

**FULL TITLE:** Architects face new challenges and opportunities as 3D printing gains traction

## **DISRUPTION SCENARIO**

[Toronto, 2027]

I was standing on the construction site, measuring the lot where we were going to place the building.

“Twenty by twenty metres,” my supervisor muttered. “Not a big space. But our 3D printer can handle any size.”

I had my work cut out for me. It was my first time working with an industrial-sized 3D printer. I was going to have to make a blueprint for the building, determine which materials to use, learn to use the 3D printer, and ship the structure back here to the site.

I took a deep breath, hoping this project would be a career-making move. As I turned to leave, my boss yelled out to me.

"Remember, the printer can only use certain materials! It can handle steel, but it'll take longer to print. You only have two weeks!"

## **WORKFORCE IMPACT**

3D printing is a disruptive technology that is changing the way we produce consumer goods and building materials. On an industrial scale, 3D printing promises to construct buildings using more cost-effective materials in a fraction of the time that traditional construction may take. While this may result in a business boom for designers and architects alike, people in these professions will have to plan their designs around this new technology, not to mention learn how to use 3D printers. Professionals might be limited in what materials they can use, and they may feel pressured to meet shorter deadlines. Hopefully, these limitations can spur innovative and creative designs.

**Footnote:** Sam Forsdick, “From nostalgists to robot mechanics, are these the professions of the future?,” *NS Business*, July 25, 2019,

<https://www.ns-businesshub.com/business/professions-of-the-future/>