

# UNLEASHING DIGITAL TO UNLOCK VALUE

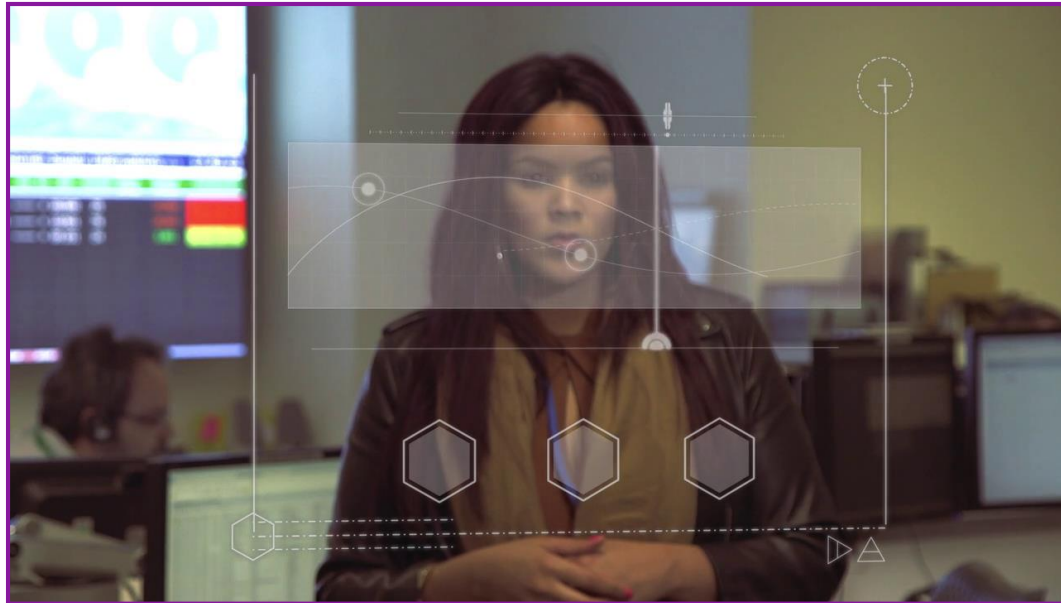
A woman with long dark hair, wearing a patterned top and a lanyard, is seated and pointing her right index finger at a large digital display. The display shows a grid of data points and a line graph. In the background, there are several empty office chairs and a computer monitor. The overall scene is dimly lit, with the primary light source being the digital display.

27 MARCH 2017



# OUR VISION

By 2020 to be the most trusted water company:  
delivering an outstanding customer experience, the best value service and environmental leadership.



# CREATING VALUE FOR CUSTOMERS AND SHAREHOLDERS

Previously announced  
**£670m** totex savings

Outperforming our  
Final Determination  
by **£260m**

Helps us on our journey to build a leading business

**Retail**

**Water**

**Waste**

**Named  
schemes**

E.g.  
Birmingham  
Resilience

Ambition to be 'Upper Quartile' by the end of AMP6 and beyond into AMP7

# BUILDING A LEADING BUSINESS

The outcomes we are driving to deliver against our Upper Quartile (UQ) ambition:

## Retail



- Already moved from 6<sup>th</sup> in AMP 5 to 4<sup>th</sup> (of 18) and ambition beyond
- Balancing drive for cost to serve efficiency with UQ customer experience and industry leading support for vulnerable customers

## Water



- Moving from 11<sup>th</sup> to at least 4<sup>th</sup> (of 18) by end of AMP6
- Targeting significant annualised run rate totex reduction of ~£20m
- Driving better productivity, lower costs and smarter investment decisions

