Additive Manufacturing UK

IN PARTNERSHIP WITH





Agenda



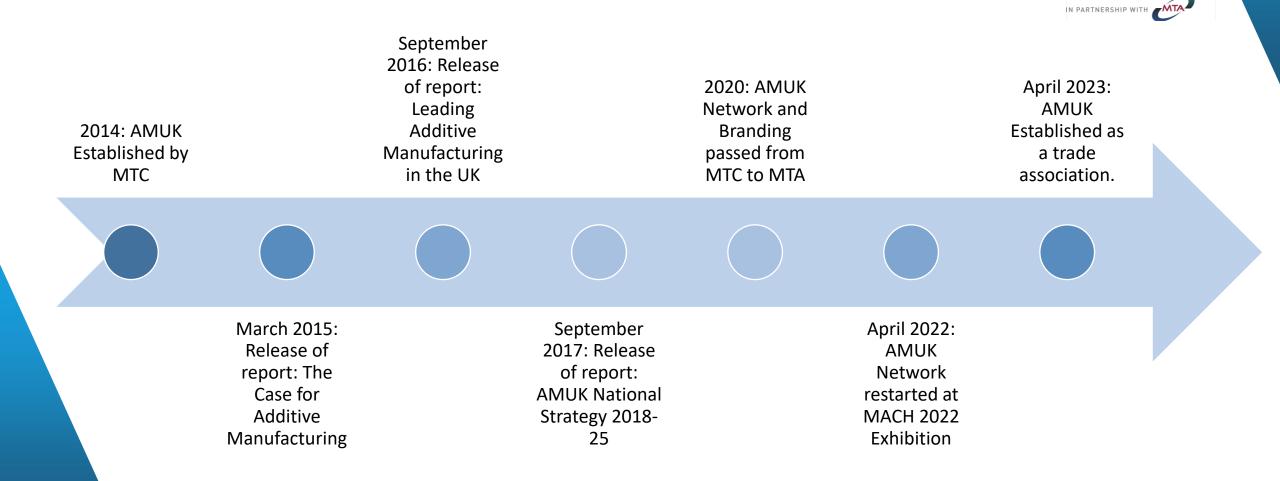
History MTA Cluster Vision Membership

Market Market Trends

Challenges
 Supply Chain
 Skills
 Standards
 AMUK
 Actions

Membership MACH 2024

AMUK Introduction - Background



Additive

UK

Manufacturing

AMUK Introduction – MTA Cluster





THE MANUFACTURING TECHNOLOGIES ASSOCIATION



AMUK Introduction – Vision





Business Support Industry Intelligence Promotion & Marketing Academic Engagement Strategic Partnerships

Sector Development



AMUK Introduction - Membership

- Membership is open to all companies who make up the Additive value chain
 - Technology/Service Suppliers
 - AM Technology Users
 - R&D Organisations
 - Training Providers
 - Education Establishments
- Currently have 68 members across the UK



Market Trends - Context



- We track general trends in the market looking specifically for growth, consistency or decreasing.
- A positive result indicates growth, neutral equals a consistent market and negative equals a decrease
- Scale is from 100 to -100. Anything about +50 is a strong positive outlook, - 50 is a strong negative outlook.
- We look a trends in the following categories:
 - Home Market AM Products, AM Materials, AM Services, AM Machines, AM Exports.
 - Materials Plastics, Metals, Ceramics, Composites
 - Industries Aerospace & Space, Automotive, Medical, Machinery, Chemical & Process
 - Investment Confidence Trend

Market Trends - Status

+50(+67)



• Currently a positive outlook in the UK around the Market Trends for Additive.

Home Market	AM Produ	icts AM	Materials	AM	Services	AM Machines
	+33 (+83	3) +	+46 (+50)		24 (+43)	+13 (+25)
Natoviala	Metals	; P	Polymers		eramics	Composites
Materials	+75 (+50)) +	+61 (+80)		13 (+46)	+56 (+50)
Industries	Aerospace	Automotiv	omotive Machir		Medical	Chemical

+32 (+33)

+19 (+57)

+9 (0)

• Investment intentions are strongly positive and currently tracking at a confidence indicator of 67.4 (78.6).

