

Strategy update



In April 2020 we announced a new strategy across the business and are pleased to say that we continue to make good progress delivering this and we are already seeing real benefits from this new approach. We believe we are on track to return the business to profitability and growth in the medium term.

Printhead

Our strategy for the Printhead business is:

1. A customer-centric business model that places the customer, Original Equipment Manufacturers (OEMs) and User Developer Integrators (UDIs), at the heart of everything we do;
2. A focus on markets where Xaar Bulk Printhead Technology has a competitive advantage;
3. A product roadmap that will develop the Bulk Printhead range to offer advantages over the competition in existing and new markets; and
4. A marketing and communications plan that drives home the advantages of our current products, sells the value and capabilities of the new products on our roadmap, and builds trust in the new business model.

A customer-centric business model

The change in go-to-market strategy which includes removing distribution channels, a clear pricing strategy, and a sales process that is focused on selling the printhead based on its technical merits and the value of the relationship with Xaar, has already started to reap rewards.

As part of the customer-centric focus we have implemented end-to-end customer journey management to provide an enhanced level of service and support over the entire product lifecycle in order to reduce their development times, and therefore time to market, and to also provide improved aftersales support.

We now have OEMs and UDIs across multiple applications developing machines using a range of our products. We have seen OEM customers return and have also won new accounts including several exciting UDI opportunities. We have a growing pipeline with a significant number of opportunities which we have a good chance of winning thanks to our technology advantages. This will give us additional opportunities for further vertical integration.

With sales in Asia, and particularly China, growing significantly, up 56% year-on-year, customers re-engaging and our sales pipeline increasing, the Board has decided to invest in a Chinese customer service centre in Shenzhen which is ideally situated to address a large number of existing and potential customers whilst providing excellent links to other printing hubs in the rest of China. The Chinese market is the largest addressable market in the world for Xaar printheads and represents an important growth opportunity.

Financial highlights

Revenue – Continuing operations

£48.0m

in line with management expectations (2019: £49.4 million)

Gross margin – Continuing operations

27%

increased from 25% in 2019, benefitting from operational leverage in the business

Gross R&D spend

£4.5m

by continuing operations of £4.5 million, up £1.4 million on 2019 with investment focused on the ImagineX platform and product roadmap

- Positive aEBITDA contribution from Printhead & EPS businesses

Net cash inflows

£7.1m

Net cash inflow from continuing operations (2019: £8.4 million)

Annual cost savings

£0.7m

annual cost saving from relocation of office following comprehensive review

Net cash

£18.1m

Strong closing balance sheet with net cash, and Treasury deposits, excluding Xaar 3D (2019: £16.2 million)

Strategy update (cont.)

This new facility will enable us to provide both our existing and potential customers across the region with a higher level of service including enhanced technical support through a demonstration centre, waveform development and RMA facilities. These facilities will enable local support to be provided for all aspects of the customer product lifecycle from printhead selection, through machine development and commercialisation to warranty and RMA support. We expect to be able to start welcoming customers to our new customer service centre in the coming months.

Competitive advantage of our Bulk Printhead Technology

Xaar's Bulk Printhead Technology offers several advantages over the competition including our Through-Flow (TF) Technology ink recirculation, High Laydown Technology and high viscosity capability, which means our printheads can jet the widest range of fluids available making them suitable for a number of applications that other printheads aren't. We have focused on ensuring that the benefits are better marketed and understood. Together with our customer-centric business model, this has enabled us to win a significant number of new accounts over the last 12 months whilst building up a strong pipeline of opportunities.

Through a targeted approach, an effective business model and printheads for the right market, we have started to win back market share in the Ceramics sector and have established a strong position in the Glass sector which will enable revenue growth over the coming years. Our position in the Coding & Marking (C&M) and Direct-to-Shape (DTS) sectors remains strong especially in DTS where we have a clear competitive advantage over our competitors due to our TF Technology ink recirculation. In 3D and Advanced Manufacturing, we are well positioned due to our ability to print a wide variety of materials and have an exciting pipeline of opportunities.

Our mix of customers, both OEM and UDI, is growing and now spans a variety of industries from our more traditional sectors such as Ceramics and Labels to opportunities in Aerospace, Automotive, Advanced Manufacturing processes used in Electronics, and Robotics.

Product roadmap and ImagineX platform

In September 2020 we announced the launch of our new printhead platform under the brand name ImagineX. This platform builds upon several technology and development programmes from our legacy Bulk and Thin Film investment. The ImagineX platform will drive the next phase of Xaar's success enabling the business to increase its addressable market whilst establishing market leading products across all sectors.

