



## One Day You Don't Want To Miss

# 3D Printing: Arriving on desktops right now

3D printing has come a long way since it was invented in the mid '80s by American Chuck Hull - but it is only in the last five years or so that the growth has really accelerated: as the technology has become cheaper and therefore more accessible.

No longer do you need to have a six-figure budget to buy a 3D printer. Today you can get a capable machine for just £300. Stretch that budget to £1,000 or £2,000 and your choice is not a simple one.

Alongside this, there has been rapid growth in the materials available. For the early years just a couple of options were available, limiting the possible uses for finished prints. But high-tech commercial machines are now able to print in a much wider range of materials including plastics, ceramics, wax, metals, concrete and even bio-materials. At the lower end the range is also growing. Initially ABS (the plastic used to make LEGO) was the only real choice, while now even more affordable machines can also print a wide range of materials including PLA, Nylon, flexible plastics, HPPE, PET and wood and stone based material - with metal not far away.

But what does that mean to businesses outside the 3D printing world? Well the technology presents huge opportunities with new ways to exploit them emerging every day.

Kent-based design agency, Rave Creative, invested in the technology over a year ago. In that time, it has had a real impact on their business, enabling them to deliver unique projects, fulfil tricky tasks and go the extra mile with their clients; so much so that they recently added a second machine to their armoury.



**Chris Callander, Commercial Director at BSK-CIC**

In 2012, over 45,000 3D printers were sold (more than in the 25 years to 2010 combined) and other businesses are already spotting potential in this expanding user base. Porsche saw an opportunity to exploit this, and the considerable buzz around the subject, by releasing 3D files of their Cayman for download and print. Then, in a similar move, Honda recently made downloadable versions of their concept cars available.

Now you don't even need to invest in the 3D printing machinery yourself. A growing number of bureau services exist including Shapeways, Sculpteo and UCODO. So you can have your

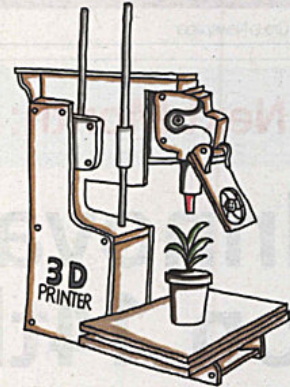
designs printed by state-of-the-art machinery which would otherwise be uneconomical. You can use them simply as your manufacturing solution or your route to market through their marketplace facilities. Clearly this is not a cost-effective alternative for high volume products but it is hugely effective where short-run, personalised products are concerned. Custom cycle component supplier RaceWare is a great example of this. In a partnership with UCODO they offer a range of mounts for GPS systems and cameras that can be uniquely configured by size, colour, mount and more on their website; with the order going to print as soon as it's placed.

So how long until we all have a 3D printer on our desks? You'll get a different answer from everyone you ask but the numbers are growing fast. And there will always be the more sophisticated equipment that is only really viable for the bureau type businesses - much like we have today with traditional 2D print. But with continuous technology advances and materials emerging on what feels like a daily basis, the potential and opportunity 3D printing offers can only grow. And it will be the businesses that start thinking now about how they can make the technology work for them that will gain the advantage.

### Intrigued?

#### Keen to try the technology for yourself?

**Register now for this year's Kent 2020 Vision LIVE on 14th May and you could win an amazing 3D printer of your own in our special prize draw.**



### Technology Showcase

You can also see a sophisticated 3D printer in action on the Triformica stand in the main exhibition (Stand No.351) and view other emerging technologies in the Tomorrow's Business Showcase within the Clive Emson building.