Our business model
Together with our partners and customers, we have been transforming the world of inkjet technology for over 30 years

The largest part of Xaar is the Printhead business. Here we sell our inkjet technology in component form (the printhead) to OEMs who produce and sell the complete digital printing solution. We also work with User Developer Integrators (UDIs) who are building their own digital system.

We actively partner and co-develop with fluid suppliers, hardware and software integrators as well as substrate suppliers to deliver a robust and attractive total solution to our customers.

Our product printing business – EPS – designs and develops complete industrial printing machines which we sell to end users.

Our 3D Printing business – Xaar 3D – is a leading developer of 3D printing solutions based on Xaar3D SAF™ technology. With investment from Xaar plc and Stratasys, Xaar 3D can leverage the natural synergies between global leaders in inkjet technology and 3D printing technology.

Xaar designs

We have R&D facilities in Cambridge, Nottingham, Copenhagen, Stockholm, and Vermont. We also work with strategic partners to jointly develop some products. We invest a substantial proportion of our revenue in R&D to remain a world leader in inkjet technology (2020: over 10%).

We continually add to our Intellectual Property ('IP') portfolio, and currently we have over 300 patents and patent applications. Our R&D staff totals 78 which is 21% of the total workforce.

Xaar manufactures

Xaar manufactures its printheads in Huntingdon, UK. Xaar's manufacturing is capital intensive. The Group has invested over £70 million in assets and production facilities in Huntingdon since the plant opened in 2007. We export over 95% of our printheads to customers around the world.

EPS, our product printing business, manufactures customised and bespoke printing solutions in Vermont, USA.

Xaar markets

Xaar offers a wide range of industrial inkjet printheads and print systems which are designed and produced to meet the customer-driven requirements of a range of manufacturing applications.

Primary markets include:

- 3D Printing
- Ceramic Tile Decoration
- Coding & Marking
- Decorative Laminates
- Direct-to-Shape
- Functional Fluid Deposition
- Glass Printing
- Graphics
- Primary Labels
- Packaging
- Product Printing.

Xaar sells

Xaar sells direct to OEMs and UDIs around the world through its global sales team. Xaar's highly skilled application engineers offer the highest level of technical support to assist OEMs and UDIs in the successful design, build, commissioning, and ongoing maintenance of printing systems. Europe, Asia and North America are the primary locations of our current OEM partners.

Xaar company EPS also sells product printing equipment, services and consumables.

We create value for all our stakeholders

Customers

OEMs and User Developer Integrators, and also end users, are able to innovate in their manufacturing methods and their products as well as benefit from a shorter distribution chain; they can take products to market more quickly, implement more precise and efficient processes, easily produce short batches, improve productivity, reduce waste and deliver more creativity.

Shareholders

A key goal at Xaar is to maximise the long-term growth in value delivered to shareholders via sustained, consistent growth in earnings per share. This is delivered through continued investment in R&D and producing a pipeline of new products which deliver a sustained return on capital employed.

Our employees

Our success depends on the capability and engagement of our people. We want bright and driven people who share our values and passion for developing and manufacturing world leading technology. We want to build a culture of innovation, continuous improvement, delivery of commitments, transparency and customer focus. We aim to build long-term relationships with all our employees by helping them grow and develop, and by making Xaar an interesting place to work as well as a great company to be involved with.

In a difficult year for many, we have focused on rebuilding trust and engagement with our people. We have carried out an employee opinion survey with very positive results, reflecting our enhanced communication with employees, both in frequency and type, and a belief in the new Company strategy. The data from the survey has resulted in targeted actions and improvements specific to different parts of the business.

We have also continued with the forums where employees have the opportunity to meet and chat with all our Non-Executive Directors along with the Exec Xchange where our employees get to meet members of the senior management team in smaller groups to ask questions and exchange ideas.

Environment

Digital print methods are inherently more environmentally friendly than the analogue techniques we seek to replace. Our research shows that, compared to analogue alternatives, digital has a huge impact in reducing energy consumption (by as much as 55%), water consumption (by up to 60%) and CO_2 emissions (by up to 95%), but also in reducing pollution and waste materials. Xaar is committed to reducing its impact on the environment wherever possible. Our actuator technology consumes less energy than competitor alternatives and our industrial printheads can remain in use for many years. In addition, we use a continuous improvement methodology and we have adopted a manufacturing ethos of "reduce, reuse and recycle".

We are committed to adopting advanced manufacturing techniques in our own cleanrooms wherever possible. Some of these techniques reduce manufacturing waste and eliminate the need for tooling and parts. In 2020 we moved to packaging which is 100% recyclable. In addition, we have commenced a review of our energy usage under a programme to target "Carbon Zero by 2030". Progress to date includes the transfer of electricity supply to an environmentally sustainable green source, the co-ordination of energy efficient actions via an Energy Reduction Team and the investigation of energy generation solutions via supply and installation of Solar array at our Huntingdon factory.

Digital printing compared to analogue reduces consumption of up to:

CO_2 emissions
95%

Energy consumption
55%

Water consumption
60%

Source: Xaar