

2020 Half Year Results and Strategy Update

30th September 2020

XAIR

Agenda

1. Introduction
2. Business Highlights
3. Financial Results
4. Business Review and Strategy
5. Business Unit Updates
6. Summary and Outlook
7. Q&A
8. Appendix



Introduction

01

Introduction



John Mills
CEO



Ian Tichias
CFO



Graham Tweedale
General Manager –
Printhead Business Unit

“We have great technology,
great people and a large
market opportunity.
We will be successful”.

John Mills

CEO



Business Highlights

02

Business Highlights

Strong progress made **implementing new strategy** across the different business units

Change in go-to-market strategy for the Printhead Business has seen **new accounts won and customers re-engaging**. The restructured business is well positioned to navigate the current economic climate with clear product roadmap

Engineered Printing Solutions has **increased margins** by 8ppt and **reduced lead times**

First half revenue of £23.7m in line with H2 2019, down 7% year on year

Gross margin of 27% in line with H1 2019, up 6ppt on H2 2019

Positive EBITDA delivery from Printhead and EPS

Strong balance sheet with net cash of £23.9m with positive cashflow from continued operations of £1.7m

Corporate brand re-positioned to reflect new strategy and vision

+ *Positive outlook and continued focus on the medium-term objective of returning Xaar to profitable growth*

COVID-19 Response

Employee Engagement:

- Operations continued
- Adaption to working from home
- Workplace controls, flexible approach
- Weekly communication to all employees

Cash protection and self-help actions:

- Discretionary spend limited
- Travel ban and recruitment restricted to key roles
- Capex on essential spend only
- Focus on working capital management whilst implementing buffer stock to ensure continuity of supply for our customers
- Review office requirements and footprint

Social Response:

- Local community support
- Donating PPE to local NHS trust
- Manufacturing 3D printed headbands for protective masks
- No use of UK government subsidies



Financial Results

03

Group Financial Performance

£M	H1 2020	H2 2019	H1 2019
Continuing Operations			
Revenue	23.7	23.9	25.5
Gross Margin %	27%	21%	27%
aPBT	(3.9)	(7.8)	(2.5)
EBITDA	(1.3)	(5.5)	(1.0)
Cashflow ¹	1.7	(3.5)	6.9
Total Operations			
PAT	(4.8)	(21.3)	(50.2)
Cashflow ¹	(1.5)	(8.3)	(6.4)

£M	H1 2020	H2 2019	H1 2019
Trade Working Capital	15.0	18.0	28.4
Cash	23.9	25.3	21.6
Net Assets	65.9	70.7	81.7

¹: Cashflow excludes £12m investment 3D made by Stratasys in H2 2019

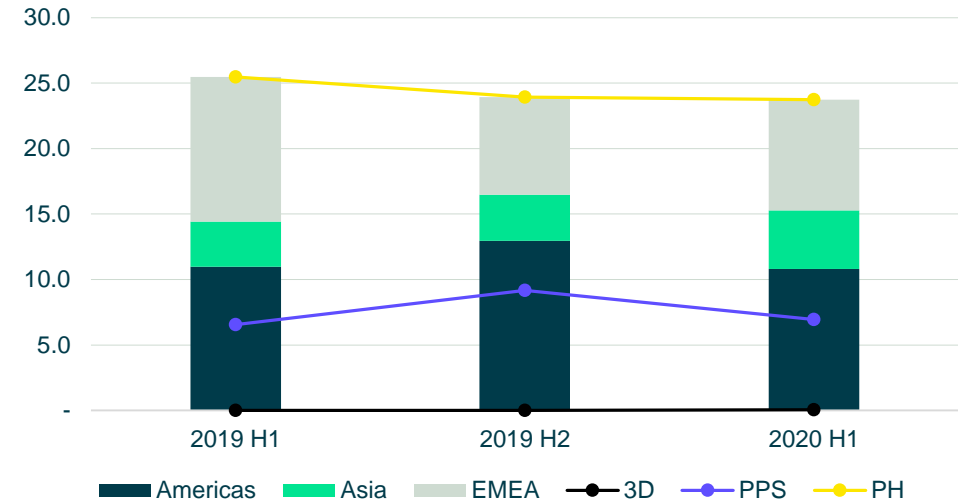
- Revenue in line with expectations
- Gross margin 6ppt higher v H2/19
- PH and EPS EBITDA positive
- Cash inflows from Continuing Operations
- Thin Film costs and cash outflows driven legacy liabilities

