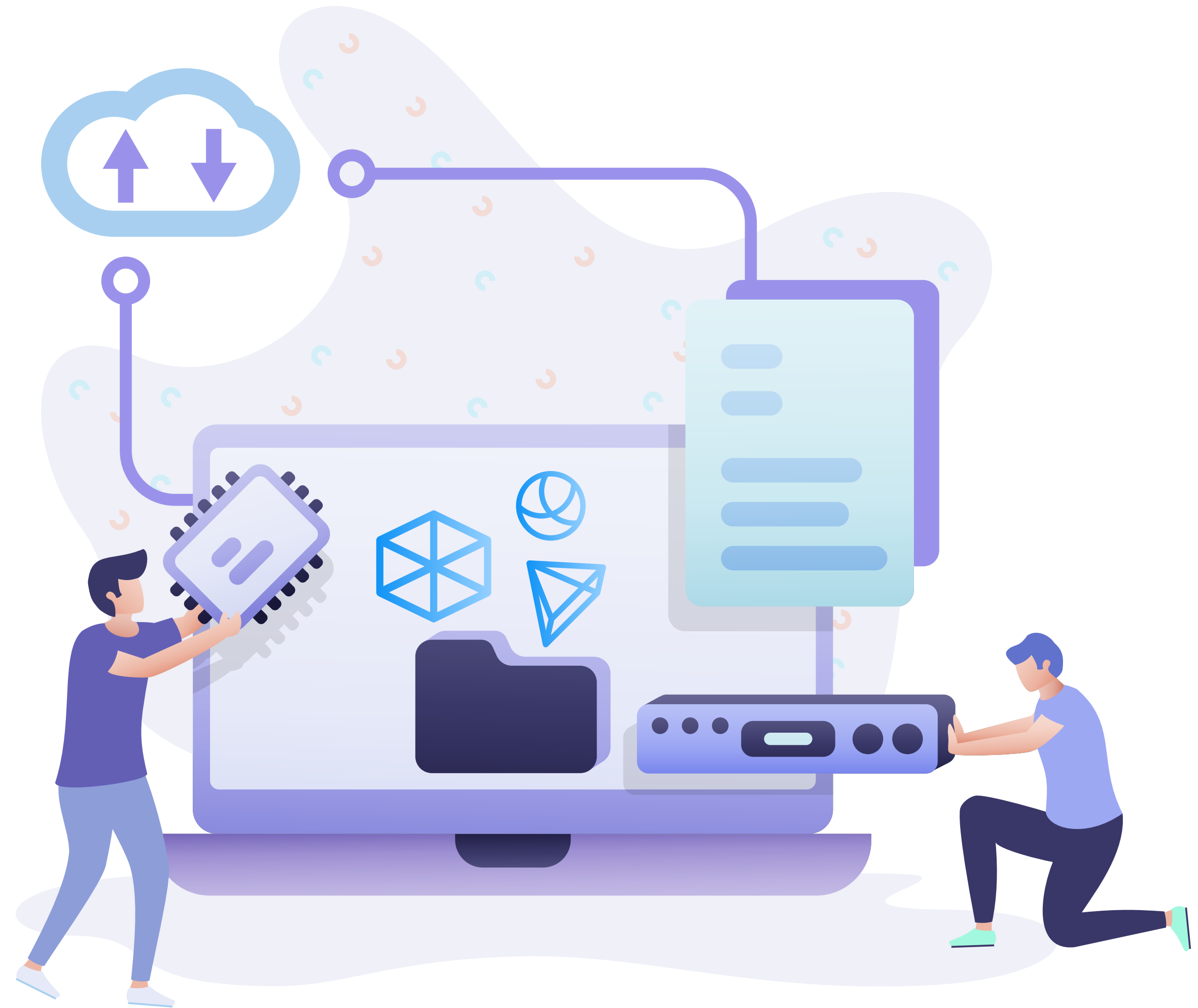




DATA INTEGRATION IN INDUSTRIAL AM SUPPLY CHAINS



MOST COMMON RESULT OF RESEARCH INTERVIEWS

AM does need a data ecosystem that stretches from the initial design to the finished part

‘How to manage a series of complicated, connected, and data-driven events’

