

HP'S 3D PROTOTYPING TECHNOLOGY POWERS PRODUCT DEVELOPMENT FORWARD TO REDUCE TIME TO MARKET



Product innovation and development are essential to the ongoing success of any business. A shorter time to market for new products offers a head start over competitors in the marketplace and the opportunity to achieve earlier returns on investment. Elite s.r.l. based in Italy, a world leader in training bikes and cycling accessories such as water bottles and bottle cages, believes that product design and development requires a high level of technology to reduce time to market.

Succeeding in the marketplace with in-office HP 3D Printing

"Reducing development time is essential to succeed in the marketplace. With the HP Designjet Color 3D Printer in our office, we are more reactive to market conditions. We can now test our product designs with customers to get feedback on designs that accurately reflect the finished product. This gives time to implement improvements and perform iterative tests on form, fit and function before going to market." Says Marco Cavallin, quality manager, Elite s.r.l.

Loris Schiesaro, R&D mechanical design manager at Elite, highlights how outsourcing affected their response times. "The challenge was always to get a result that was verifiable in real time, and be able to quickly respond to that result. This was rarely possible because our external suppliers were always asking for deadlines

to be extended from five to seven or even eight days, while we needed immediate answers the same day, or the next. So, with HP's new 3D printing technology, we now achieve the response times that we need."

Cutting project development time by 30 percent boosts new product roll-out

Since investing in the HP Designjet Color 3D Printer nearly a year ago, Elite has immediately been able to produce any model of a design in durable ABS plastic in a single afternoon, and in its office. For Elite's new NOVO training bike stand, it cut development time by 30 percent over the project's lifecycle.

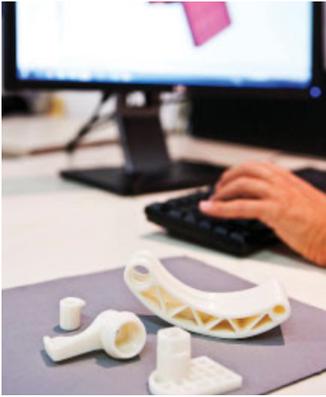
Schiesaro describes the transformation. "We printed the whole stand in plastic and then finished the outer surface with paint. We are able to simulate the item's features produced with 3D printed prototypes and every single component realistically. We can conduct all our real, functional tests on the prototype. We are fully satisfied with this technology that has enabled us to achieve remarkable targets on this project."

Elite triples product prototyping activity on same budget

On the same budget as before, Elite now produces three times as many models a year on the HP Designjet Color 3D Printer. Schiesaro, explains, "The ability to have a prototyping device next to our desk, gives us a considerable advantage in terms of time and costs. On



PROGRESSIVE
PROFITABLE
PRINTING



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Loris Schiesaro
R&D mechanical design manager
Elite s.r.l.

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Schiesaro describes the processes before acquiring HP 3D Printing technology. “Before this technology existed, we outsourced to a service bureau that produced prototypes similar to those we are making now, but obviously with much higher costs and longer times than we achieve now. We outsourced our designs to an SLA rapid prototyping provider. The turnaround for urgent jobs was three days, before receiving the model back for finishing and testing. With our time and budget constraints, outsourcing limited our model production to 50 per year.”

Gaining the freedom to design new products

The clean and simple in-office production of physical models on the HP Designjet Color 3D Printer is allowing Schiesaro’s design team greater freedom to focus on creativity. Schiesaro says, “This printer is definitely easy to use intuitive and makes the mechanical engineer’s work faster and more exciting. Use of this prototyping technology in our office has been a great achievement in that, within days, we had the parts on hand to measure, test, validate, and show to our customers. We are able to make our entire range of products. We can design any part... any size. These models are very professional in terms of robustness and aesthetic presentation.”

Cavallin concludes, “The HP Designjet Color 3D Printer is giving us a convenient and affordable way to explore a greater number of new product designs and concepts, and test their market viability with partners and customers, to increase Elite’s product catalogue and ultimately grow our sales opportunities.”



AT A GLANCE	CHALLENGE	SOLUTIONS	RESULTS
<p>Industry sector: Architecture, Engineering & GIS</p> <p>Business name: Elite s.r.l.</p> <p>Headquarters: Fontaniva (PD), Italy Telephone: +39 (0) 495 940 064 Elite s.r.l. Via Fornaci 4 35014 Fontaniva Italy</p> <p>Web site: www.elite-it.com</p>	<ul style="list-style-type: none"> • Reduce product time to market by cutting development times with HP’s in-office 3D prototyping technology. • Increase prototype iterative testing capabilities with lower costs per model and faster turnaround than current SLA outsourcing solution. • Reallocate time and resources saved on prototype outsourcing to affordably explore and test feasibility of greater number of new product concepts in-house. • Greater reactivity to market conditions from ability to engage sales partners and customers with accurate and functional, realistic product prototypes. 	<ul style="list-style-type: none"> • HP Designjet 3D Color printer • HP Designjet 3D ABS Material • HP Designjet 3D Removal System 	<ul style="list-style-type: none"> • HP 3D Printing technology in the office cuts Elite’s new NOVO stand project design lifecycle by 30 percent, reducing time to market. • On identical budget, prototyping production capabilities boosted from 50 per year to 150 per year plus up to 80 percent time saved on single model production. • Time and cost savings from in-house prototype production, compared to Elite’s previous outsourcing solution, exploited to explore greater number of new product concepts. • Functional and realistic models in durable ABS plastic, plus faster turnaround from in-house prototyping, offers opportunity to gain valuable market research information from sales partner and customers.

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