

Big Data : IBM participe à 2 nouveaux projets pour rendre les villes « plus intelligentes »

Paris, France - 21 mai 2013: Nous produisons tous les 2 jours un nombre de données équivalent à celles qui existaient en 2003. Avec les capacités de traitement et d'analyse de données très hétérogènes, nous sommes en mesure désormais d'extraire de l'intelligence qui permet d'améliorer la vie des citoyens et l'expérience des consommateurs.

Parce que le Big Data est une priorité, IBM a investi plus de 100 millions de dollars en R&D sur ces nouvelles technologies afin d'aider les organisations à tirer profit de l'analyse des données. Dans ce cadre nous annonçons aujourd'hui deux initiatives : l'une dans le secteur de la distribution des eaux et l'autre dans le secteur des transports publics.

IBM aide Thames Water à préparer sa stratégie de croissance à l'aide du Big Data Analytics

IBM annonce qu'il a été choisi comme Partenaire Technologique et d'Innovation de l'Alliance Thames Water AMP6. En collaboration avec Thames Water, une entreprise anglaise de traitement et d'approvisionnement d'eau. IBM mettra en place des stratégies innovantes s'appuyant sur l'analyse des réseaux sociaux et de gros volume de données afin d'améliorer ses interactions avec les clients et son fonctionnement dans le cadre de sa stratégie de croissance.

IBM aide la ville de Dublin à améliorer son réseau de bus public et à réduire les embouteillages grâce au Big Data

IBM annonce une initiative pour aider la ville de Dublin à tirer parti du Big Data afin d'identifier et résoudre les facteurs responsables des embouteillages sur son réseau d'autobus. Cela permettra d'améliorer la circulation pour les usagers : croiser les données issues des capteurs du réseau routier avec des données géo-spatiales permettra aux fonctionnaires de la ville de mieux contrôler et de mieux gérer leurs autobus en temps réel.

IBM helps transform Thames Water using Big Data Analytics in preparation for future growth

London, UK, 16 May 2013: IBM (NYSE: IBM) today announced it has been appointed as the Technology and Innovation Partner in the Thames Water AMP6 Alliance. IBM together with Thames Water will create innovative strategies by analysing big data and social media to improve operations and customer interaction while preparing the water company for future transformation. As part of the alliance IBM will help shape the water company's business plan which supports essential improvements to ageing water and sewerage networks across London and the Thames Valley.

Thames Water provides clean and waste water services to 14 million households and businesses in London and the South East of England - more than any other UK Water Company. The alliance, the biggest in the UK Water Sector, is set to carry out between £2bn and £3bn (\$3.1bn and \$4.66bn) of work and signals a complete transformation in the way Thames Water operates.

"We have a significant amount of work to do upgrading our deteriorating infrastructure over the next 25 years and beyond, while keeping customers' bills affordable. If we are to achieve this a different approach is required," said Lawrence Gosden, asset director.

"Our focus will be on delivering value, as opposed to just cost-efficiency. We will take a long-term view, as well as making sure we meet our shorter-term goals. By forming this early, two years before the start of the next five-year regulatory period, we stand the best possible chance of delivering the safest, most sustainable and most innovative solutions - those which don't necessarily involve simply pouring concrete."

Based on collaboration, innovation and sustainability, Thames Water aims to integrate its supply chain with business planning to improve outcomes pre-set for the next regulatory period (AMP6) between 2015-2020. Additionally, the alliance will focus on boosting safety, reducing total expenditure and environmental impact alongside lowering energy and chemical costs.

As the Technology and Innovation Partner, IBM will introduce Big Data analytical capabilities to provide deep insight into existing business and service data. The analysis will provide valuable information to help identify innovation opportunities to transform the management of assets, interaction with customers and suppliers and how key risks to the business are pro-actively managed. Other key areas being targeted include smart metering, treatment processes, the application of nanotechnology for energy production and environmental pollution prevention.

"As the water industry continues to transform finding smarter ways to make operations more efficient while preparing for future growth is a major priority for companies today" said Graham Butler, VP for Energy and Utilities, IBM Europe. "IBM is at the heart of developing Thames Water's transformation strategy with Smart and Intelligent Water Solutions which underpin its continued ambition to have the very best health and safety performance while providing customers with the best value for money."

IBM will also create innovative opportunities for Thames Water to deliver long term value and maximise experience for customers. These activities include analysing a range of social media channels including blogs, online forums and Twitter to create real-time public opinion snapshots, identifying trends and usage behaviour while understanding how consumers feel towards the brand. This valuable analysis can be used to identify new ways of transforming the Thames Water front office to continue improving customer communication and service levels.

"As the world enters a new era where decisions are based on facts and data, Thames Water is taking the lead in innovating by applying big data analytics to extract very precise business insights," said Jon Bentley, Smarter Energy Lead, IBM Global Business Services, IBM UK and Ireland. "As a result of the innovation, data analytics and smart technology IBM will bring to the alliance, Thames will create new value by making optimal decisions regarding its capital works programme and its approach to asset management and operation, delivering better customer service as a result."