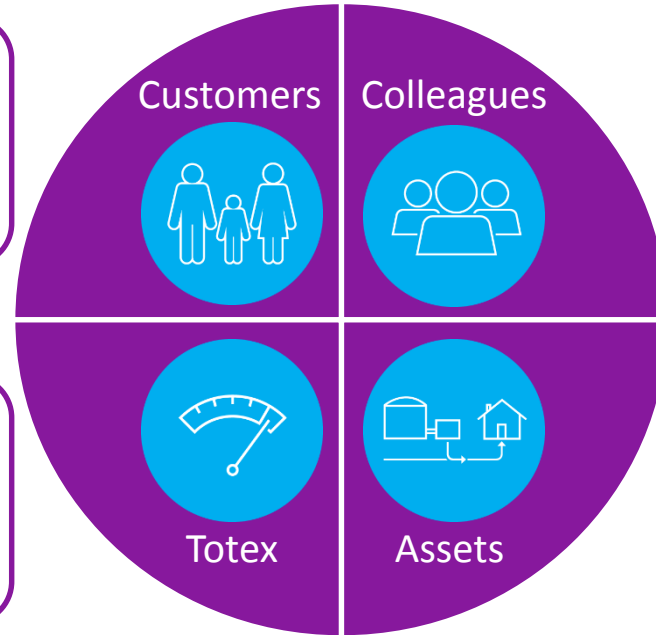
## Waste



- Remaining in the top 2 (out of 10) from pole position in AMP 5
- Improving service and earning customer ODI rewards
- Maintaining our sector leading position and seeking to drive further value

# DIGITAL STRATEGY

## Key levers of digital value



Reinventing water with customer at the heart of all we do:

- Easy and right first time
- 24x7 channel of choice
- Affordable for all

Transforming our colleague experience:

- A productive day's work
- Intuitive to use
- Inspiring our talent

Driving financial outperformance:

- Lower costs
- Smarter capital decisions
- Earning customer ODI rewards

Reducing our risks:

- Improved asset health
- Quality analytics
- Strengthening cyber defences

## Underpinned by innovation and agility

**Devices** – smartphones, tablets, sensors, wearables, drones, satellites, robots

**Design** – apps, interfaces, architecture, integration

**Data** – capture, accuracy, analytics, predictive modelling, insight

# BECOMING A UQ RETAIL BUSINESS

## Retail

- Outperforming our retail industry allowance of £21 cost to serve each customer – each 50p per customer of efficiency is worth £1.7m
- We are currently delivering performance of £17.50
- Reduced operating cost
  - Shorter calls, improved utilisation, fewer repeat calls
  - Channel shift to new self serve & lower cost channels
  - Reducing unnecessary contact
- Improving bad debt performance
  - Using data to accelerate debt payment and also support vulnerable customers
- Improved experience through first time resolution and choice of channels with the only 24 x 7 full service offer in the sector
- Building long-term value through customer data and insight



New contact centre desktop

New website & digital channels

New bill

New customer data analytics

# BECOMING A UQ WATER BUSINESS

## Water

- Targeting significant annualised run rate totex reduction of ~£20m
- Reducing operating costs
  - Less travel time and shorter time per job
  - More efficient use of chemicals and consumables
  - Lower costs on fines from the Highways Agency
- Making smarter investment decisions
  - Improving data capture of asset health and maintenance tasks
  - Using analytics to predict asset deterioration
- Reducing risks by real-time water quality measurement and insight
- Creating a culture to embrace new technologies, including satellite imaging, to continually reduce costs and risks



New fieldworker apps and devices

New stores apps & centres

New network modelling system

New quality analytics

New treatment works app

Developing satellite imaging

# BECOMING A UQ WASTE BUSINESS

## Waste

- Remaining in the top 2 (out of 10) from pole position in AMP 5
- Improving service and continuing to earn strong customer ODI rewards
  - Connecting sensors and analytics to prevent flooding and pollution
  - Quicker diagnosis and resolution of jobs through analytics
- Maintaining our sector leading efficiency
  - Using automation and remote control operation to reduce operating costs
  - Optimising asset investment by advanced modelling
  - Reducing environmental impact and risk by intelligent data driven decision making
- Developing opportunities for further efficiency through innovation, such as drone inspection
- Creating value through innovative use of reusable materials



