3D printing is making development of architectural 3D models quicker and affordable

Architectural models breathe life into abstract concepts, but they have traditionally taken so long to create that clients are left with a feeling that are watching an actual building being made. This troublesome for architectural firms facing important deadlines like client presentations or public hearings. However, 3D printers have created tremendous business opportunity for Chizel Prints. The firm is now using in-house 3D printing to create dazzling, finely detailed architectural models at a fraction of the time and cost. The previous process was manual and it required workers or subcontractors to hand-craft these models.

Chizel Prints Manufacturing Pvt. Ltd.

Chizel Prints offers on demand product designing and manufacturing for custom made miniatures, prototypes, props & lifestyle accessories. Incorporated by three IIT graduates and mentored by NDBI (National Institute of Design), Chizel comprises of passionate designers, artists and manufacturing experts together striving to deliver the best product to their clients.

Current Challenges:
Chizel Prints has been a service bureau for architects, engineers and builders since its incorporation, when it began creating computer simulation models and animations for professionals who needed a way to bring their building concepts to life. Over the few years, the company naturally branched out to physical massing models. Until recently, it produced these models by laser-cutting plastic or sending design files to a third-party vendor who creates physical models via expensive procced called Stereolithography. Both these procedures are time-consuming and expensive.
Through 2014, Chizel Prints offered physical models primarily as a goodwill service to satisfy customer needs and secure business. Chizel Prints owner Yash Rane, spent more than year investigating ways to make the physical modeling business more cost-effective, both for his company and his clients. He was aware of the development of a new breed of fast and affordable 3D printers. However, he was skeptical about the feasibility using this technology for his application. This led to him investigating the pros and cons of various 3D printer offerings available in the market.

Solution by DBZ:

Speed, printing quality and price we considered to determine value a 3D printer would bring to the business. After a year of evaluation, Mr. Rane decided Chizel Prints should invest in the Accucraft 3D series printers. The machine is five times faster than any other system and is one-sixth the price of the runner-up in his evaluation.

"Speed is the key; I can take an order for a model today and deliver it to the customer tomorrow. News of our new capability is spreading quickly by word of mouth. Cost is another key aspect. In addition to the low machine price, I can make that model for one-fourth the cost of stereolithography or laser-cutting.", says Mr. Rane.

Benefits of using Divide by Zero Technologies 3D Printer:

The benefit of speed and affordability was evident right from the start. In early 2015, a retail office and residential complex in Navi Mumbai ordered a model of its premises for marketing purposes. Impressed by the speed, quality and the price of the work, the company ordered 100 models just the next day. These 3D printer models were to be present to every new tenant. Astonishingly, Chizel Prints delivered 100 models to the client in just two days.

"Architects cherish tradition and are appropriately skeptical about new technology. However, We’re earning their approval of 3D printing by producing affordable high-quality models in record time." says Mr. Rane. Clients who were once skeptical now exclaim with the following words, “You did this? That big? That fast? For how much? Oh, wow, the detail looks good!” proudly quotes Mr. Rane.

The lower costs of creating models with Accucraft 3D series printers allows Chizel Prints offer customers two or three 3D printed models for what used to be the price of one. In-house 3D printing is also fueling new sales.
"I just feel more comfortable now when a customer or prospect starts inquiring about physical modeling. For the first time, I can guarantee affordability; I can guarantee that the work will be done on time, and I can guarantee that there won't be any complications because we're doing all the work ourselves, in-house." says Mr. Rane.

More customers can now take advantage of modeling services because Chizel Prints has found a way to make it more affordable. "We can now offer clients a wide range of models at various price points and lead times, including the fastest turnaround in Indian region," says Mr. Rane.

The result of the new speed and affordability of in-house 3D printing is that Chizel Prints and its clients enjoy cost savings and a positive impact of the new service. Demand for the service is skyrocketing rapidly, as architects and their clients witness the speed and affordability of the 3D printed model can obtain.