- Working capital reductions driven by targeted inventory reductions and improved DSO
- Cash protection and continued investment
- Strong Balance sheet

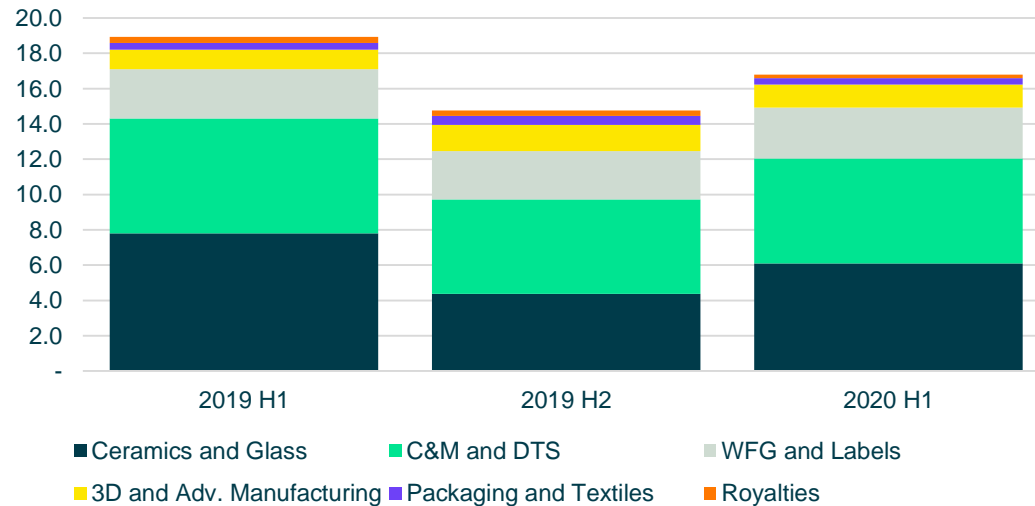
Group Revenue

- Revenue flat v H2/19 down 7% y-o-y
- Printhead recovery driven by increased revenues in Asia and EMEA as the Ceramics/Glass & C&M and DTS sectors all grow
- EPS up on H1/19 but down on H2 – Pad Printing revenues declining due in part to COVID
- 3D machine sales commence in H2/20

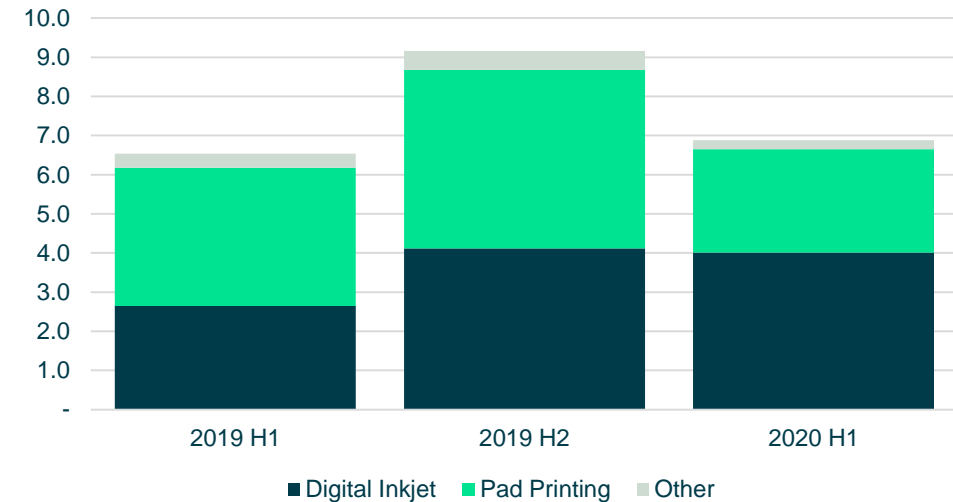
Revenue by Region and BU



Printhead Revenue by Sector



EPS Revenue by Technology



Divisional Performance: Printhead

Printhead				
	H1 20	H2 19	H1 19	H1 20 v H1 19
Revenue	16.8	14.8	18.9	(2.1)
Gross Margin	23%	16%	27%	
Total Opex	(5.4)	(9.2)	(7.0)	1.7
aPbt	(1.4)	(6.8)	(1.8)	0.5
EBITDA	0.4	(5.1)	(0.4)	0.9

