



## WHERE TO NEXT?

### THE GROWING IMPORTANCE OF BUSINESS INTELLIGENCE TO THE WASTE MANAGEMENT SECTOR.



William Flanagan, CTO,  
opensky Data Systems.

There's something in the air around this time of year that gets us to take a little time out and reflect on the bigger picture of where our industry is at present – and where it's headed in the foreseeable future. And it's not

just in the Waste & Recycling Sector, it's a global movement. With the world's eye on the achievement of waste recycling and management targets, at both European, National & Regional level, it's no wonder that data and statistics is the new language of choice in this space.

But apart from regulatory influences, there are more reasons why people are turning to their data for answers. In a recent report, Analytics and Business Intelligence was the #1 ranked technology priority for CIOs and Business teams. Organisations are 40% more likely to expect a revenue increase from using these services, so it's an investment many see as being worthwhile.

To some extent, the waste management industry has become a victim of its own success. Local waste authorities, not only in the UK, but across Europe, are being driven forward at an ever-faster pace by the legislative framework in which they work, by the growing awareness and demands of the general public – and also by the competition between authorities to achieve best-in-class results and improved waste management performance.

And without doubt, one of the key drivers of this race to the top is the availability of timely, accurate and sophisticated waste data so that national, regional and per contract performance can be measured, monitored, reacted to and even predicted.

#### Waste Data...Where is It?

Waste Data is everywhere, from the AVL units in collection vehicles that collect waste, to the weighbridges, contractor and authority financial and HR systems, facilities operational systems, mobile and social media references, GDP and Housing Data, Legislative Data and European targets and the myriad of existing software that already manages thousands of tonnes of waste, every day in the UK. But data is just that, lots of data. Unless this data is used in business processes such as invoicing, reporting etc, it can sometimes be perceived as a nuisance causing storage, governance and privacy headaches for network admins. So how do waste management companies, recycling companies and waste collection and disposal authorities tap this waste data goldmine and transform redundant data into critical business information?

Welcome to the world of Business Intelligence services, which deliver the sort of real time, multi system and multi data source functionality that can have a completely transformative effect on any industry and reveal insights that can truly make a huge impact on how organizations and businesses do business. Insights reveal information based trends, not ones perceived only by certain departments or customers. You can't argue with the facts!

The progress in the past decade has been huge, and it's faintly charming to look back to the days not so long ago when Excel and paper systems were the order of the day, but by the time all the paperwork had been aggregated, the information was already out of date. Fine for reporting on a monthly or quarterly basis to the likes of DEFRA and others but not great to react to inefficiencies in the waste management process or to spot trends in poor performance or causes of cost spikes!

### Waste Data.... How do I make sense of it?

Availability of business intelligence information is transformative for a number of reasons. Firstly, the ability to react with confidence is greatly enhanced when the information at your fingertips is absolutely up-to-date, not waiting until month end. Secondly, as previously siloed systems of information such as finance, marketing, operations and sales all have an impact on each other in the real world, business intelligence solutions merge them and look for patterns of impacts of one against the other. Thirdly, as Microsoft Business Intelligence powerhouse, PowerBI is such a simple, familiar and easy tool to use (even if its processing hundreds and thousands of pieces of data in a moment), the full value of an organisations data is unlocked – and placed at the fingertips of everybody in the organisation who needs access to it, when, where and how they want it. So the goals of any authority or private company can be shared throughout the company and the contribution of all functions are totally transparent across the entire organisation.

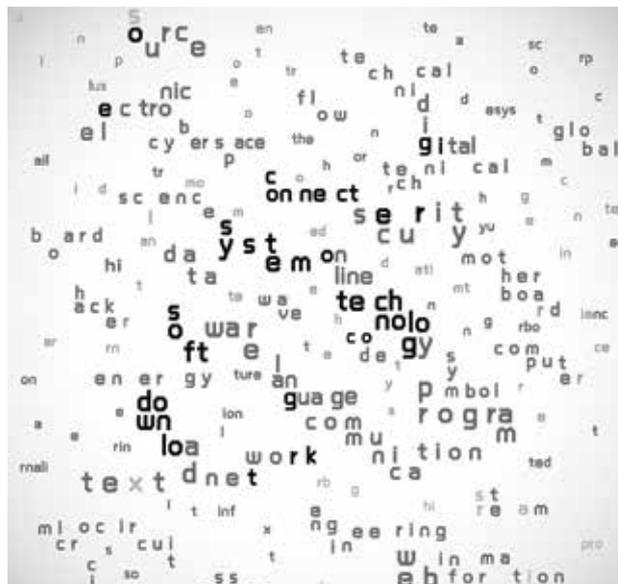
And while information presented may be current, it can easily be translated into future target projections – anything from financial savings to proposed landfill levels to contractor performance KPI's.

### What are Business Intelligence Services?

Business Intelligence Services, such as those offered by opensky Data Systems, who specialize in the management of UK waste data, can come in all shapes and sizes. "Big Data Analytic Platforms and the Internet of Things is creating compelling business cases for using large amounts of enterprise data for predictive maintenance, multi-channel marketing, manufacturing efficiencies and machine learning operational platforms. But if an enterprise level super intelligence is not your thing but you do want to know where your waste management process is performing at optimal levels in realtime, then Microsoft and other Business Intelligence solutions that amalgamate and makes sense of your various sets of data and how they affect each other is the way to go" says William Flanagan, CTO at opensky.

Then there's the matter of the adaptability of modern Business Intelligence services. A Board of Management may look for a helicopter view, for example, while those closer to the coalface will require more hardnosed information on which to base their operational, every day decisions like when is the optimal time to go a certain route or what is the prediction for demand next week for waste from an MRF etc

Illuminating the causal effect of one action in a business on another, is one of the smartest uses of BI. Traditionally, processes and departments had their own systems, which were usually separate and siloed. The move now is for all systems to be linked to a central intelligence hub that is easily queried by those who have questions.



### Data & Policy

The out-take from this is that waste management authorities and contractors are not running scared – from a financial perspective – from the technologies that can help them reach the next level in their fight against waste and optimal performance. Business Intelligence systems have the scalability to grow as the business grows. This is important for any industry sector – but it's even more relevant to waste management, where the pace of change and the rate of development are so rapid.

Looking forward to the next big wins in the area of waste management, much will depend on the bravery of governments to pursue a leaner, greener and more sustainable way of doing things – without the guarantee of 'quick votes' which a similar spend in other areas might deliver. Now with the massive increase in waste data becoming available and the improvement in the management and reporting of that waste data, real results are not only being felt and seen, they are being measured. And the results are good. Industry and Government in the UK and Europe have never been more united on a goal and its working. Recycling and Waste management targets are being met and its through the commitment and team spirit of the many players in the waste eco system that these results are being achieved.

But assuming that public demands for a greener economy continue to grow louder and more concerted, the waste management sector is certainly in a position to respond. With the help of appropriate Business Intelligence services, best practice wins from the U.K., for example, could be replicated right throughout Europe in a relatively short timeframe.

It's an exciting and challenging time to be involved in waste management right now, the data testifies to that – and that's only set to continue over the coming five years and beyond.

**For further information** on opensky Data Systems range of Waste Data Management Solutions & Waste Analytics Services, please visit [www.openskydata.com](http://www.openskydata.com) or contact Peter Hutt, Environment & Waste Programme Manager, opensky Data Systems **+353 45 855 675**.