New operational decision system

New colleague app for customer ODIs

Supply chain now on fieldworker app

New works automation

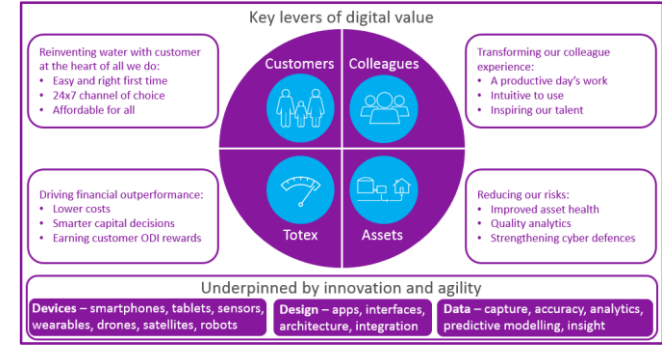
New risk management app

Developing drone technology



# CONTINUING TO DRIVE AND EMBED A DIGITAL FUTURE

- Our digital strategy is making a huge difference today
- All our investments pay back on a two year basis
- We are entering year three of AMP 6 and we are not stopping

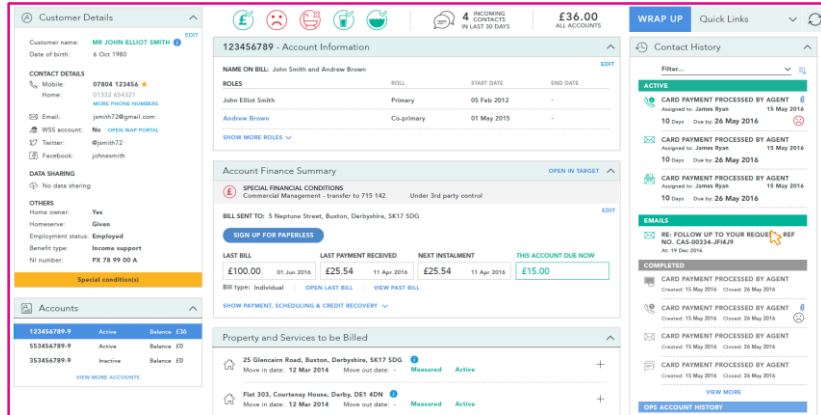


- We are embedding innovation to embrace new opportunities
- Our customers are at the heart of all we do
- We are transforming the experience for our colleagues
- We have unleashed digital and are creating value

**Retail**

# CUSTOMER MANAGEMENT PORTAL

New customer advisor desktop, collating diverse sources of information into a single, insightful view of the customer



- Drives productivity improvements and an improved customer experience
- Reduces call handling time to 5 minutes from 8 minutes per call – a **£330k cost saving per year**
- **15% reduction** in repeat calls since implementation
- Supports multi-skilling and reduces training time
- Easier customer identification, “one click” processes and use of empathy indicators enhancing service

Retail

Water

Waste

# CHANNEL SHIFT TO DIGITAL

Multi-channel offering for customer contact,  
including self service, web chat and social media

- **1.3m** more customers using our digital service
- **Reduces our cost to serve by £550k per year** through lower FTE requirements
- Over **950k customers** now using online billing – **saving £300k per year** in printing and postage
- **£50m** online payments collected
- Only water company with 24/7 availability for all calls (not just emergencies)

Chat with us

My name is.. \*

James

Email Address \*

james-cr.wright@seventrent.co.uk

What would you like to chat to us about today? \*

My account, billing or payment

Cancel Submit

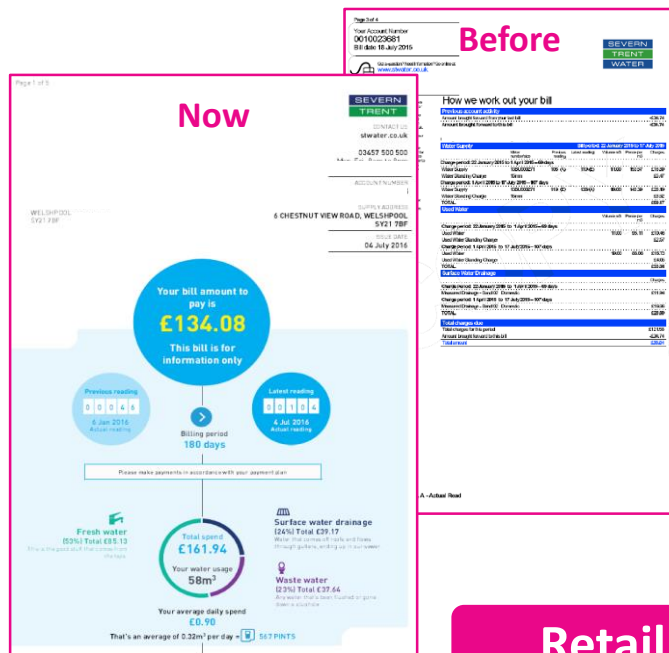
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## NEW BILL FORMAT

