

J&A Sell-Side M&A Report

# Manufacturing Execution Systems (MES) and the Fourth Industrial Revolution M&A Transactions and Valuations

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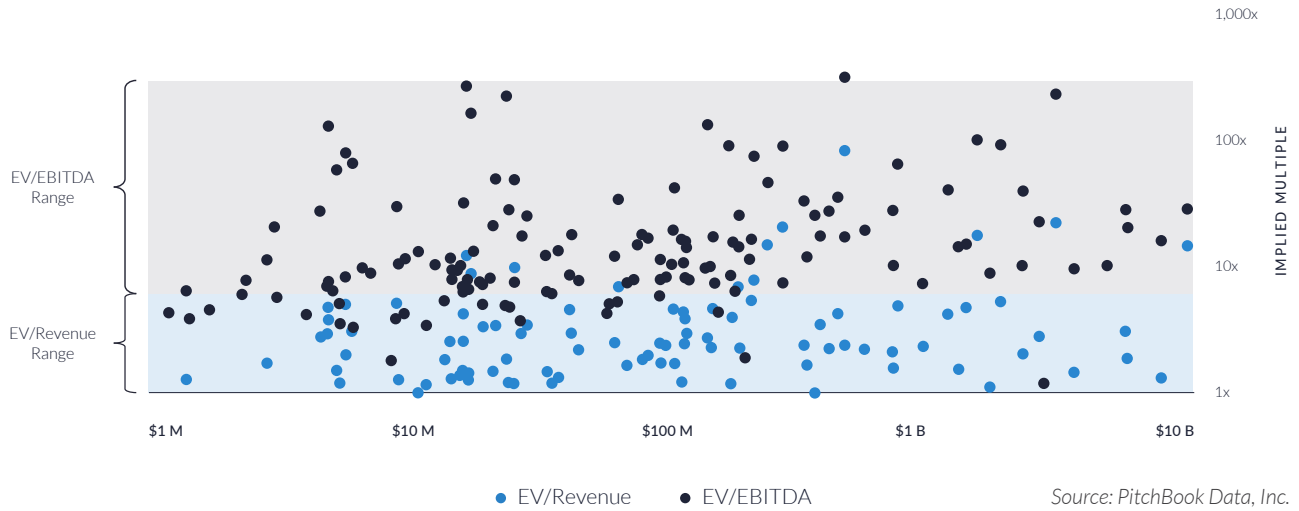


The manufacturing execution systems (MES) and industry 4.0 sectors continue to evolve as cloud-based automation, real-time production intelligence, and AI-driven smart factory solutions expand. Industrial internet of things (IIoT), predictive analytics, and advanced manufacturing operations management (MOM) software increase efficiency, scalability, and supply chain agility. M&A activity and investment in the sector reflect the growing adoption of digitized manufacturing, connected production systems, and AI-powered decision-making.

This report analyzes M&A transaction trends, valuation metrics, and regional investment patterns from Q1 2020 to Q4 2024, focusing on capital deployment, industry consolidation, and strategic acquisitions. It examines major deals, including Rockwell Automation's acquisition of Plex Systems, ASMPT's buyout of Critical Manufacturing, and Siemens' acquisition of Camstar, assessing their strategic rationale, valuation multiples, and market impact.

Additionally, this report evaluates valuation trends, including EV/revenue and EV/EBITDA multiples, to identify pricing patterns and investment dynamics. It delivers actionable insights for investors, financial advisors, corporate executives, and industry leaders, offering a detailed perspective on the competitive landscape, emerging investment opportunities, and the strategic direction of MES and industry 4.0 businesses.

## Transaction Valuation Multiples in the Manufacturing Execution Systems and Fourth Industrial Revolution Sectors Analysis (Q1 2020 – Q4 2024)



\*The X- and Y-axes have been converted to a logarithmic scale to better visually represent the data.

EV / REVENUE			
MEAN 3 X	MEDIAN 2 X	MINIMUM 1 X	MAXIMUM 83 X
EV / EBITDA			
MEAN 28 X	MEDIAN 11 X	MINIMUM 1 X	MAXIMUM 325 X

- Valuation multiples are based on a sample set of M&A transactions in the manufacturing execution systems and fourth industrial revolution sectors, using data collected on March 5, 2025.
- Firms advancing digital transformation, automation, and smart manufacturing receive premium valuations. Some trade at EV/revenue of 83x and EV/EBITDA of 325x, while others remain below 10x, highlighting differences in growth, profitability, and technology adoption.