- Revenue growth 13% v H2/19
- Gross profit increase with margin 7ppt higher v H2/19 and 1ppt higher than FY19
- Lower OPEX due to tight cost control and impact of restructuring implemented in H2/19
- R&D investment increase of £0.5m
- SG&A spend down £2.2m year-on-year
- EBITDA is now positive

+ *Positive EBITDA generation*

Divisional Performance: EPS

EPS				
	H1 20	H2 19	H1 19	H1 20 v H1 19
Revenue	6.9	9.2	6.5	0.3
Gross Margin	35%	29%	27%	
Total Opex	(1.8)	(2.5)	(1.9)	0.1
aPbt	0.5	0.0	(0.2)	0.6
EBITDA	0.6	0.2	0.0	0.6

- Revenue decline v H2/19 due to Pad printing machine sales impacted by COVID, 6% growth v H1/19
- Gross profit increases driven by improvements in the quotation process and increased cost controls
- Operating expenditure tightly controlled throughout H1
- Paycheck protection program loan of \$1m taken out and expected to be forgiven in Q3/4. Cash and balance sheet remain strong

+ *Increased gross margin by 8ppt*

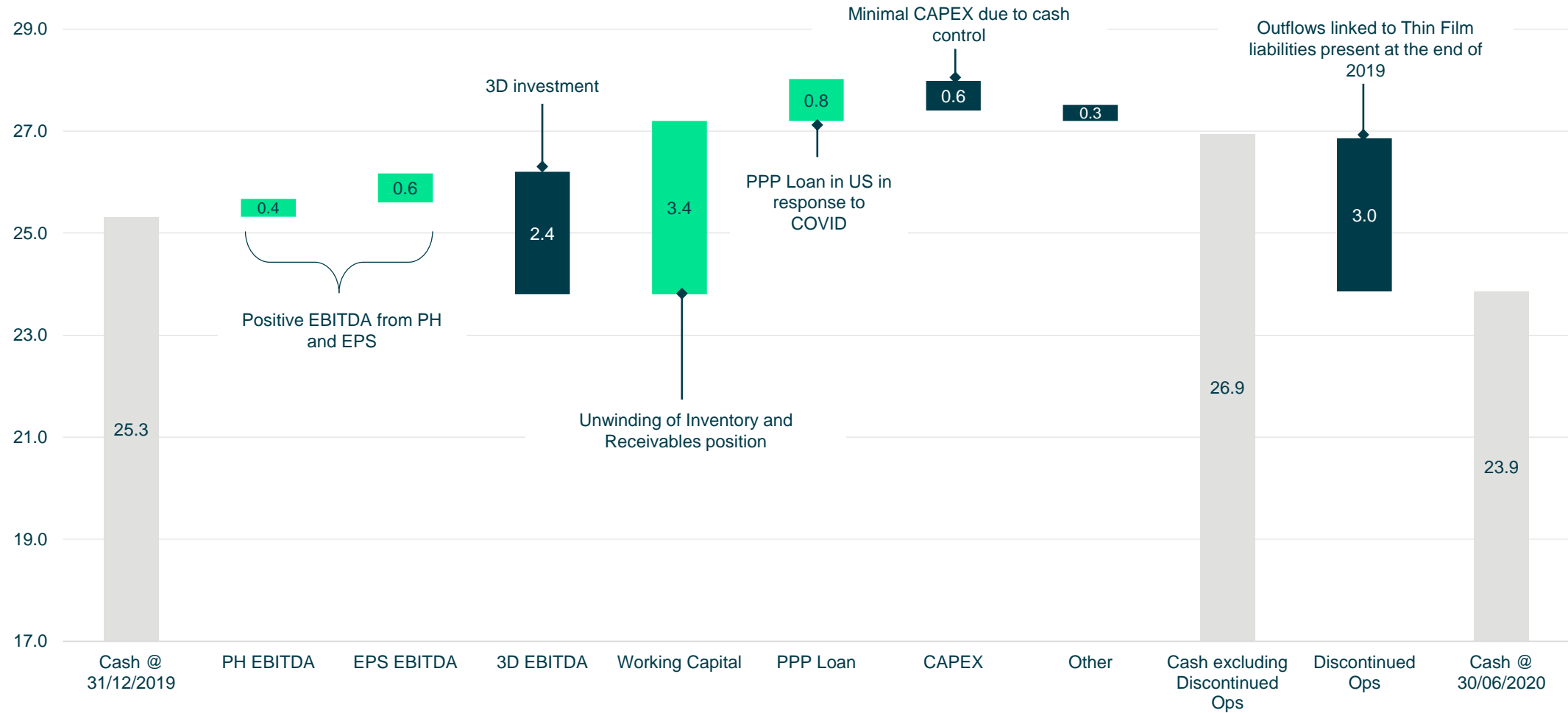
Divisional Performance: 3D

3D				
	H1 20	H2 19	H1 19	H1 20 v H1 19
Revenue	0.1	0.0	0.0	0.0
Total Opex	(3.1)	(3.1)	(0.4)	(2.6)
aPbt	(3.0)	(3.2)	(0.5)	(2.6)
EBITDA	(2.4)	(2.4)	(0.4)	(2.0)

- Increased operating expenditure relates to the change in treatment of Development costs
- Capitalisation of R&D costs ceased & now being amortised