## Total redesign of the customer bill, focusing on simplicity and clarity



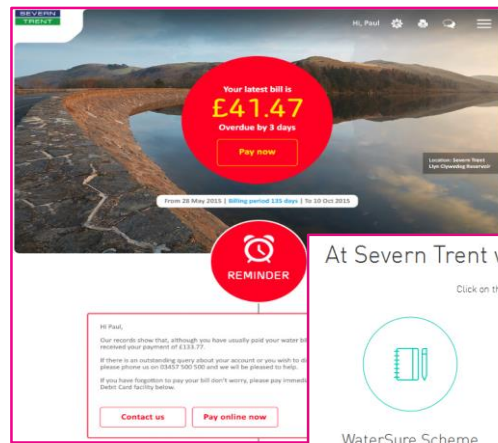
- Easier to understand bills has resulted in a **17% reduction** in unwanted customer contacts since go-live
- For the recent main billing run, in February alone there were **15k fewer calls**
- Customer feedback on the improvements has been great
- Currently designing an interactive digital bill – to offer even greater ease of understanding and further reduce cost to serve

# Retail

# REDUCING BAD DEBT

## Differentiating between customers who can't pay and those who won't pay, from leveraging data

- Obtaining additional information on our customers to optimise our collection strategy and improve collection rates
- Helps better identify those in need of financial support
- New approach to maintain our leading bad debt position and create further opportunity
- Online, interactive budget calculator process helps customers who are struggling to pay identify the correct payment plan



At Severn Trent we have many ways we can help you

Click on the icons below to explore our different schemes and options

WaterSure Scheme	Big Difference Scheme	Severn Trent Trust Fund
WaterSure can help you if your income is low and you use a lot of water	If you have a low disposable income, Big Difference Scheme may be able to help	Severn Trent Trust Fund is a registered charity that provides financial help
<a href="#">FIND OUT MORE &gt;</a>	<a href="#">FIND OUT MORE &gt;</a>	<a href="#">FIND OUT MORE &gt;</a>

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# Water

## New devices, with easier to use fieldworker applications, improved connectivity and greater mobility



- Using latest version of Panasonic's Toughbook
- Enables quick and easy feedback on completed work
- New Fieldworker app improves productivity and reduces training timescales by **50%**
- Better connectivity avoids colleague frustration and time wasted in searching for a signal
- Greater efficiency - saves technicians 30 minutes per day, equating to over **£500k per year**



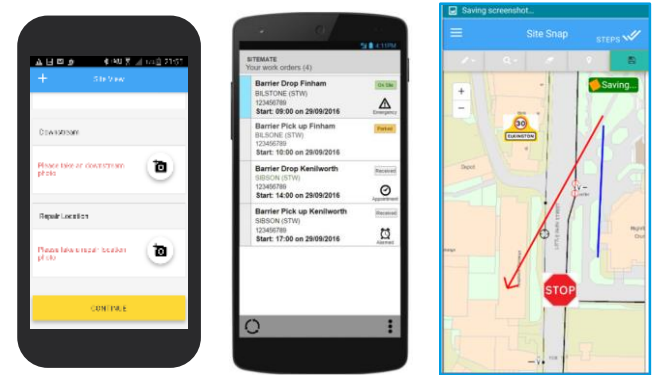
## Two new applications for use in the field, built by our internal app team

### SiteSnap

- Simplifies the creation of 100,000 traffic management sketches per year
- Reduces the number of permit application rejections
- Saves our technicians 20 minutes per day, equating to **£360k per year**

### SiteView

- App records evidence of compliance with strict Highways Authority requirements
- Expect to avoid **£250k per year** in fixed penalty notices



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## Consolidation of our stores and implementation of new stock management technology

