# New generation of BMS delivers knowledge, control

By Neil Cameron   24 May 2016

Today, building owners and facility managers are using building management systems (BMS) in ways that could only be dreamed of in the past, and the demand for the technology is poised for growth. In fact, the global commercial BMS market is predicted to double between 2013 and 2021, according to a November 2013 report by Navigant Research, highlighting the anticipated increase of adoption of BMS technology.
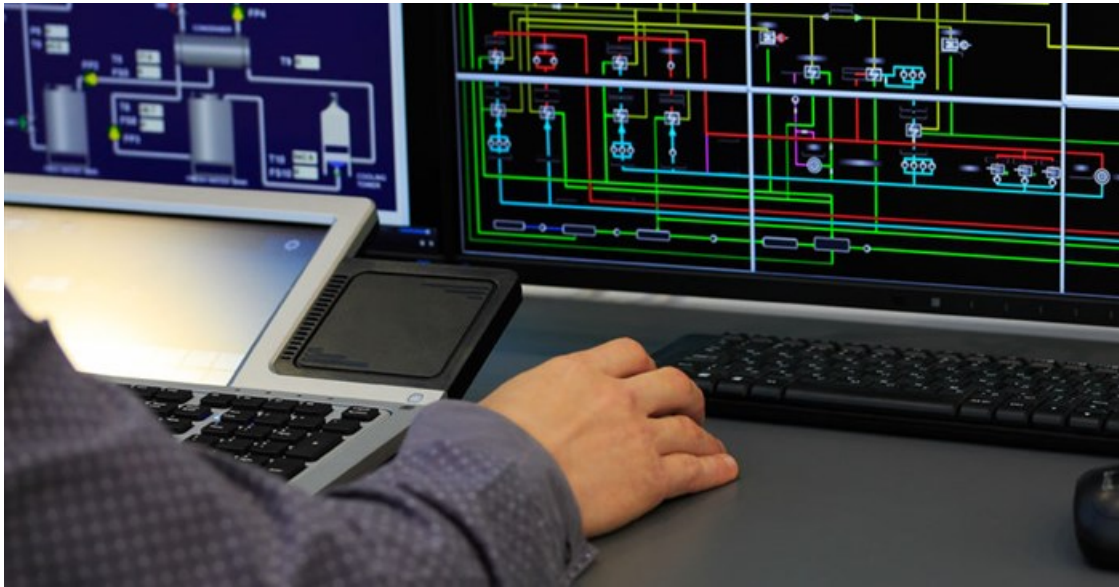
© genkur – 123RF.com

It's not surprising that BMS has become an essential tool for many facility managers. An advanced BMS serves as the command and control centre for the facility. Information pours in from all parts of the building: settings, current readings, and alarms from occupied spaces and from inside complex equipment. An open BMS not only controls heating ventilation air-conditioning (HVAC) equipment from a variety of manufacturers, but also connects to the lighting, security, fire, and other systems, putting even more power at the fingertips of building managers.

Integrated, feature-rich BMS

In South Africa, there is an increase in interest in integrated, feature-rich BMS, largely due to the ever-increasing cost of electricity. Enhanced functionality within BMS can assist companies to monitor and manage their energy consumption more effectively. Importantly, it can reduce their energy consumption. This is particularly relevant when considering that buildings use about 40% of global energy.

Today's BMS is delivering in ways that seemed out of reach even a few short years ago. For example, in 2012, "The Future of BMS" survey from the Building Efficiency Panel, a group of more than 3,000 building owners, operators, contractors, and equipment specifiers, less than 25% were using such basic BMS features as energy demand limiting, which cuts back on non-essential loads to reduce building demand. Advanced features were used even less often. The issue wasn't with BMS technology — in the same survey, 71% of respondents said that their BMS was keeping up with technological developments. Rather, the challenge was in taking advantage of the capabilities of the BMS. The primary users of BMS simply don't have the time, staff, budget, and resources to become experts in the technology; their resources are focused on actually managing their facilities.

Third-party systems and devices

Johnson Controls has made significant technology advances and the current generation of BMS is focused on leveraging new and existing technologies to deliver a system that works the way facility owners and operators work. The BMS is now more accessible and harnesses the power of advanced analytics and data collection with a focus on more sophisticated and user-friendly interfaces and data visualisation.

We are seeing the trend of integration into more third-party systems and devices. In addition, data collection and analysis is enabling companies to make predictions and base decisions on this information, delivering additional value. We are also seeing an increase in plug and play devices, further improving interconnectivity. This all forms part of the Machine 2 Machine (M2M) and Internet of Things (IoT) movement where data is extracted and communicated via the internet.

It is these advancements in BMS that have unleashed the insights into building performance that enable even further reductions in energy use and operational costs, while still delivering a comfortable and safe environment.

ABOUT NEIL CAMERON

Neil Cameron is Johnson Controls area general manager, building efficiency - Africa
▪ Smart building data makes business sense - 20 Feb 2018
▪ Simple advances bring BAS to smaller buildings - 14 Aug 2017
▪ Climate control for the smart home - 12 Apr 2017
▪ #BizTrends2017: HVAC and building efficiency - 11 Jan 2017
▪ Don't get caught in the BMS trap with the lure of modular functionality - 31 May 2016

View my profile and articles...