General News

Revealed at Saphila 2019: how SAP mobile technology enables innovative 'smart city' solutions for Cape Town

JOHANNESBURG – June 24, 2019 – Cape Town has long been known as one of South Africa's most beautiful cities, and at the recent Saphila 2019 event - the bi-annual conference of the African SAP User Group (AFSUG), which took place on 10 and 11 June – it was also presented as a well-functioning place to live and work. A 'smart city', if you like.

Omeshnee Naidoo, director of information systems and technology, City of Cape Town, and Andrew Fisher, solution architect, HCL Technologies, together gave delegates a presentation on how the City of Cape Town has used mobile technology in its road, storm water and traffic signals asset management operations, with overall business benefits. Recently, the solution has also been used as a foundation to enable fleet management.

A 'smart' city is the designation given to a metropolis that incorporates information and communication technologies (ICT) to enhance the quality and performance of urban services, such as energy, transportation and utilities, in order to reduce consumption,

wastage and overall costs. The overall aim of a smart city is the enhancement of the quality of living for citizens through the use of smart technology[1].

Naidoo noted that, some years ago, the city had invested in asset management and plant maintenance in the original ERP environment, and that parts of the process had always had to remain manual.

"As we've matured our maintenance processes over time," she said, "we've made changes and went to market to invest in mobility management. Value for money was an important factor, as was performance, and there was always a need to take business processes to the field.

"Functional benefits have come with these solutions, including a shift to preventative maintenance and real-time visibility through the use of the mobile device, which allows for immediate feedback, as well as significantly increased data and improved compliance abilities. A kilometre of road, for example, costs tens of millions of rands to build, and by moving to preventative maintenance, this extends the life cycle of the road and obviously saves a lot of money."

Naidoo outlined other benefits of the move to mobile solutions:

- Assets can be repaired faster, or failure avoided, through preventative maintenance;
- Seasonal preventative maintenance has allowed for better planning, for example carrying out storm water clean-ups during dry seasons to prevent flooding during rainy seasons;

---

[1] https://www.techopedia.com/definition/31494/smart-city

- Failures have been reduced by 50 percent due to improved work management processes; and
- The significant reduction of operational times has impacted positively on safety issues for citizens.

During his section of the presentation, Andrew Fisher noted that the mobilisation of the system processing had also become a journey of empowerment for the users in the field. While a few of the older workers had been initially resistant, he said, they had reached a point where they had embraced the technology and been proud of the digital empowerment this had brought them. Fisher added that more general benefits brought by the mobilisation technology included the following:

- Staff motivation: "Because staff members feel empowered, output levels have improved by over 20 percent."
- Employee safety: "The device allows for tracking of staff and reports can be enabled if the device is going off the expected route, and/or no movement is detected."
- A focus on strategic objectives: "Effective asset management results in savings that can be used to invest in the organisation's objectives."

Fisher gave a step-by-step case study involving a section of road that had collapsed on 24 April, in which less than 24 hours had elapsed from the initial logging of the call to the completion of the repair work.

"Taking the system information onto the mobile device allows field workers to see all the invisible underground assets in the area that they need to know about," he explained, "for example storm water or sewage conduits. Other processes which are

done in the field from the mobile device allow the inputting of failure codes, confirmations of the processes followed and the updating of costings then and there.

"The end result of this particular service call was a grateful message on Twitter, in which the resident who had initially reported the incident sent out an incredibly positive Tweet complimenting the City of Cape Town on a job well done."

Fisher clarified that the City of Cape Town was currently carrying out 22,000 maintenance orders per month, and that there has been a real improvement in wear-and-tear failures being eliminated through preventative maintenance.

"We are continuously striving to improve our systems and processes and are driving down the numbers of issues even further on a monthly basis, by holding ongoing meetings with the relevant people. We aim for continuous improvement and look forward to using machine learning to allow us to fix even broader picture issues. It has been a wonderful experience as a SAP consultant to have had these types of tools to use. It has made it much easier for us as consultants to make a real difference in a city like Cape Town," he concluded.

For more information around Saphila 2019, please visit www.hellosaphila2019.com.

ABOUT AFSUG:

The African SAP User Group (AFSUG) provides a forum for SAP customers to share information and experiences, accelerate implementation of successful business solutions and influence SAP Africa and SAP Aktiengesellschaft's (AG) local and global directions. It represents all customers across a variety of industries, businesses and technological processes.

Regular, focused and highly professional contact at all levels between AFSUG, SAP Africa and its business partners, allows the user group to promote the needs and wishes of the user community. Additionally, through this contact, it assists SAP Africa in the management of the service-related challenges presented by rapid growth.

For more details, please contact:

Nicola Read

icomm

+27 83 269 2227

icomm@pr.co.za