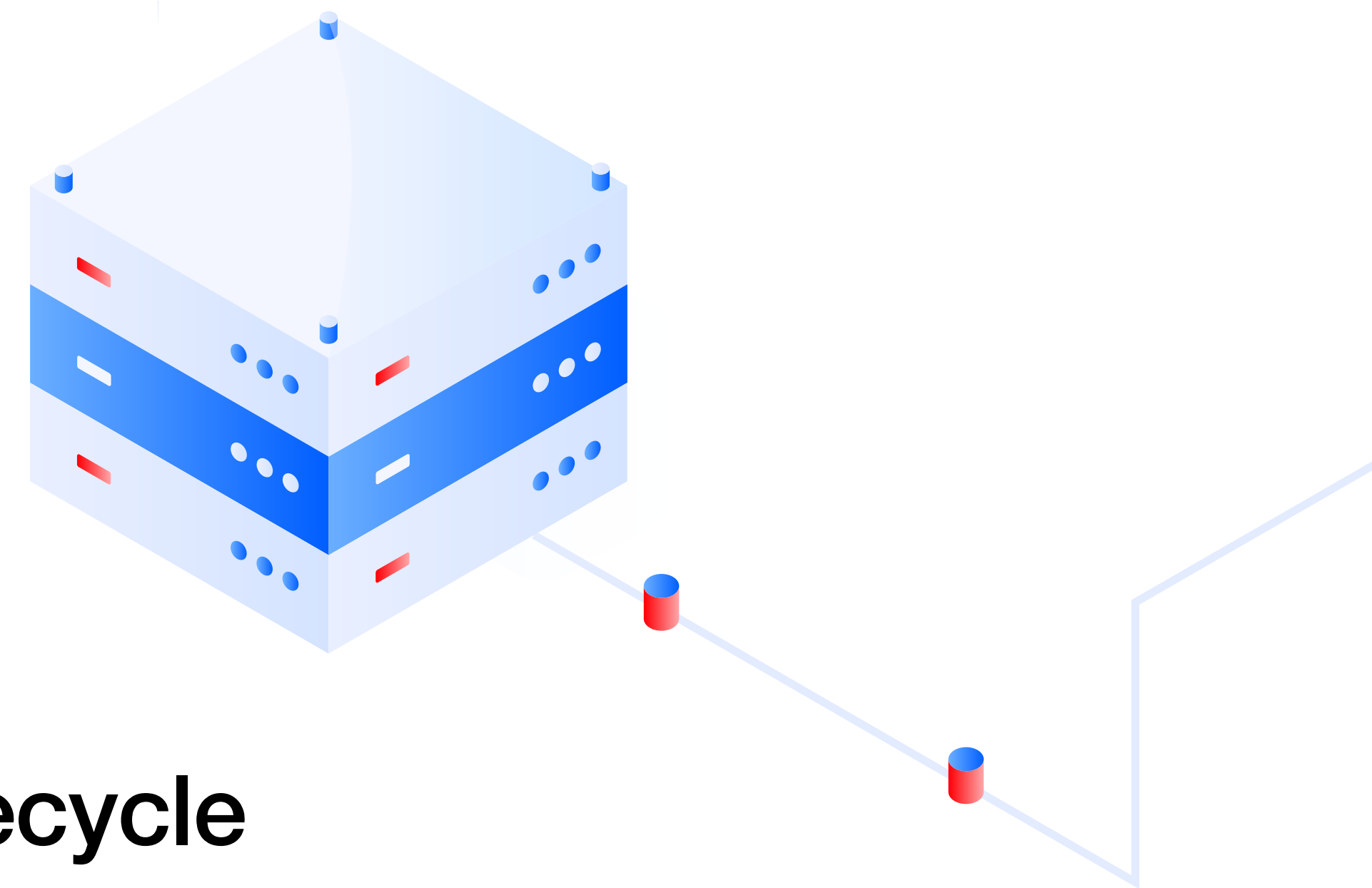
DIGITAL THREAD TECHNOLOGY WAS OFTEN MENTIONED AS A SOLUTION

'DIGITAL THREAD' IS COMMONLY USED TO DESCRIBE THE PROCESS OF DIGITISING

- supply chains
- manufacturing processes
- parts
- in-service data

DATA IS

- captured throughout the product lifecycle
- analysed for opportunities to decrease costs, improving efficiency & innovation