- 3D cash of £5.9m leaves the business well positioned to continued to fund investment in R&D and the Go-to-Market

+ Programme on target

Positive Operating Cash Flow



Financial Summary



Revenue is **in line with expectations** and v H2/19 showing stabilisation



Cost control management with **strong working capital discipline**



Positive EBITDA and Operating Cash Flow



Balance sheet is strong and provides **stable platform for future growth**



Positive outlook and continued focus on the medium-term objective of returning Xaar to profitable growth



Business Review and Strategy

04

Key Changes

Positives

Passionate and committed

World-class team of people

Product with clear **customer value**

Significant **unexploited technology**

Learned lessons from the past

EPS strong **growth potential**

JV with Stratasys in the 3D space

Issues to address

Xaar's **reputation** has been damaged by withdrawal of 5601 and previous go to market strategies

Customers not clear what **direction of Xaar technology** is taking

Is Xaar's **bulk technology** at the end of its life

Found Xaar difficult to **work with**

How we are addressing the issues

Clear Business model and route to market – Built for Partnerships

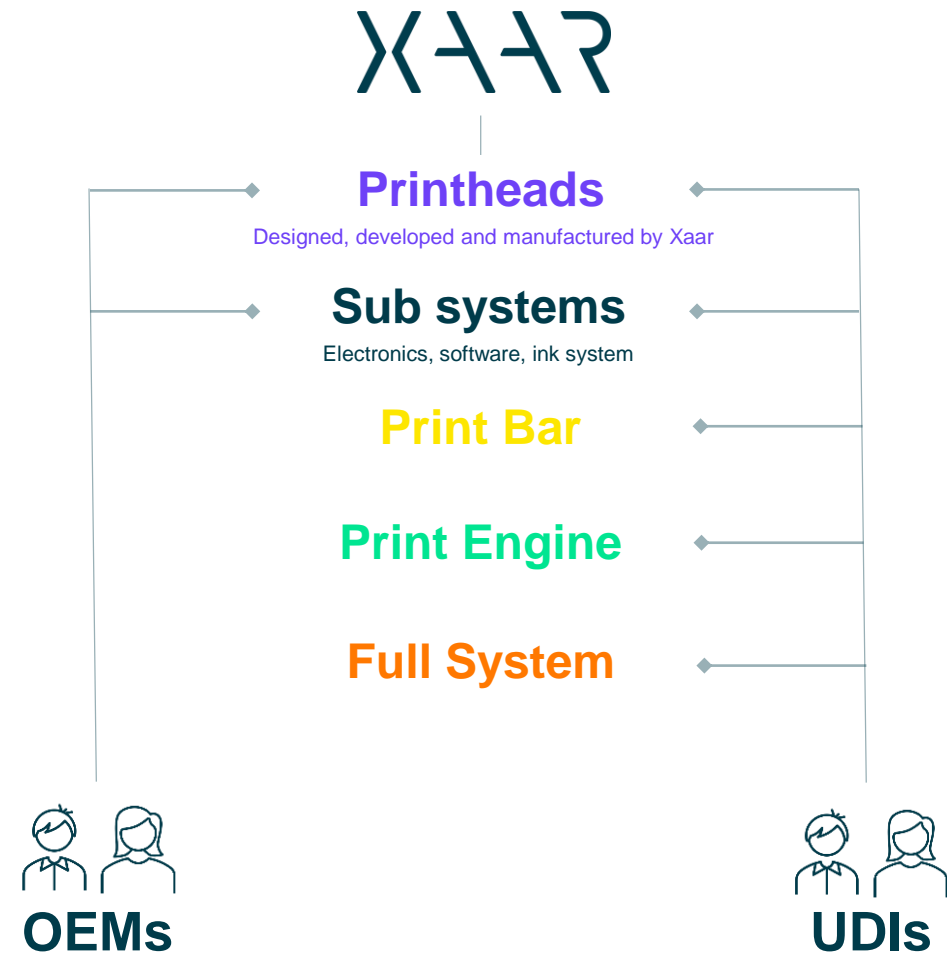
Visibility of Bulk technology Roadmap – ImagineX Platform

