

## An Augmented Reality-Based Approach towards Furniture Shopping

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In the furniture industry, all the companies have been involved in furniture designing, manufacturing, distributing, and selling decorative household equipment. But the furniture industry is one of the major industries facing challenges these days. The researchers have gone through the existing and current furniture selling applications, and conducted interviews, observations, and a questionnaire based survey among furniture sellers and clients during the process of identifying the problem. It was discovered that purchasing the most suitable furniture item according to the customer's expectation is the main challenge that people have faced during online purchases. That means it can be challenging to visualise how the furniture will look in our homes and work with the décor already in place. Researchers pointed out that augmented reality can quickly resolve this problem. The usage of augmented reality in industrial applications is still relatively limited in a world where technology rules. Augmented reality is a field of image processing that deals with the combination of the real-world and virtual environment. The researchers have used ARCore plugins through the furniture item visualisation. Users will be able to see how the item will appear in their space in real-time. The researchers aimed to implement an application for smartphones to assist customers who purchase interior items directly online by allowing them to virtually see how their area will look after making the purchase. After implementation, researchers compared this developed system with the related current world applications and scenarios in the system evaluation process. Those system evaluations show that the proposed system will be more supportable to make the current furniture industry more profitable.

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