For the first 18 months IBM, Thames Water and the Alliance Partners will collaborate to co-create the AMP6 business plan and define the scope of technology and innovation services that it will deliver. IBM will also assess future technology deployments throughout AMP6 and into the following regulatory period to further improve system performance.

Thames Water's AMP6 alliance is made up of two 'design and build' consortia, a programme manager and a technology and innovation provider. The organisations selected are as follows:

- Design and Build: Costain, Veolia Atkins (CVA) and Skanska MWH Balfour Beatty (SMB)
- Programme Manager: MWH UK
- Technology and Innovation Provider: IBM

The contract awarded will be for an initial seven year period up to a maximum overall term of 12 years.

Big Data Helps City of Dublin Improve its Public Bus Transportation Network and Reduce Congestion

Irish city is a test bed for Smarter Cities research using real-time data from its road and transport system

DUBLIN – 17 May 2013: Today IBM (NYSE: IBM) announced it is helping the City of Dublin use Big Data to identify and solve the root causes of traffic congestion in its public bus network throughout the city, which means improved traffic flow and better mobility for commuters. Integrating data from a citywide network of sensors with geospatial data means that city officials are able to better monitor and manage its fleet of buses in real-time.

The Dublin City Council (DCC) delivers housing, water and transport services to 1.2 million citizens across the Irish capital. To keep the city moving, the council's traffic control centre works together with local transport operators to manage an extensive network of roads, tramways and bus lanes.

In a collaboration with IBM researchers, its road and traffic department is now able to combine Big Data streaming in from an array of sources – bus timetables, inductive-loop traffic detectors, , rain gauges and closed-circuit television cameras, GPS updates that each of the city's 1,000 buses transmits every 20 seconds – and build a digital map of the city overlaid with the real-time positions of Dublin's buses using stream computing and geospatial data.

Traffic controllers can now see the current status of the entire bus network at a glance and rapidly spot and drill

down into a detailed visualization of areas of the network that are experiencing delay. These insights and the interface allow visualization of the data give them an opportunity to identify the cause of the delay as it is emerging and before it moves further downstream. This approach can accelerate the decision-making process to clear congestion more swiftly.

Additionally with improved reporting now in place, the data can help the city identify the optimal traffic-calming measures to reduce congestion. It can also help answer questions such as whether the bus line start times are correct or the best place to add additional bus lanes and bus-only traffic systems.

For example, using advanced analytics on data collected on each bus' journey showed that some buses were being passed on route by buses that departed at a later time during rush hour. Now, IBM researchers, the DCC and city bus operators are working to pinpoint why the distance or time between busses, also known as headways, are diverging in this manner and what measures can be quickly put into action that will improve traffic flow at these specific peak times.

"Until recently we had a fragmented view of the overall health and real-time status of Dublin's transport network, making it very difficult to identify traffic congestion in its early stages because the causes of a delay had often moved on," said Brendan O'Brien, Head of Technical Services, Roads and Traffic Department at Dublin City Council. "Now, we can quickly hone in on network issues as result of analyzing Big Data and respond faster, based on actionable insight, to improve traffic flow and reduce traffic congestion."

Based on the success of the traffic control pilot for the city's bus fleet, DCC and IBM Research are engaged in additional projects to further improve traffic control and congestion in the city. These projects include: integrating meteorological data into the traffic control centre so operators can take prescriptive actions to reduce extreme weather conditions impact on commuters and a predictive analytics solution combining data from the city's tram network with electronic docks for the city's free bicycle scheme.

This effort is part of a unique [collaboration](#) between IBM and Dublin City Council that began in 2010. As a part of Dublin's effort to becoming a leading Smarter City through its embrace of technology to stimulate economic activity and meet the challenges of a globally competitive city for the future, it shares data generated by city services, such as transportation and its operational expertise running the city with IBM researchers. The IBM Research lab in Dublin focuses on cities and advancing science and technology for intelligent urban and environmental systems through Big Data, analytics and optimization.

"Constantly in motion, cities generate enormous amounts of data that can help officials deliver a better quality of life for its citizens and build competitive advantage with the right tools," said Dr. Francesco Calabrese, Research Manager, Smarter Urban Dynamics, IBM Research - Dublin. "Dublin is becoming a smarter city by harnessing Big Data, extracting actionable insights from its transport data and delivering these instantly to decision makers so they can improve traffic flow and awareness of how to prepare for their future transportation need."

Using Big Data analytics techniques, the new Vehicle Awareness and Prediction feature, which is based on IBM InfoSphere Streams and developed by IBM Research, is now part of IBM Intelligent Operation Center's Intelligent Transportation solution. IBM's software solutions for cities draw on experience gained from Smarter Cities projects with cities around the world. IBM InfoSphere Streams software, part of IBM's Big Data platform, can analyze and share data in motion, providing real-time decision making in environments where thousands of

decisions can be made every second.

For more information on IBM Smarter Cities, visit www.ibm.com/press/smartercities.

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