.). Also, to investigate digital signage within the parks following consultation with Park User Groups and with consideration to their English Heritage listing and their Victorian features. NB. Digital notice boards are considered to be high risk due to potential anti-social behaviour and vandalism, in addition digital notice boards in some locations may not be in keeping with the character of the park.

Shown below are examples of static signs currently used in parks.

- Allotment management ICT Solution under consideration with proposed integration of Colony 6.0 into Agresso/Unit 4 to enable automated invoicing.
  - Manage detailed records of plot inspections, including photos and notices issued
  - Do away with spreadsheet chaos! look after customers in one central GDPR compliant system
  - Access the allotment information whilst out and about
  - Take the hard work out of issuing accurate invoices and chasing debtors
- Need for live mapping of cycle routes in the city particularly those that pass-through parks and open spaces. CWC has in excess of 60km of cycle way in our city that highways could map out on Geowulf for the general public to be able to view.
- Promote/create more Park User Groups and signpost them to available grant funding
- Waste & Recycling 'Domestic Kerbside' Collection – Further develop SupaTrak functionalities and/or consider CONFIRM software solution in order to improve reporting and set up a 2-way electronic interface with Customer Services CEP CRM4 to improve the customer enquiry journey. Also, to explore route optimisation software to drive further kerbside waste collection efficiencies.
- Waste & Recycling Services 'Trade Waste' collection- to implement an IT solution for the Commercial waste service – SupaTrak proposals and CONFIRM software solution under consideration. Subject to approval and procurement this will be in place 2021.
- Waste & Recycling Services 'Bulky Household' Collection - to implement an IT solution for the Commercial waste service. Improve the current Microsoft Dynamics solution or develop SupaTrak functionalities and/or consider CONFIRM software solution. The aim to fully automate the booking and collection process in order to both improve reporting and set up a 2-way electronic interface with Customer Services CEP CRM4 that would improve the customer enquiry journey.
- As part of Phase 2 Public Service Network (PSN) network as part of local full fibre network. Fixed CCTV will get upgraded to full fibre broadband backhaul. Further opportunities possible using 5G for mobile CCTC.
- Also opportunities offered by the ERDF funded Smart Infrastructure project which will include sensors on street lights as part of the upgrading to LED and remote monitoring to deter fly tipping (increased illumination / motion sensor) .

Discussion

The above examples represent only a small sample of the ways in which digital technology enhances the efficiency and effectiveness of the services provided to our residents.

The note is intended to provide a background for discussion and to generate questions regarding how technology is used and other areas in which development should be considered.