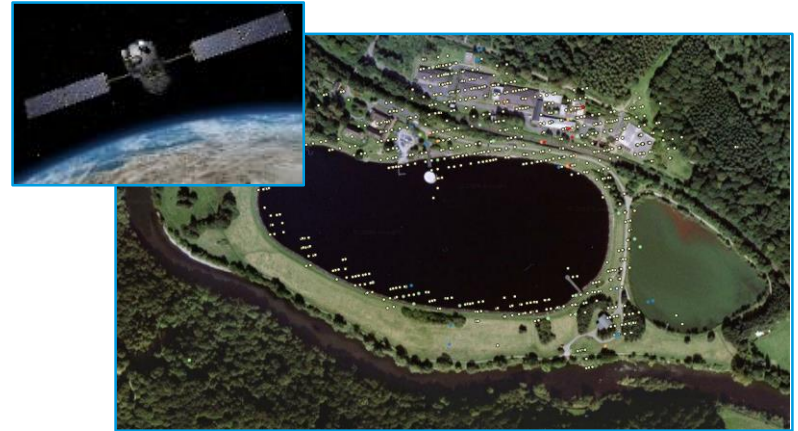


- Stores now consolidated into three regional distribution centres and six satellite stores
- Barcoded stock control creates a supermarket style self-service experience
- Repair teams now saving 30 minutes per day
- Improves stock availability, reduces risks and enables better supplier discounts
- Savings generated of **£1.2m per year** through improved stock availability reduced one-off purchases

# SATELLITE TECHNOLOGY

## Exploring options to use satellite technology to enhance asset monitoring and inspection regimes

- We are actively looking for new opportunities to use cutting-edge satellite technology
- Our first pilot has the potential to help identify leakage locations
- Will help reduce the cost to resolve leaks
- The technology works by identifying interactions of soil and chlorinated water
- We will seek to roll out if we can demonstrate a strong return on investment



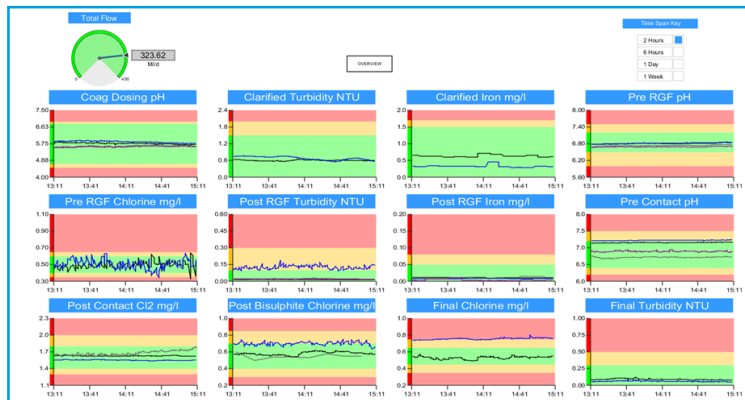
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# PROACTIVE NETWORK MODELLING

Deployment of new high-speed data loggers around the network to support a move to prediction and prevention



- Loggers provide real-time information directly to control room
- Provides more detailed information about the health of the network and improves modelling
- Identifies pressure spikes which can lead to asset failure
- Helps identify root cause of failure to assist prevention
- Enables proactive intervention to prevent assets from deteriorating – **avoiding £1.5m in customer ODI penalties**

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# CRITICAL TO QUALITY MONITORING

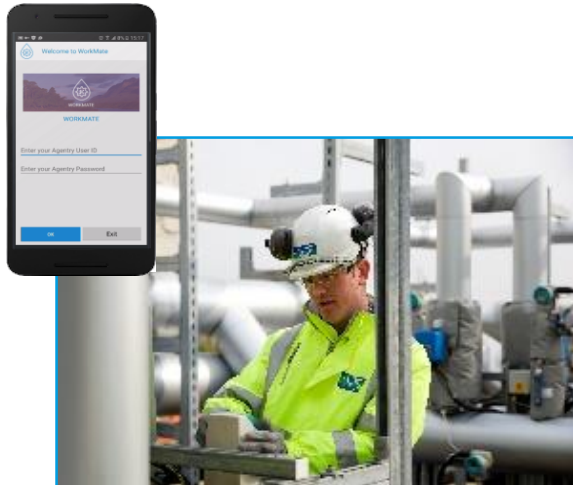
## Enhancing control of water quality, through effective measurement and control of key stages in the process

