48. Omni-metrix

The immo-metrix system saves energy

Omni-metrix © Muriel Thies

recentre

Active in the lighting sector since 1995 as an importer, Alain Willems met Jacques Stevens when he was seeking made-to-measure solutions to control the lighting for the Palace of Justice for the European Court in Luxembourg. In April 2009 they came together to create Omni-metrix sprl, a company that makes automation products (for the management of tertiary sector, industrial and similar buildings) and home automation products (for the management of passive houses and other homes) under the domometrix brand.

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"Jacques Stevens presented a management system which was capable of bringing together all the specific technologies for a building", explained Alain Willems, now the marketing director of Omni-metrix. "In other words, the lighting, air conditioning, ventilation and heating to start with, but also all the openings, alarms, access controls, a pass management system and automated environmental systems." The only thing holding back this product? Its immense possibilities. "Since the immo-metrix system can do all this, customers find it hard to believe that this system controls everything, even though it's true!"

interfaces combined with an ISO 11898 standard bus, originally developed for the automotive sector, but which is highly suited to use in buildings. The options for the Devil-Net logical addressing are limitless: the number of possible addresses is around 537 million, and each of those addresses has 64,000 possible functions. Very fast, but also very secure, it can carry data at a rate of 1 megabit per second. The controller has an Ethernet interface allowing it to be connected to the Internet in order to carry out remote maintenance. Other control options such as fixed or mobile telephony are also possible. Omni-metrix offers a

domestic range at a relatively low price point, but without compromising security; a tertiary sector range intended for hospitals, care homes, administrative and small business centres; and lastly an industrial range, higher in price but even more secure.

But what links this system with sustainable development? Alain Willems sees this link in Omni-metrix's overall objective: trying to find products which are reliable in the long term, which help make everybody's life easier and help save energy. "Our products are manufactured in Wallonia and not in China, apart from a few components. They meet all the EC standards. And some interfaces, for example those installed at my associate's home, are still working 17 years on."

"We have also developed a system for monitoring gas, water and electricity consumption in real time and sending data on it to an email address. That's a benefit for everyone: if there's a water leak, it shows up immediately!"

Major energy savings can be made by installing an immometrix system: window contacts can actually be used as inputs into the system for other functions than the alarm, for example automatically turning off the air conditioning when the system detects that a window is open. All the elements monitored by the system can also be used as triggers for an electrical valve to control one or more radiators, to lower a blind, to manage lighting, etc. Calculation of the heating effect of natural lighting linked with the blinds, makes it possible to save up to 93% of energy. when the blinds are raised and lowered at the correct times. "We have also developed a system for monitoring gas, water and electricity consumption in real time and sending data on it to an email address. That's a benefit for everyone: if there's a water leak, it shows up immediately!" Businesses can appreciate the savings generated by this system still more, since it is available at price points suit-



able for very small companies, with for example solutions for 16 separate push buttons and 16 separate lighting circuits, for the price of 1.235 euro. "This version can be scaled up to a traditional business. And when a business grows, you just need to let the belt out a little", Alain Willems continues. Now that companies are also called on to reduce their greenhouse gas emissions, the development prospects for Omni-metrix are many: "For example, for a transport business that used to light its entire parking area, we have been able to set up a system which lights up only the route of the buses. In this specific case, for the business this represented 2.1 months' return on investment, and 12.1 tonnes of CO2 less!"

"The immo-metrix system has also noble applications when it is put at the service of people with reduced mobility."

The system can also ally energy savings and a reduction in carbon emissions with a more social dimension: Omnimetrix has for example worked with TDS Office Design to set up the Smart Office, a system of desk management intended for highly mobile staff for which each employee carries a badge that sets up the desk on the basis of his or her profile. "The height of this desk can be adjusted electrically, depending on the height of the person sitting at it. In general, a desk is the right height for just about 60% of women and 80% of men. In January 2009, we won the Agoria prize for Technological innovation for the development of this desk management system."

6



Sustainable Success Stories

The immo-metrix system has also noble applications when it is put at the service of people with reduced mobility: "People with mobility problems want an environment just like one for people with full mobility. I recently met a kitchen manufacturer who had created electrically heightadaptive kitchens. At present his system uses a pushbutton, but you can imagine adapting our system so that a simple badge could be used to set the worktops, the hobs and the cupboards to the right height." By getting involved in this type of application which allows people with disabilities to play a fuller role in society, Omni-metrix shows its attachment to another important but less widely publicised dimension of sustainable development: improving welfare for all.

Isabelle Masson-Loodts for REcentre Interviewee / Alain Willems, marketing director

> Omni-metrix sprl avenue Roi Baudouin 32 Belgium Year of foundation • 2009 Number of employees • 3 Turnover (2010) •

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