BAM

Smart construction sites and smart windows thanks to rapid innovation with the Internet of Things

The customer
BAM initiates, develops, carries out and manages construction projects in the residential, utility and infrastructural sectors. Safety, efficiency and quality are key to the building process.

The requirements
Digital innovation offers BAM the opportunity to make construction projects more sustainable, with a focus on convenience and guaranteed performance.

The solution
In partnership with KPN, BAM developed a range of IoT solutions in short cycles, such as the smart window and smart construction site.

The result
These smart innovations make for a more sustainable living environment and a more efficient construction process – reducing costs for BAM’s clients.

Dennis van Goch, Innovation Manager at BAM, explains how BAM in partnership with KPN used the Internet of Things (IoT) to develop innovations in short cycles and how those innovations make the living environment more sustainable and the construction process more efficient.

Innovation as a strategic pillar
‘BAM initiates, develops, carries out and manages construction projects in the residential, utility and infrastructural sectors. Safety, efficiency and quality are paramount in the construction process. To remain ahead of the game in a rapidly changing and highly competitive field, innovation is one the most important strategic pillars for us. BAM is not just a construction company anymore; we also provide convenient, sturdy and sustainable buildings, with guaranteed performance. That’s what we call ‘building as a service’.’

‘Innovation is one of the most strategic pillars for BAM’

Rapid innovation with IoT
‘Thanks to the Internet of Things (IoT), we can innovate rapidly. IoT helps us to create digital insights into the performance of the components we use in our projects and constructions. By analysing the data, we can measure and therefore control...’

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performance. That means we can build constructions that actually “think” alongside the client and optimise performance.

**IoT use cases in partnership with KPN**

‘BAM and KPN are working together to co-create new services based on IoT. It all began at a workshop at the Internet of Things Academy, where we came up with a number of ideas and started putting them into action. By drawing on the lean start-up model and an agile philosophy, the right features can be developed in a short space of time. This results in a unique type of collaboration that allows innovations to be produced rapidly. The technology and functionality were tested in the proofs of concept (POCs). By testing the concepts in the field in short cycles, the innovations were quickly refined, so ultimately the client could benefit from added value. The initial POCs that we tested in the field were the smart window and the smart construction site.’

‘Since we have more data available, we can work more efficiently, more safely, and in a more organised way. This is not just great for our employees, but residents living near the site also get a lot out of it. After all, this makes the construction process more sustainable.’

‘The innovations are conceived, designed, developed and tested within three months!’

**Innovating in short cycles**

‘Both the smart window and smart construction site were conceived, designed, developed and tested within three months. This can only be done in such a short period by working with lean innovation and an agile philosophy. If it doesn’t work, then we won’t take it any further. But if it does work, then we’ll scale it up. By innovating in short cycles together with KPN, you keep your digital innovation small and manageable. It’s like I say: success is contagious!’

**The smart construction site**

‘We installed sensors in a power distribution box on site, which allowed us to take measurements on each project, thanks to the connectivity provided by KPN. With the data that we generate, we use our expertise to develop the algorithms we need to make the construction site smarter. Since we have more data available, we can work more efficiently, more safely and in a more organised way. This is not just great for our employees, but residents living near the site also get a lot out of it. After all, this makes the construction process more sustainable.’

For further information please contact your KPN Account Manager or send an email to info-grootzakelijk@kpn.com.