- Implementing best-practice methodologies at major treatment works is improving data management
- Establishes the key measurement points at each process stage that are critical to the quality of the water
- Using technology – including sensors - ensures we understand our performance against these key measures in real time
- Allows proactive action to maintain quality and operate plants efficiently
- As a result, we have reduced quality failures at our works by **more than 50%** in the last two years



# WORK MATE

New app which ensures our teams have readily accessible instructions to complete critical water quality tasks



- Ensures our teams do the right work at the right time
- Easily accessible, clear instructions and recording of actions completed
- Replaces old operational task lists saving time to re-key data at the end of each round
- Helps maintain our assets in the best possible health and keeps critical to quality measures within tolerance

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# WATER QUALITY ANALYTICS

Using the wealth of data in our systems to build analytical capabilities and help analyse the network

- Aggregating data to help identify areas at high risk of water-quality events
- Allows us to undertake proactive maintenance at these locations to maintain the health of our assets and prevent failures from occurring
- Expanding the use of data and analytics to support our overall management of asset health



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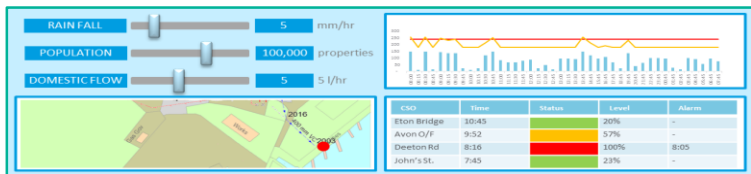
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# Waste



# PROACTIVE ASSET MANAGEMENT

An operational decision management tool to help identify blockages in the network and automate decision making



- Helps prevent floodings and pollutions
- Data from 1,000+ loggers combined with historic data and weather information to identify when a sewer is most likely to be blocked
- System automatically raises work for our operational teams to decide on the appropriate resolution
- Available on all our new mobile devices
- Improves our predictive capability by **33%**, reducing pollutions by 50 per year and **avoiding £3m in penalties**

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# COLLEAGUE ENGAGEMENT IN ODIS

‘Love Our Network’ app developed to engage our workforce and get their help in looking after our assets

- Over 4,000 of our employees live and work across our network
- The app allows colleagues to easily report their observations as they travel around our region
- Helps look after assets, manage risk and improve customer service
- Forecasting a **reduction of >5,000 customer contacts** per year as a result of this app



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## Using new Panasonic devices to help reduce the time to diagnose problems and provide an improved customer experience

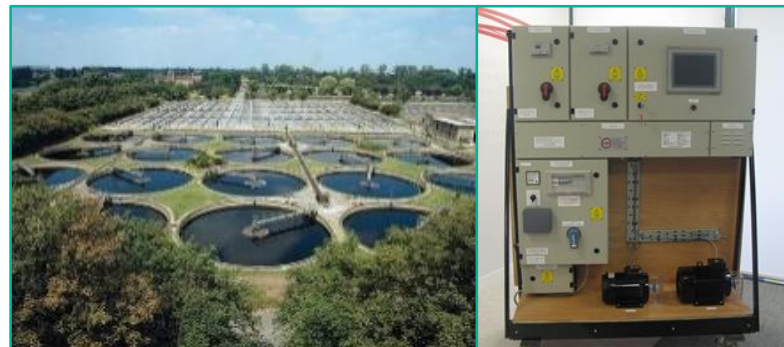


- New software provides supply chain field workers with information about previous jobs completed at the property, helping quickly diagnose problems
- Using the empathy indicators from our Customer Management Portal, the field worker will know how the customer is feeling, providing better responsiveness
- Details entered in Site Mate automatically update our records and provide a status update to our customers through the “Track My Job” app
- App helps to improve our customer satisfaction scores and through rolling out to our supply chain, **will save £146k per year**

# INTELLIGENT PUMPING STATION & CATCHMENT CONTROL

**Network pumping station trial utilising machine learning, automation and remote control to optimise pumping operations**

