

Comfortable living in a „Smart Home“

BAU 2017: Theme “interconnected buildings”

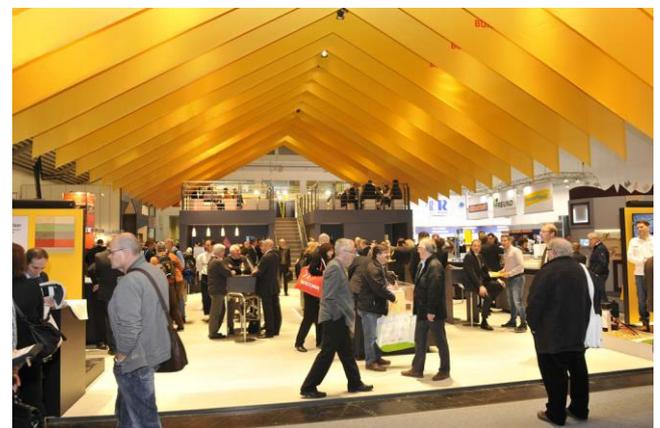


A Smart Home is a comfort zone. The lights come on automatically, the door unlocks as soon as an occupant approaches the building. Prior to this, the HVAG system has set the radiators to a comfortable temperature. The letterbox sends a text message when the mail arrives; the washing machine uses the cheapest electricity rates, if electricity has to be paid for at all, as the Smart Building is energy self-sufficient. It knows its occupants' habits and makes their lives as convenient as possible. Even Smart Cities can be created, just by linking these extremely smart buildings. Science Fiction? Not at all. BAU 2017 shows how far digital technology has as yet advanced.

In wintertime, when Julia König returns home after a long day at work, everything has been prepared: the apartment is nice and warm, the lights have been switched on in the hallway and the living room, and the blinds are already down. All relaxed she drops into her favourite armchair and looks forward to the evening ahead. When the young doctor leaves the house in the morning, the heating system automatically reduces the temperature, the security system is activated and all devices unnecessarily consuming electricity are being switched off.



There is no doubt: the smart home makes people's lives easier as it relies on intelligent building technology. What has been a "toy for techies" a few years ago has become reality today. Interconnectivity starts with simple sensors, switches and lights, and can lead to various living room scenarios – including the control of temperature, brightness, movement, door and window contacts, household appliances, communication technology, and entertainment electronics. In the



case of a fire, smoke detectors save lives; motion sensors detect suspicious activity in the dark, whilst they have a deterrence effect; and alarm systems protect the house from burglars. From afar you can check whether the stove and the washing machine are off, and the gate is shut.