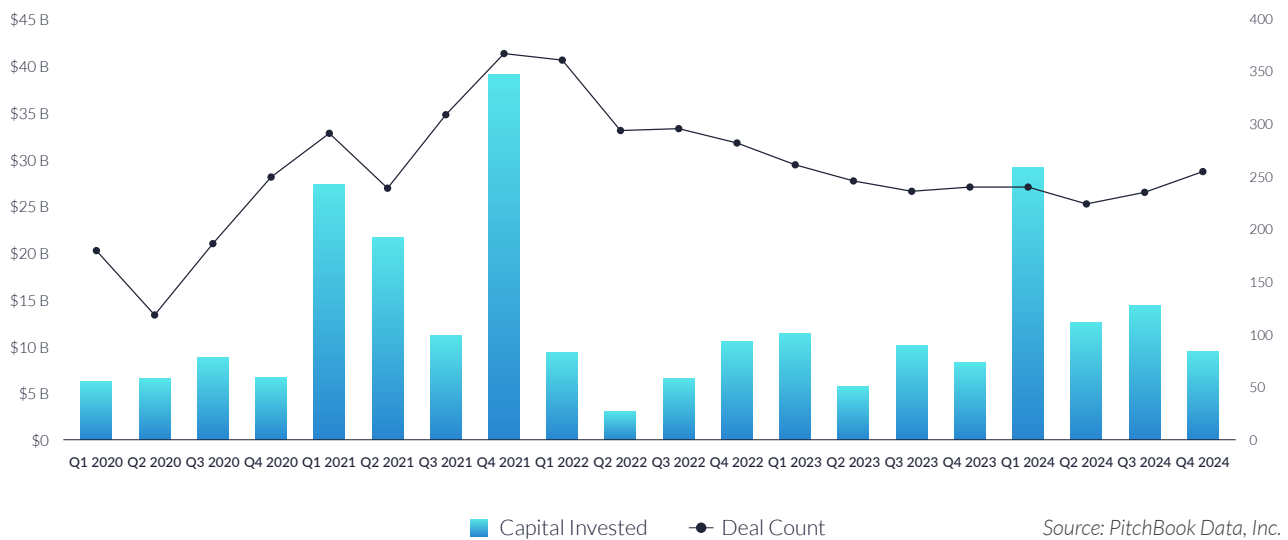
- Market leaders in MES and automation maintain multi-billion-dollar enterprise values, while smaller firms hold lower valuations. Some transactions occur at EV/revenue over 20x and EV/EBITDA exceeding 200x, particularly for companies focused on AI-driven automation, IIoT, and real-time manufacturing intelligence.
- High valuation multiples reflect strong investor confidence in smart factory technologies and data-driven efficiency solutions. Outliers suggest automation, predictive analytics, and digitized workflows offer high-growth opportunities in industry 4.0.



## CAPITAL MARKETS ACTIVITIES

The data highlights transaction trends, valuation metrics, and geographic investment patterns in the MES and industry 4.0 sectors. Growing demand for smart factories, real-time production monitoring, and AI-driven automation has fueled M&A activity and investment. Strategic acquisitions and private equity buyouts are scaling industrial automation platforms, IIoT solutions, and AI-powered manufacturing intelligence. These trends are driving market consolidation, innovation, and the integration of digital twins, predictive analytics, and cloud-based MES solutions.

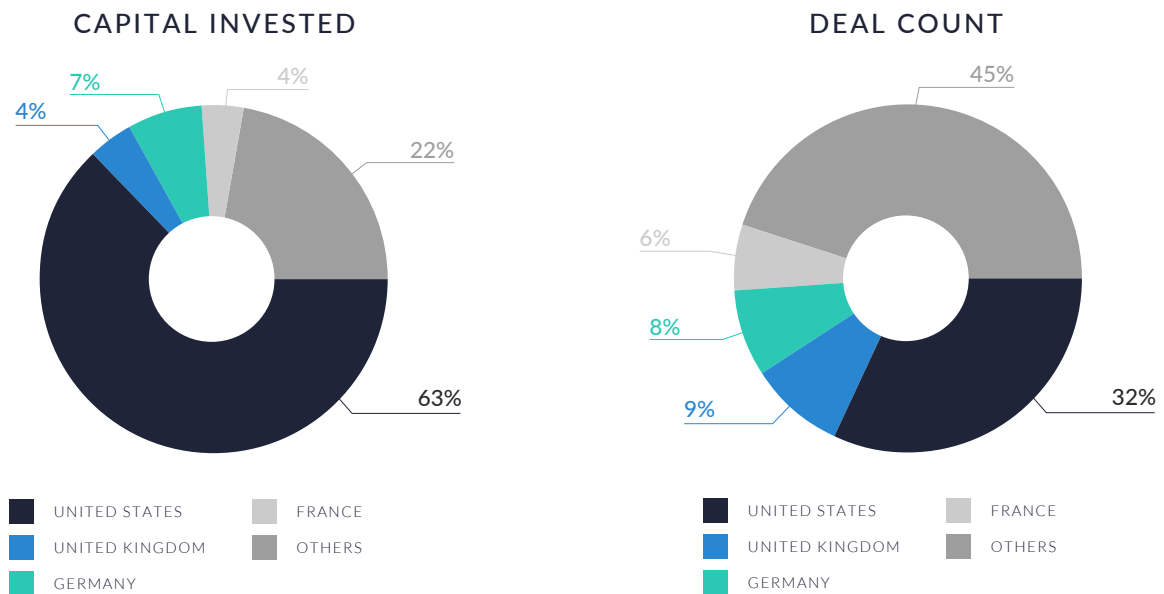
### Announced M&A Transactions in the Manufacturing Execution Systems and Fourth Industrial Revolution Sectors (Q1 2020 – Q4 2024)