The ImagineX platform will deliver a number of features over the next few years which will provide significant enhancements to the current portfolio; these include substantially improved speed and throughput (frequencies up to 150kHz, equivalent to a threefold increase in speed), aqueous compatibility, increased throw distance to improve image quality on curved surfaces, increased robustness to improve the life of the printhead and maintain image quality, higher viscosities enabling a broader range of fluids to be printed (above 100cP), and higher resolutions (up to 1440 dpi). These features will help strengthen our position in markets where we are already well represented and will drive improved adoption in several markets where we are currently not, such as Wide Format Graphics, Labels, Packaging and Textiles. The performance enhancements in our product roadmap give a clear path for OEMs to upgrade their products and maintain their product differentiation.

Several features from the ImagineX platform are already available and today we announce the launch of our second product, the Xaar Nitrox. The Xaar Nitrox delivers improved print uniformity and is capable of running at higher frequencies which enable the printhead to increase its speed and productivity by 40%. These enhancements make it ideal for Ceramics, Labels, and Advanced Manufacturing applications.

The first product from the ImagineX platform, the Xaar 2002, was launched in August 2020 following extensive customer feedback and incorporates several technology developments, including high viscosity, high laydown, and AcuChp, as well as an increased ease of integration for the OEM. This product has been well received by the market and is being adopted by both current and new customers alike.

We are engaged with OEM partners on several programmes related to our ImagineX platform, with our partners committed to alpha and beta trials. The change to the customer-centric business model is enabling improved Voice of Customer and we are engaged with a wide group of OEMs who are continuing to provide feedback on the roadmap.

Over the longer term Xaar will increasingly vertically integrate in order to provide a more complete printer solution in certain markets, whilst continuing its primary business model of selling printheads to OEMs and UDIs. The additional capabilities required to achieve this will be added through either partnership, development of existing capabilities or acquisition.

Marketing and communications

Twelve months ago, we talked about needing to rebuild the Xaar brand, regain the trust of OEMs, and to make sure the advantages of Xaar technology are well understood. We have made significant progress in addressing these issues, whilst acknowledging there is still more to do.

The combination of communicating the change in strategy and the new product roadmap, followed by a revised mission and vision, and more recently the new brand and launch of the ImagineX platform, have helped to shift perceptions of Xaar. Stakeholders are noticeably more engaged and excited by the direction Xaar is taking. This is demonstrated through the positive customer feedback, in addition to the growing number of customers engaging with the business, strong interaction with the press and positive media coverage including at conferences such as Future Print where we officially launched the ImagineX platform to the marketplace.

The level of engagement from previous and established customers indicates we have started to regain their trust. This has been achieved through our efforts to build relationships with them, our desire to listen to their needs and to work with them to find a solution, and through the consistent communications they receive. This has all been reinforced with corporate messaging on our social media platforms. The initial customer response has been encouraging, with the acceptance that we need to consistently listen and deliver on our customer needs to fully rebuild partnerships with them. We are now able to facilitate the end-to-end customer journey management, utilising marketing cloud for better campaigns and lead generation. We have also been successful in our conversion of these leads.

The launch of the Xaar 2002 printhead gave us the opportunity to demonstrate the advantages of Xaar's technology and discuss with customers our product roadmap. The launch of the ImagineX platform in September has helped reinforce the perception that Xaar's bulk technology adds real value today and has an exciting future. With ImagineX, customers can now see us as a potential partner not only for their current generation of products but also for future development programmes. The closer relationships we now have with our customers has the added benefit of enabling better Voice of Customer (VOC) which in turn allows us to fine tune our product roadmap and helps place us front and centre for the customers' next generation of products.

With the launch of the Xaar Nitrox we are also introducing a new naming convention to link into our new ImagineX platform and reflect our new brand identity. A significant amount of work is going into this product launch which will be the first of several in the coming 24 months.

To see the new Xaar brand identity and the ImagineX platform visit www.xaar.com.

Operational gearing

Substantial progress has been made in reducing the cost base of the Printhead business in recent years to reduce not only variable costs but also removing, or reducing, fixed costs where possible. These efforts had been obscured by the rate at which revenue declined, and subsequently we hadn't previously seen the expected positive impact on gross margins and ultimately the profitability of the business. With revenues increasing in 2020 we now see the benefit of these measures as sales and factory throughput have both increased and we can leverage the high operational gearing in the factory and wider business. This is reflected in the gross margin from continuing operations improvement, up 5% year-on-year to 27%. A combination of operational gearing and the reduction in the SG&A costs have seen adjusted EBITDA improve £5.4 million year-on-year to £0.0 million.

As the business continues to grow, we will be able to further leverage our high operational gearing with modest investment to support additional sales from the existing product portfolio or new products released from the ImagineX platform.