Communication changes to our customers – **New Corporate Identity**

‘The New Xaar’

Built for Partnerships

- Xaar will sell printheads that it has **designed, developed and manufactured**. It will not sell any third party printhead
- Xaar will sell printheads to two customer types
 - **OEMs**
 - **User Developer Integrators (UDIs) who are developing their own digital solution**
- Xaar will **NOT sell** through any competing channel
- Xaar will become more vertically integrated provided it supports the primary business model of selling printheads to OEMs and UDIs. Additional capability will be achieved through either partnership, development of existing capabilities or acquisition
- Primary markets are **North America, Europe, Israel, China, Korea, Japan & Middle East**
- It is clear where there are gaps in our product offering and capabilities that will drive future acquisition strategies, as well as shaping the way that we organically grow the businesses and partnerships that we form



Generation 2 IP – Introducing our ImagineX Platform



New Corporate Identity



Externally

A **clear signal** to customers that
Xaar has changed

Re-attract attention through
elevated communications

The **right management team** in
place to deliver new strategy

Internally

Reflects the **culture change** and
increases employee engagement

Improve interaction and collaboration
with internal stakeholders

Establish and embed how we work and
what we represent

Corporate Video





**Business Unit
Updates**

05

Printhead Division

Business Model Challenges

Dual route to market through OEMs and distributors caused confusion



- Sales of printheads via distribution has been stopped

Global pricing strategy established



- Clear understandable pricing with all customers

New value-add proposition for OEMs including technical and commercial support



- Product features explained as clear end user benefits
- Application development support

Rebuilding confidence in Xaar's product range internally and externally



- Product development roadmap focused on market gaps and opportunities
- Expanding the capability of Xaar's bulk technology and products

Market Segmentation

Markets	Ceramics and Glass	WFG and Labels	Packaging and Textiles	C&M and DTS	3D and Adv Man
Reason for grouping	Oil based inks with high pigment loadings	UV inks	Water-based inks	Different printing orientations size of the printhead	Challenging inks
Market size for printheads	£100m	£500m	£100m	£100m	£50m
Estimated Xaar share	Ceramics 5% Glass <1%	<1%	0%	30%	1%
Current product suitability	High	Very low	Very low	Very high	High
Key product requirements	Robust nozzle Plug and play	Robust nozzle plate High speed 400-1200dpi	Water compatible 400-1200dpi	Long throw distance Material compatibility	Material compatibility 1200dpi High speed High Viscosity
Market positions (management estimate)					

Xaar Roadmap – Powered by our ImagineX Platform

Feature/Product	Status	Benefits
Tuned actuator and AcuChip	<i>Launched 2020</i>	Plug and play
High Viscosity	<i>Launched 2020</i>	Jetting new materials for new applications
High Laydown	<i>Launched 2020</i>	5X increase in productivity
Duty-based Compensation	<i>In test</i>	Improved image quality and reliability
High Frequency (48kHz)	<i>In test</i>	40% increase in speed and productivity
Aqueous compatibility	<i>In test</i>	Water based conductive inks and fluids
High Frequency (57kHz)	<i>In test</i>	60% increase in speed and productivity
Increased throw distance	<i>In development</i>	Image quality on curved media and reduced risk of head strike
Robust nozzle plate	<i>In development</i>	Image quality maintained
Ultra High Frequency (150+kHz)	<i>In development</i>	Three fold increase in speed
High Density Actuator	<i>In development</i>	Higher native resolution up to 1440dpi



Funded within our planned operational spend
Expect delivery phased over the next 5 years

Printhead Summary



World-class and award-winning manufacturing facility in the UK



Well invested with the ability to scale capacity in the current footprint



Leadtime operating model established significantly **reducing inventory exposure**



