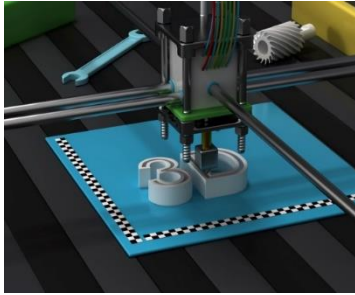


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Overview: [3D printing](#) translates a digital model into a three-dimensional physical object, layer by layer. Materials such as plastics, metals, and woods can now be used to print a wide array of consumer and industrial goods.



Retail Perspective

3D printing has already revolutionized the manufacturing world, but as consumers demand greater personalization and more on-demand options, retailers have begun to adopt the use of this technology as well. Today, 3D printing mostly takes place in the first few phases of product development—such as product design, proof of concept, and prototyping—as it can increase production flexibility and significantly reduce the time to market in more cost-effective ways ([Forbes](#)).

Key Takeaways

- 3D printing enables faster prototyping and redesigns.
- In-store 3D printing can draw customers into physical stores, offering personalization, on-demand creation, and an exciting experience to see the technology in action.
- It involves customers in the design process, allowing them to personalize items to exact specifications.

Retail Use Cases

Rapid Prototyping: Nike uses 3D printing to deliver greater performance innovation faster, expediting the creation of everything from custom track spikes to football cleats, such as the [Nike Vapor Laser Talon](#) and [Nike Vapor HyperAgility](#). Concepts become reality in the span of just hours as opposed to months, fast-tracking the development of new market-ready footwear and accessories ([Nike](#)). Similarly, Adidas has partnered with Carbon to produce their own 3D printed insoles – at a speed fit for future mass production, thanks to Carbon’s advanced liquid resin development process ([Adidas](#)).



Customized Apparel: 3D printing is also being used to create individually fitted shoes and garments. Intel’s Mach 2XS is a commercial printer capable of producing a completely personalized garment in under an hour, down to the style and fabric choice. Technology like this can be used to entice customers to shop in physical locations, where they can browse or dine and then leave with their custom-designed goods ([VOA News](#)).

Mass Manufacturing: While many startups in Silicon Valley are working on 3D printers for consumer use, HP has entered the 3D market with their FusionJet line that will provide the business community with more affordable bulk printing capabilities ([HP](#)). Similarly, [Optomec](#) has begun to mass print parts and molds for consumer electronics on printers that can be run non-stop, while other [larger 3D printers](#) are being introduced that can print life-sized furniture, oversized metal components and frames, and even basic shelters and houses.

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