Beyond the factory we continue to review our cost base. Xaar's offices on the Cambridge Science Park are over 25 years old and require investment to bring them up to a more modern, appropriate standard. Furthermore, with the reduction in workforce over the last few years there is significant excess capacity. The move to homeworking caused by COVID-19 has been successful and has proven that flexible working can be effective for large parts of the workforce. Following a comprehensive review, a decision has been taken to relocate from the Cambridge Science Park to the nearby Cambridge Research Park. This move will allow the business to relocate to smaller premises offering a more modern and vibrant workplace for employees and guests. Significantly the move will also generate savings of £0.7 million per annum from the start of the second half of 2021.

EPS

Our strategy for the EPS business is centred on three principles:

1. Focused business development aimed at utilising existing technologies to expand into adjacent markets;
2. Increased scalability through the standardisation of modular components whilst retaining the ability to meet each customers' unique requirements through customised fixtures and tooling; and
3. Improved controls over pricing and costs.

We have continued to build upon the good progress made in the first half of the year. Despite the impact of COVID-19 continuing to impact our team's ability to travel we have been able to deliver improvements on our focused business development. This is reflected in the strong order book and pipeline at the start of 2021 which contains opportunities from several new target markets.

Our engineering teams have worked hard on delivering standardised modular systems and we continue to see orders won using this philosophy. This is significant in that it will not only reduce design costs, and improve product margins, but will also reduce the lead-time for the customer. Combined with improvements in the quotation process, and cost control, we expect to see the real benefit of this in 2021 through increases in gross margins and a faster turnover of machines on the shopfloor.

These developments aren't truly reflected in the full year performance where the rise in gross margin from the change in strategy, and related processes, are offset by the write off and provisioning of slow-moving legacy inventory and the reduction in revenue in the second half of 2020.

Additional work has been identified to take place in 2021 to remediate internal management and reporting controls to enable delivery of improved operational processes and remediate identified deficiencies, to deliver improvements in revenue recognition, gross margin and inventory management.

3D

Xaar's position in the 3D business is one of technology enabler and our end goal has been, and remains to, supply printheads for use in 3D applications and not become an OEM in the sector. That was the rationale behind our joint venture agreement with Stratasys, a recognised leader in 3D with a proven track record and strong routes to market, and the subsequent option agreement signed with Stratasys.

Alongside its investment in 3D, the Xaar Board has redefined its core business strategy during 2020 with a strong focus on the development of its bulk piezo printhead business. We have a programme of investment in technology and new products and, with a revised commercial model, we have been successful in both reengaging with OEM partners and developing new customer opportunities. Our key focus today is on building upon this core competency, increasing our capabilities in deploying bulk piezo printheads among chosen OEMs and UDIs, and prioritising investment to ensure we develop and sustain competitive advantage as we see increasing demand for our unique technology solutions. We enter 2021 with a range of further investment opportunities in both technology through internal R&D capability and capacity through the potential for acquisition of complementary technology, skills and expertise.

Whilst Xaar 3D has continued to make progress this year it has been impacted by the COVID-19 pandemic. This has affected the programme most significantly in two areas. Firstly, due to restrictions put in place in Denmark, the number of people able to access the Copenhagen facility has been limited. These limitations have restricted both the test capacity and the speed at which testing can take place. Secondly, travel restrictions have prevented the team from travelling and has meant face to face time with the sub-contract manufacturer has also been limited and has affected the original timeline of the alpha and beta programme. As a direct consequence of these delays we anticipate Xaar 3D would require further investment in 2021 (cash decreased in 2020 by £7.0 million to £2.1 million), significantly more than original plans anticipated.

As a result of the delays in the programme and the further investment anticipated, the Xaar Board has considered all options for the future financing and ownership structure of Xaar 3D, and accordingly has held detailed discussions to sell the remaining stake in Xaar 3D. Terms are still to be finalised and may potentially differ to those of the Call Option originally agreed in 2019. The Directors have assessed that the disposal is highly probable and therefore Xaar 3D is classified as a discontinued operation.

The terms of any final agreement will be subject to Xaar shareholder approval.

Such an arrangement would provide Xaar 3D with the best opportunity to complete the commercialisation of the HSS product range in the shortest time, would lead to an immediate injection of cash and will enable Xaar to focus on its core business.

Strategy update (cont.)

COVID-19

Following the outbreak earlier in the year we took measures across the Group to ensure the health and wellbeing of all our employees. The business has adapted incredibly well to these challenges with much of the organisation operating effectively from remote locations. In addition, changes at our manufacturing facilities have meant that we have been able to continue production without compromising the health and safety of our employees or our production capabilities.

The Xaar Printhead business has a significant customer base in both China and EMEA, including a strong customer presence in both Italy and Spain. Despite COVID-19 lockdowns in these geographies, which resulted in a number of short-term production stops at our customers' facilities and limited our ability to visit, we have continued to support and engage with them and have seen sales into both Asia and EMEA increase since the second half of 2019. Our teams have worked hard to maintain our supply chain and production capabilities in meeting the requirements of this increased demand. Our ability to ensure the continuity of supply has been well received by our customers and has helped us secure several orders versus the competition.