Distribution model stopped, route to market and **relationships re-established** with OEMs



ImagineX Platform delivers **new product capabilities** that increases the number of addressable markets



Positive growth in revenue from new business with new and existing OEMs

EPS Division

EPS Overview

- EPS **design, develop and manufacture** bespoke print systems that are integrated to their customers production lines
- Good reputation in the US market leading for **high quality, reliable bespoke solutions**
- **Revenue growth** in recent years has not led to an increase in profitability and cash generation:-
 - Lack of control in the quotation process leading to project overruns
 - Requirement to develop new solution for each customer leading to lower margins
 - Lack of focus on securing aftermarket ink and spares revenue
- Objective: **Increase revenue and margins without increasing R&D costs**

Implemented Modular Strategy

Each bespoke system now leads to a standard machine that can be **configured for other customers with similar requirements**

Solution to new projects built around existing core system with pre and post print operations coming from **portfolio of pre-developed items**

Only if sub-system doesn't exist will team **design new functions** (and then add it to the portfolio)

Modular Strategy - Starting to pay off

Now have two core print products XD70 and XD360



At present these form the basis of the over 80% of digital print projects

Improved margins by 8%



With lead time on project being reduced **from 29 weeks to 22 weeks**

Defined core product



Will allow **more effective marketing** to generate new business in adjacent markets

Team now has more focus



Securing aftermarket revenue. We will start to offer service packages including spares and ink on a contract basis to **build annuity revenue stream**

EPS and Xaar – The Future

Good cost control in place and **improved margins** have seen improvement in profitability

The future will see **greater group integration** of Business Units and the portfolio of products that EPS sell will form part of the vertical integration strategy of Xaar

Current trading – many projects pushed out till 2021 leading to a more challenging second half

Clarity of EPS fit in Xaar group – their customers are what we now call UDIs

Current opportunities exist for EPS to supply either a print engine or full system

Xaar 3D Division

Xaar/Stratasys Partnership – Continued Progress

- Our core technologies are predominantly based on unique implementation of a powder bed fusion process (High Speed Sintering). Inkjet printheads and infrared heaters are used to manufacture products layer by layer from polymer powder materials at much higher speeds than other additive manufacturing processes
- Stratasys has the option to acquire remaining 55% stake of Xaar 3D at a valuation of \$33m within 3 years of signing the deal in October 2019
- 2020 objectives is for successful testing & shipping machines to Stratasys for beta trials whilst establishing go-to-market teams and infrastructure prior to product launch
- Despite some delays linked to COVID-19 testing has gone well and have made good progress against our targets

	Xaar
Brand Leader in 3D Printing	High speed sintering knowhow and IP including printer design, process and thermal management
Extensive commercialisation experience in multiple segments	Experience in designing powder bed solutions with low cost industrialization
Best global additive go-to-market selling over 40001 industrial systems a year	Leading supplier of piezoelectric industrial printheads
Strategic partnerships in key verticals	HSS IP, process, powders & ink knowledge
>20K global installed base	



Summary

06

Summary – Key Achievements



EBITDA positive in PH & EPS



Built stable platform for the business:

- Implemented re-structure
- Cost discipline
- New commercial strategy
- Re-engagement of lost customers and gaining new customers
- Strengthened management team in key positions
- Employee engagement with common vision
- Clear value proposition for bulk products and technology



Launched ImagineX Platform

which will lead to new range of products across all market sectors



EPS business model change

resulting in margin improvement & reduced lead times



Strong working relationship with Stratasys

keeping Xaar 3D on schedule



New corporate identity

The New Xaar

Summary – Outlook

2020 priorities

- Continue to **operationally and financially stabilise** the Group – clear focus to ensure we grow from a stable footing
- **Neutral operational cash flow** in 2020 (excluding Xaar 3D)
- Ensure Xaar 3D **executes on product delivery** to Stratasys

Medium term aspirations

- Ambition grounded in philosophy of presenting **achievable goals focused on delivery**
- Profit “drop-through” will continue to be healthy given **well invested facilities**
- Return to **profitability 2022**

Further Upsides

- Delivery on **product roadmap** unlocks **significant market opportunities** offering huge upside potential
- **Agility and flexibility** to capitalise on significant new opportunities as they arise
- Communication of **ImagineX Platform increases market share** in existing customer base

“Great technology, great
people and a billion
dollar market”

John Mills

CEO



Q&A

07

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