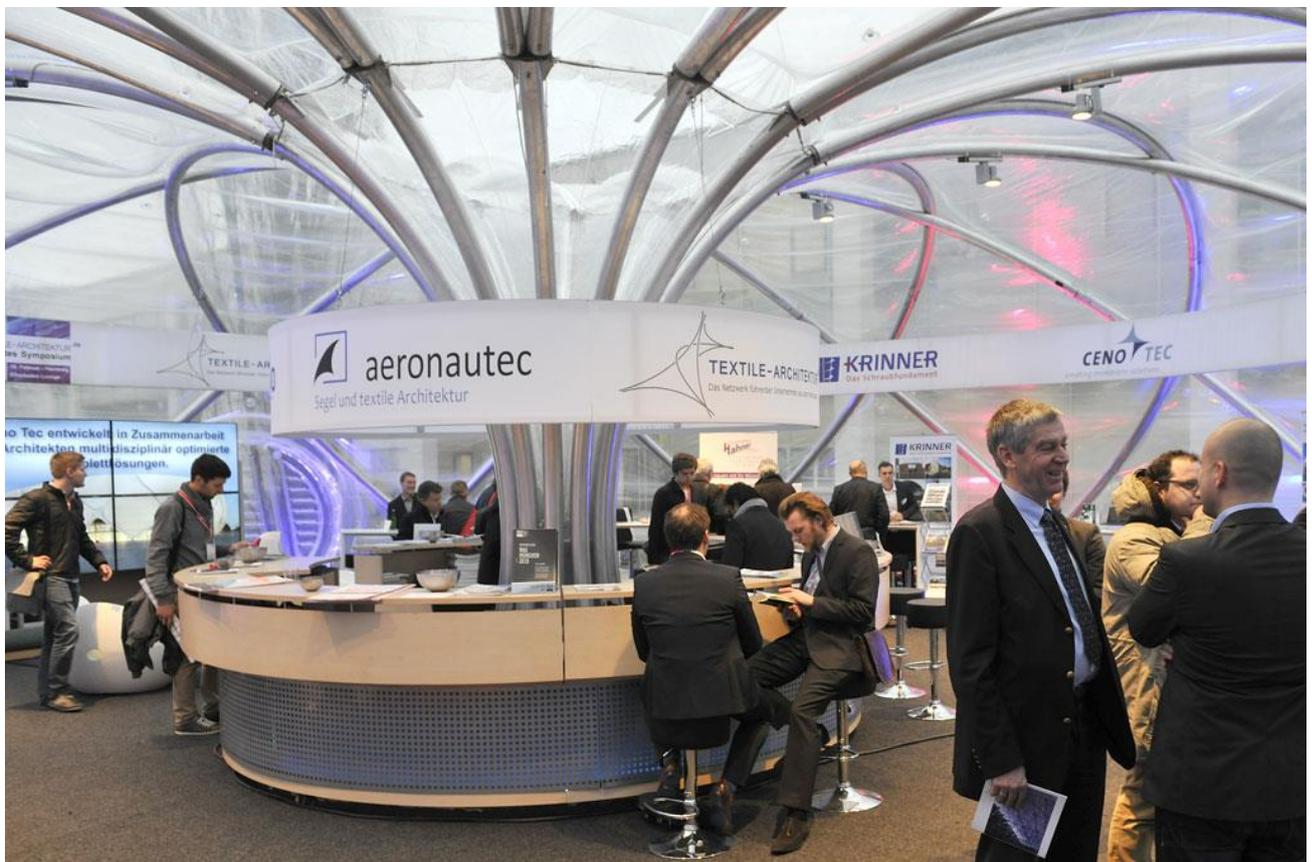


Smart Home Boom: New applications every week

Almost weekly, new applications are launched into the market. Smart homes thus become increasingly interesting for homeowners and tenants. Another reason is the level of comfort provided to the elderly.

Experts already call it a smart home boom. This is primarily due to one driver: the Smartphone. Since almost all users have an operating system in their pocket that can control more and more applications of the building technology in a very simple way. Apps are connected via Bluetooth Smartphone and Wi-Fi, or remotely via a mobile phone connection.

Hence, the market gets moving, as home automation system providers are finding new solutions in various communication protocols (radio and bus systems). They join up to facilitate more complex control options by combining individual solutions, and to further optimize the use of Smart Home applications.



Enhanced quality of life thanks to interconnectivity

Beyond merely managing heating, lighting and the home's security system these state of the art smart home applications offer far more. The latest developments even enable the connection of building components, such as glazing, doors, and windows; and turn them into intelligent systems that enhance the living comfort and energy efficiency of buildings.

One result could be, for instance, an intelligent facade. It converts smart homes into smart buildings. Smart energy management, shading control, security systems and monitoring functions, as well as real-time monitoring of all consumption and fabrication data of the building pave the way to intelligent and future oriented building construction. When this concept is rolled out from the individual building to an entire district, we get a Smart City.

Smart home solutions capture the market

The interconnected home faces a bright future. More and more smart home technologies are ready to be applied. Over the next few years they will have a major impact on our lives. At BAU 2017 in Munich, every two years the place to meet for everybody in the construction industry, you will be able to see the most significant novelties in this field.



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