Our US-based EPS business has continued to operate throughout the period with little interruption to its manufacturing operations. As an OEM and supplier to end users the EPS business has felt the impact of a slowdown in the economy more directly than the Printhead business. Full year sales from Pad Printing machines and consumables were affected throughout the second half of the year as end user markets continued to be impacted by the pandemic. The EPS business has taken advantage of the Paycheck Protection Program (PPP) established by the 2020 US Federal government Coronavirus Aid, Relief, and Economic Security Act (CARES Act). As part of the PPP EPS has taken out a loan of \$1.0 million which under certain conditions can be waived. The company meets the criteria for the loan to be waived and has recognised it as income and reported it as a government grant (see note 7 on page 130). EPS is well positioned to take advantage of any upturn and has continued to secure orders for use of its products in various sectors despite the limitations arising from the pandemic. Furthermore, it has been able to establish both a strong pipeline and strong order book as customers start to plan for their capital investments again.

The 3D business unit has operations in Nottingham, UK, and Copenhagen, Denmark and has seen delays in the testing and commercialisation of the 3D printers. These were caused by minor delays in the supply chain and more significantly by restrictions in Denmark which limited the number of individuals who were allowed in the Copenhagen facility, restricting testing capacity, and the ability to travel and resolve issues face to face with the sub-contract manufacturer.

Both our Printhead business and EPS were well positioned prior to the pandemic with strong order books. We believe we are well positioned to continue to support our customers and suppliers, and our strong cash and balance sheet position provides confidence that we are well placed. We believe we are well positioned to take advantage of any economic upturn as pandemic restrictions recede.

Operating sustainably

Xaar strongly believes that corporate responsibility is integral to business success. We uphold the highest of standards across our business and comply with all relevant regulations in the territories in which we operate whilst enhancing the working environment for our employees and minimising the environmental impact of our products.

We have offset all of the UK regulatory Scope 1 and 2 carbon impact that we made and reported in 2020. Based on our carbon footprint reported in 2020 this makes Xaar a carbon neutral inkjet manufacturer.

We still need to understand the full impact from our operations and are committed to continue reducing the impact on the environment and maintaining our drive to achieve complete carbon neutrality in line with the UK's 2030 goal.

In August 2020 we introduced new packaging across our printhead portfolio and now all Xaar's printheads are shipped in fully recyclable and biodegradable cardboard packs with the aim of reducing our plastic consumption by 1.2 tonnes per year.

In addition, we have moved electricity supply for our Printhead business to a green energy supply, supplementing measures we are already taking to improve energy efficiency.

We have also started a project to review our carbon footprint and the measures we take to limit this. The results of this review including definition of appropriate KPIs will be announced later in the year.

In support of our local community, we have started a programme of work to establish apprenticeship and graduate schemes which we expect to roll out over the next 12 months. This is aligned with our sponsorship of local clubs around Huntingdon and Cambridge in the UK to drive interest in STEM subjects among school students.

Our priority during the COVID-19 period has been to ensure the health and wellbeing of our employees. Beyond this we have supported our local community by donating PPE to the Addenbrookes NHS trust and manufacturing 3D printed headbands for protective masks.

We have put in place on-site COVID-19 testing facilities to test all staff on-site on a twice weekly basis.

Brexit

The Group operates globally and the impact following the transition phase of Brexit continues to be monitored. We have taken action where necessary in moving to freight carriers to ensure smooth customs clearance and to date have experienced little impact. We will continue to evaluate all transport methods and ensure we meet any increased burden of audit trail compliance. As for many businesses, a greater challenge is potentially that of EU workers and migration. As a result of Brexit, the Group is exposed to potential currency fluctuations.

Brexit and trade barriers continue to be an integral part of the Group’s ongoing risk management and review process, for which solutions to address the risks identified are explored and implemented. We continue to believe that the direct consequences of Brexit will have no material impact on the Group.

Outlook and summary

We are very pleased with the performance of the business in 2020. Given the difficult trading environment and the wider economic impact of the COVID-19 pandemic, the results are positive. There is significant work still required to increase customer trust and capitalise on the many market opportunities, and the ongoing pandemic makes it difficult to provide reliable guidance on the outlook for 2021 and beyond. That said, the short-term outlook remains good with a strong order book across the business, and the continued strength of the Group’s balance sheet and cash position leave it well placed to withstand further volatility in the market. Implementing the new strategy is already proving successful and we believe this will continue. The foundations that are being laid at present will provide a springboard for future growth and a return to profitability in the medium term.

By order of the Board


John Mills
 Chief Executive
 Officer

27 April 2021


Ian Tichias
 Chief Financial
 Officer

27 April 2021