DIGITAL THREAD TECHNOLOGY IN AM REQUIRES

SOFTWARE INFRASTRUCTURE FOR DATA

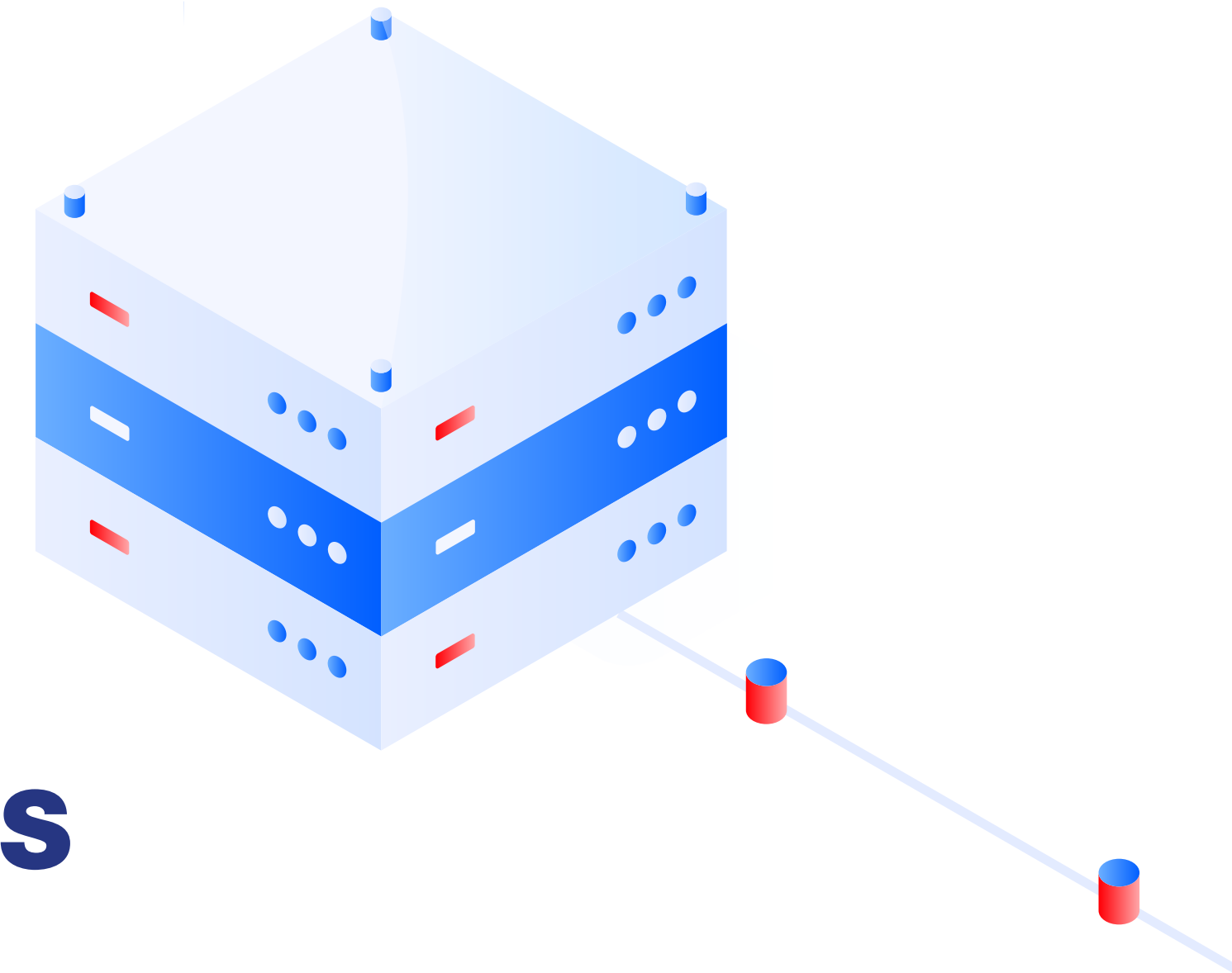
- Capture
- Availability
- Discovery while securing IP

TOOLS FOR DATA

- Mining
- Federation
- Integration

QUALITY STANDARDS

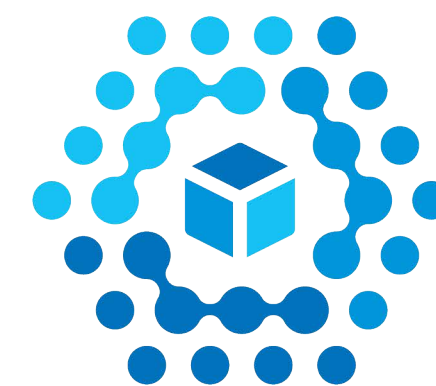
BEST PRACTICES



BUT THE DEVELOPMENT OF INDUSTRIAL AM ALSO NEEDS

- Cultural shifts to ensure governance policies for data capture
- Platforms for collaboration
- Negotiation of existing & new IP rights
- Controlled access to data

