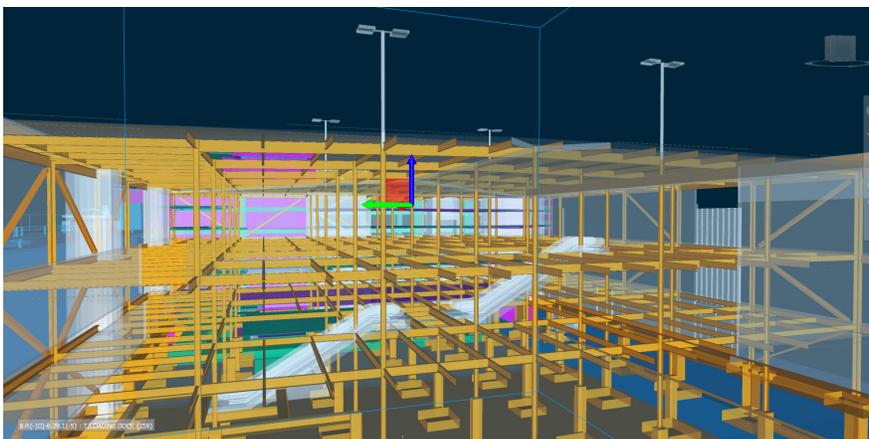


# Retail Insights

## Technology in Retail Design

The shift from in-store to online shopping is creating great pressure on retailers and designers to develop more efficient and technologically smarter stores to remain relevant to consumers. Just as new technologies have changed how consumers shop, they are also changing how stores are designed. Today, three-dimensional and virtual design software applications are making it possible for designers to achieve retailers' store design goals.

- **BIM – Building Information Modeling.** One major technology that has raised the bar on retail design is Building Information Modeling (BIM). BIM designs are three-dimensional constructs comprised of information-filled components. Designers can not only model floors, walls and ceilings,



but also lighting, finishes and furnishings. In addition, modeling facilitates greater integration of building engineering and reduces the amount of material conflicts or “clashes” that can occur in the field. Specific benefits of BIM include:

- Helps keep all stakeholders up-to-date by enabling remote collaboration of team members based on the same ‘real-time’ information.
  - Reduces coordination issues in the field by detecting system conflicts, or “clashes,” during design.
  - Allows the comparison of multiple design options, increasing the speed and ease of design changes.
  - Facilitates phased construction studies by assigning phases to model objects.
  - Enables retailers and designers to “see” their designs before construction through quickly generated perspectives.
  - Promotes more accurate cost estimating through effective tracking of material types and quantities.
- **VR – Virtual Reality.** A logical extension of BIM is the use of Virtual Reality (VR) technology. VR maximizes the benefit of BIM-created designs by

## Continuous Improvement

At Hixson, our Continuous Improvement program is designed to actively educate our associates, as well as promote and pursue quality and process improvements, in an effort to deliver successful projects and great project experiences for our clients. The following are some of the features of and/or recent activities enabled by Hixson's dedication to Continuous Improvement:

### Hixson University

Hixson's award-winning, internal corporate learning center is accredited by the International Association for Continuing Education & Training (IACET).

### ICSC Center Build Conference

Scottsdale, AZ  
Nov. 29 - Dec. 1 2017

### CoreNet Global Summit

Seattle, WA  
November 5-7, 2017

### Greenbuild International Conference & Expo

Chicago, IL  
November 14-16, 2017

allowing design teams and retailers to walk virtually through the model. The use of VR goggles and controllers helps users gain a real-life sense of how the store will look, feel, and function when completed. Using BIM with VR, the impact of even minor design decisions can be fully understood before final commitment. Plus, in the near future, potential customers may even be able to make virtual walk-throughs of a store before deciding to visit. Specific benefits of VR include:

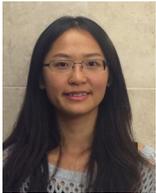
- Gives the ability to evaluate circulation, visual impact of displays, colors and finishes.
- Provides the retailer with a clearer understanding of a design prior to construction.
- More activity engages retailers and stakeholders in the design process.
- May become a tool for retail brand showcasing, attracting customers into stores for unique brand experience.



In today's hyper-competitive environment to capture consumers' attention and entice them into the store or showroom, BIM and VR have become indispensable design and implementation tools. As BIM and VR technologies continue to improve, they will enhance the ability of retailers and designers to integrate technology into the physical retail environment.

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## ABOUT THE AUTHORS



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Shuting is an Architectural Designer at Hixson. She holds a Bachelor's Degree from Zhengzhou University in China and a Master of Architecture from Miami University of Ohio. Shuting is proficient in several BIM and VR software applications and has worked on retail projects involving BIM and VR for clients such as Bloomingdale's and GGP.



### **Joe Klingshirn**

An Architectural Designer at Hixson, Joe holds a Bachelor's Degree and a Master of Architecture from the College of Design, Architecture, Art, and Planning (DAAP) at the University of Cincinnati. Proficient in several BIM and VR software applications, Joe has worked on retail projects involving BIM and VR for clients such as Macy's and Saks Fifth Avenue.

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