+71 (+63)





• AMUK, as advised by the membership and the AMUK Steering Board, choose the following areas as the challenges it is looking to address:

SUPPLY CHAIN:

Education, Adoption, Visibility and Qualification

SKILLS:

Education, Training, Qualifications and Recruitment

STANDARDS:

Navigating, Implementing, Testing and Inspection

Challenge 1: Supply Chain



Supply Chain: Education, Adoption, Visibility & Qualification Lack of understanding/knowledge of current capability of additive technology by UK manufacturing supply chain.

Lack of uptake and use of additive he technology by the UK manufacturing supply chain.

Lack of understanding of capabilities available in the UK.

Qualification of the supply chain – link to standards.

Challenge 2: Skills



Skills: Education, Training, Qualifications and Recruitment	Lack of skills to effectively use additive technology.
	Lack of agreed courses on how to educate and train developers and users in the technology.

What qualification pathways are there for AM skills?

Due to lack of personnel very competitive landscape for companies with recruitment – lots of head hunting.

Challenge 3: Standards



Standards: Navigating, Implementing Testing and Inspection Lack of agreed standards – with have a lot of competing standards in the UK and companies have to follow each one to get into each supply chain.

Confusing landscape for smaller companies – which standard to adopt – which organisations to engage.

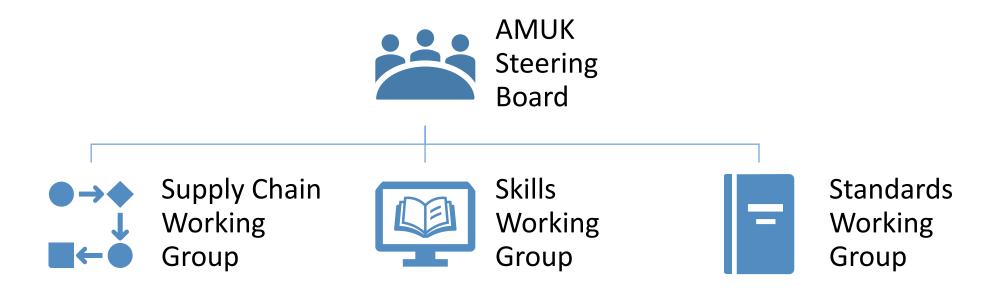
Lack of knowledge in how to adopt a standard – Additive industry in the UK is young (less than 10 years old) so education is required on how to adopt.

Lack of understanding of how to implement the testing regime set out in a standard.





 Following setting of the challenges, 3 working groups with members were formed:



 Overall, there are 28 individuals representing 20 companies on the working groups – meetings held in November 2023.

Supply Chain Actions



Supply Chain: Education, Adoption, Visibility & Qualification	Comprehensive Case Study Database			
	Greater Exposure of Membership across social platforms			
	Creation of a roadmap for AM Adoption			

Event for both AM beginners and experts to come together and share best practice – a user's group.

Create a guide to funding opportunities in the UK

Skills Actions



Skills: Education, Training, Qualifications and Recruitment

AM Training Course Review – Pathway for AM skills mapped against courses available.

AM Open Days – series of smaller events to raise profile of technology to companies and education establishments.

Establish AM specific competition – aimed at apprentices and university students to bring industry and academia together.

Standards Actions



Standards: Navigating, Implementing Testing and Inspection

Sector Standards Database – What standards are needed for each sector?

Review of materials databases – what's available and where are the gaps.

AM Standards Event – share best practice between members to advance standards understanding and adoption.

Getting Involved



MEMBERSHIP

- Open to companies who have a UK presence in the AM value chain, including:
- AM technology & service providers (materials, build, post processing, NDT etc)
- AM users
- R&D Organisations
- Training Providers
- Education Establishments
- Visit the website for further details: <u>https://additivemanufacturinguk.org.uk/am-uk-</u>

MACH 2024



Additive

UK

Manufacturing

- Biennial UK Manufacturing Technology Exhibition 15th-19th April @ NEC, Birmingham
 600 Exhibitors and 25,000 visitors.
- 22 AM Exhibitors: Renishaw, Plastometrex, Laser Lines, Globus Metal Powders, Additive X, CREAT3D, Bowman 3D, Dyndrite, 76 Additive, Apex Additive Technologies, REM Surface Engineering, Kaizen PLM, MSL, Cookson Industrial, HP 3D Printing, Additive Industries, 3DPRINTUK and more

https://www.machexhibition.com/

Additive Manufacturing UK