WE CALL THIS EXTENDED SOLUTION

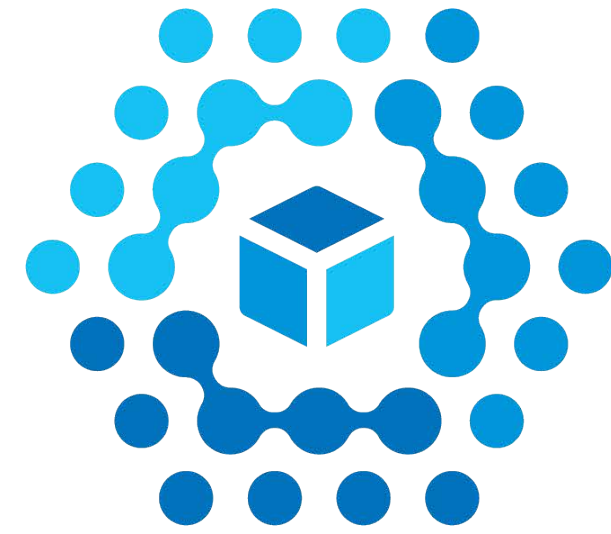


EDI4AM
EDI 4.0 – ADDITIVE MANUFACTURING



THE GOALS

- Understanding the complex interplay of materials, processes and geometry
- Improving manufacturing processes throughout the supply chain
- Supporting requirements for certification



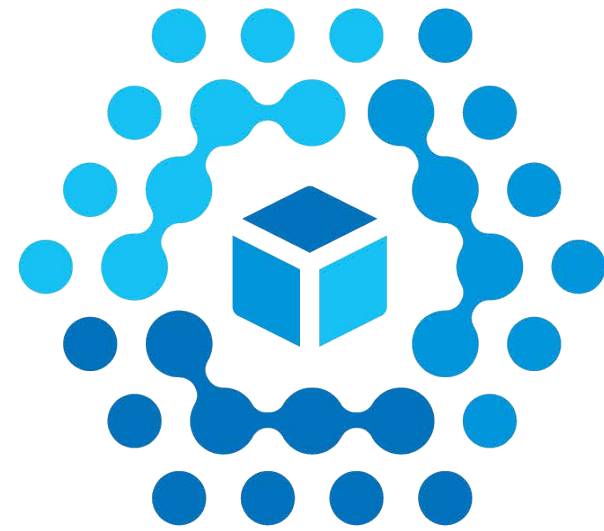
EDI4AM

EDI 4.0 – ADDITIVE MANUFACTURING

(1)

UNDERSTANDING THE COMPLEX INTERPLAY OF MATERIALS, PROCESSES AND GEOMETRY

- To optimize materials, processes and geometry
- To increase performance while reducing weight
- New materials yielding novel microstructures
- Improved manufacturability



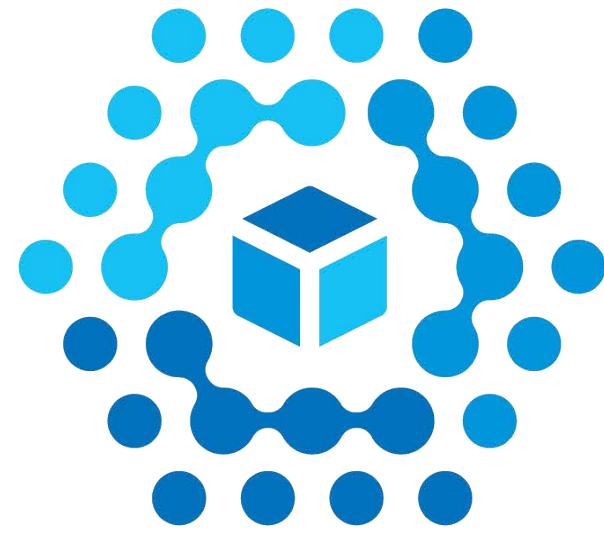
EDI4AM

EDI 4.0 – ADDITIVE MANUFACTURING

(2)

IMPROVING MANUFACTURING PROCESSES THROUGHOUT THE SUPPLY CHAIN

- To increase efficiency & lower costs
- To gather real-time interpreted data of connected manufacturing operations
- Feedback for adapting designs, materials, manufacturing processes



EDI4AM

EDI 4.0 – ADDITIVE MANUFACTURING

(3)

SUPPORTING REQUIREMENTS FOR CERTIFICATION

- Parts (design, control, manufacturing)
- Facilities (preparing & production)

**LEVERAGING THE COLLABORATIVE NATURE
OF THE DISTRIBUTED MANUFACTURING COMPANY**



EDI4AM
FOUNDATION

MUST CAPTURE AND MANAGE ALL DATA RELATED TO AM

**IS A NON-PROFIT INITIATIVE THAT LEVERAGES
THE COLLECTIVE KNOWLEDGE OF THE WHOLE AM INDUSTRY**

- based on international standards, in cooperation with supra-national organisations, such as (if applicable)

UN/EDIFACT (un/cefact)

ANSI ASC X12 (American National Standards Institute)

ODETTE (Organisation for Data Exchange by Tele Transmission in Europe)



EDI4AM
FOUNDATION

FIRST STEP

- SDAM Alliance invites its participants to help build the structure of the Foundation
- active role in Board to manage the Foundation
- active role in achieving the targets of the Foundation

For more information or the sign up for this project please contact:

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