- Collaborating with our supply chain to create intelligent assets within the network
- Adopts new sensor technology
- Uses 'machine learning' to automate and remote control assets, preventing potential impacts on customers
- Aiming to optimise the network by utilising the large amount of latent storage
- Helps prevent floodings and serious pollutions

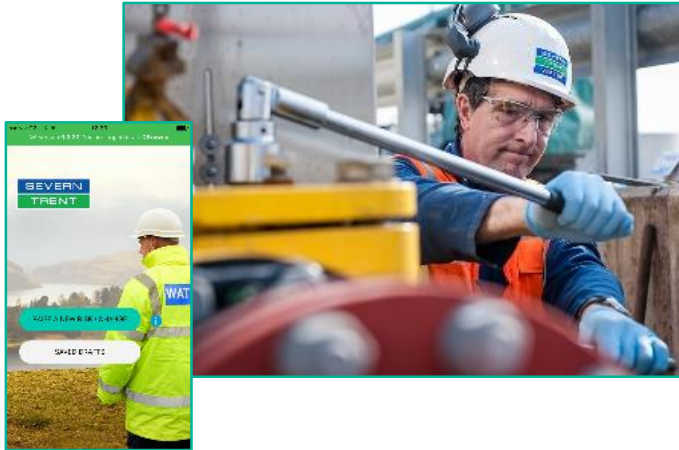


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## Severn Trent Operational Risk Management (ST-ORM): new app-based system allowing easy recording of operational risks identified

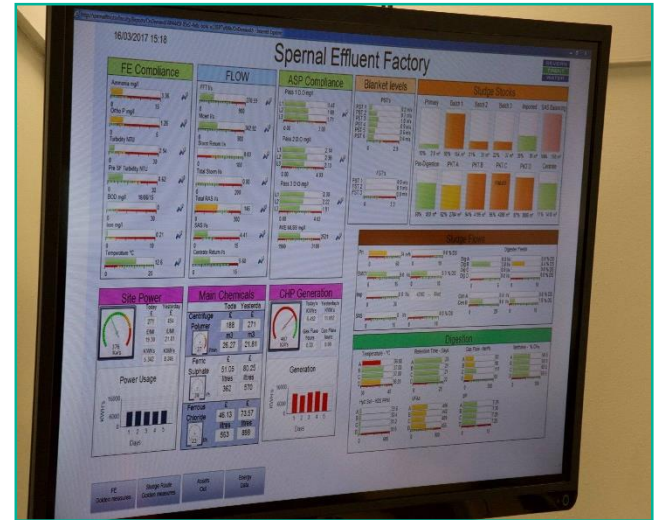


- Allows colleagues to record all operational risks, real-time, wherever they are on mobile devices
- Enables easier identification and prioritisation of key risks
- Allows us to understand our overall risk profile and make fast decisions to improve the health of our assets
- Helps to prevent asset failure and enables better targeted investment
- Forecasting **£400k per year totex saving** through proactive risk mitigation

# EFFLUENT FACTORY

## Managing treatment work assets through visualisation, automation and remote control

- Enhances visualisation of process performance and remote control of assets
- Enables real-time decision making through sensors and monitors, with dashboards available on mobile devices
- Helps maintain the health of our assets and the integrity of our treatment processes
- Over the last 12 months at Spernal treatment works, we have **saved £100k** in energy and chemical costs



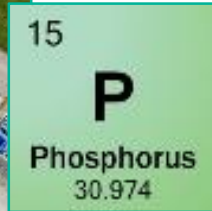
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# PHOSPHATE RECOVERY

## Water treatment technologies to remove phosphorus from sewage



- Phosphorus is abundant in sewage and is a major pollutant in rivers
- Tight standards are imposed that we have to meet
- Adoption of new technologies to remove phosphorus means we are now world leaders in this area, **saving £10m this AMP**
- Also leads to a new revenue opportunity; by refining the sludge into a high quality agricultural fertilizer and turning it into a valuable resource

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## Utilising new drone technology to inspect our assets

- Used for applications including asset inspections
- Leads to savings from absence of scaffolding and minimises health and safety risks
- Estimated inspection **cost savings of £300k per year**
- Currently exploring other uses, such as checking that treatment processes are optimised
- Helps ensure compliance with discharge standards and maximises the quality of the raw products into our energy generation plant





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