

SMART DESIGN

Architects are meeting the challenge of urbanization megatrend with new approach to design

With 200,000 people moving to cities worldwide every day, urbanization is one of today's most compelling megatrends – and one that architects grapple with daily. It's no surprise, then, that the way architects think, learn and work is going through a period of profound and fundamental change.

Architects today are moving from static design to complex algorithmic tools that allow for thousands of iterations in building design. Sophisticated design tools, innovative output and real-time collaboration are driving new ways of working and inject projects with heightened efficiencies.

Architects are even changing the way in which they communicate. In an environment where face-to-face meetings are an increasing challenge, online communities and social networking are the new professional conference. At KONE, for instance, we engage in hundreds of real-time chats with architects and design teams every week.

Shifts like those translate into significant, fundamental changes in the way buildings are being designed. Architects are using a new level of modeling and design in their work. Based on our experience, Building Information Modeling (BIM) is being used in more than 60 percent of all building projects today.

What is Smart Design?

An increased degree of high quality information, earlier and faster: That's Smart Design, and its impact is powerful. The number of changes is reduced and the finished product comes online faster than ever before.

The capabilities of **KONE Building Information Modeling** can include information on the timing and sequence of equipment and logistics throughout construction. These new BIM models help deliver a more predictable, better communicated solution before starting construction. And that means builders and general contractors can more efficiently reach construction milestones.

Using data-rich 3D models to inform design decisions, architects deliver essential information early in the pre-construction phase. With BIM, information is shared in a common file that is accessible by all project stakeholders. Important details don't disappear; milestones are easy to incorporate.



WHAT IS SMART DESIGN?

- An increased degree of high quality information, earlier and faster
- Heightened collaboration
- Sophisticated modeling tools

One heavy-duty toolbox

In three easy steps, the **KONE Product Selector** provides a recommendation on which KONE elevator solution meets a building's needs. All that's needed is the building type, number of floors and expected population!

Smart Design has particular value at the point where KONE products intersect with the building itself. For example, our innovative architectural toolbox provides BIM integration. These 3D models can be configured and placed into a larger project model. The result: We help inform the overall design of a project while it is still in a conceptual state. Plus, our "click to chat" is staffed with elevator and escalator experts who are ready to collaborate and keep architects productive.

Smart Lobby differentiates the customer experience

Smart Design is showcased in today's Smart Lobby – a hardworking, vibrant space where varied technologies are fully integrated. Made possible by emerging technologies, the KONE Smart Lobby helps express a building's unique purpose and brand, setting the stage for a differentiated customer experience.

Think of it as a cohesive functioning unit operating on a constant flow of data. Imagine the possibilities. New functionality delivers a purposeful customer journey and a new brand experience. Security and safety are enhanced, and guidance tools improve People Flow®.

Cognitive analytics help the building think

The Smart Lobby responds to real-time data through continued analysis of People Flow in the building. Continual analysis of feedback ensures that systems and user experience are optimized. The building becomes a dynamic ecosystem, constantly evolving to meet changing needs.

People Flow data analytics – monitoring both vertical and horizontal movement within the building – are an important part of the mix. Precise interpretation can deliver the best customer experience, identify the best location of foot traffic, and target the best areas for revenue generation.

Constant data analysis can ensure that the Smart Lobby is a dynamic space, one that can easily adjust to change. Using IBM Watson™ to store and collect data from more than one million elevators, escalators, doors and turnstiles, KONE applies analytics tools to create deep insights in People Flow. For instance, sophisticated systems could help people pre-order elevators during the busiest times of the day or accelerate evacuations during emergencies.

Dynamic, innovative and real-time

At KONE, we're creating new online tools and a spot for architects, design builders and general contractors to collaborate with us. It's a new way of working that speeds design visualization, predicts and resolves potential (and costly) mistakes, and improves equipment delivery time. Planning and design tools that support you throughout the design phase, and beyond: That's Smart Design.

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Smart Design is of particular benefit to builders and general contractors who depend on getting detailed information faster than ever before.



About the author: As Area Offering Manager for The America's Elevator Business, **Robert Moler** is a key contributor to development and implementation of KONE's Smart Design Strategy. A graduate of Iowa State University, he leverages previous experience in sales, sales management, project management, and operational leadership to bring a strong customercentric focus to KONE's elevator business. Robert's work has contributed to KONE's exceptional offering of sustainable solutions.

ABOUT KONE

At KONE, our mission is to improve the flow of urban life. As a global leader in the elevator and escalator industry, KONE provides elevators, escalators and automatic building doors, as well as solutions for maintenance and modernization, which add value to the life cycle of any building. Through more effective People Flow®, we make people's journeys safe, convenient and reliable, in taller, smarter buildings. Together with our partners and customers around the world, we help cities to become better places to live in. In 2017, KONE had annual net sales of EUR 8.9 billion, and at the end of the year close to 55,000 employees. KONE class B shares are listed on the Nasdaq Helsinki Ltd. in Finland. For more information, see www.kone.us.