- Investors deployed \$258 billion across 5,109 MES and industry 4.0 transactions, driving industrial automation and digital transformation. High deal volume reflects ongoing acquisitions, market consolidation, and accelerated technological integration.
- Capital investment peaked at \$39 billion in Q4 2021 and dropped to \$3 billion in Q2 2022, reflecting shifts in market confidence, macroeconomic conditions, and changing investment priorities.
- M&A activity remained strong despite valuation fluctuations, with 367 deals in Q4 2021, the highest in the dataset, compared to 119 deals in Q2 2020. Industry consolidation and technological advancements sustained consistent acquisition momentum.
- Investment rebounded to \$29 billion in Q1 2024, the second-highest capital injection in the dataset, reflecting growing demand for automation, AI-driven manufacturing, and real-time production intelligence.

The graphs below present the geographic distribution of transactions, providing additional detail on regional trends and investment dynamics.

## Breakdown of Announced M&A Transactions in the Manufacturing Execution Systems and Fourth Industrial Revolution Sectors by Country (Q1 2020 – Q4 2024)



Source: PitchBook Data, Inc.

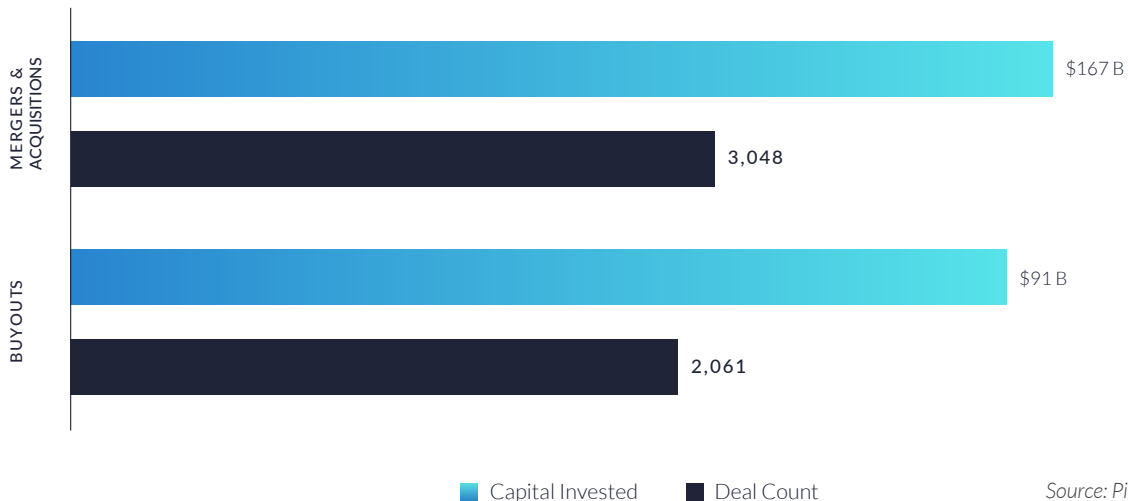
- US-based investors provided 63% of total capital but accounted for only 32% of deals, reflecting a focus on larger transactions and strategic acquisitions. The US remains a leader in smart manufacturing, industrial automation, and software-driven MES solutions, with capital-intensive investments aimed at scaling established platforms and integrating advanced manufacturing technologies.
- International and emerging markets generated 22% of total capital and represented 45% of deal volume, indicating higher transaction activity at smaller scales. Expanding MES adoption in these

regions supports cost-effective automation, localized manufacturing solutions, and IIoT-driven efficiency improvements, driving market penetration beyond traditional industrial hubs.

- Germany, France, and the UK accounted for 15% of capital and 23% of deals, showing a concentration of strategic acquisitions in industrial automation and high-precision manufacturing. These markets lead in robotics, digital factory solutions, and industry 4.0 integration, with M&A activity reinforcing their roles as hubs for advanced production technologies.

The deal-type dynamics below set the stage for understanding how capital flows and strategic priorities shape the manufacturing execution systems and the fourth industrial revolution sector's growth and landscape.

## Breakdown of Announced M&A in the Manufacturing Execution Systems and Fourth Industrial Revolution Sectors Deal Type (Q1 2020 – Q4 2024)

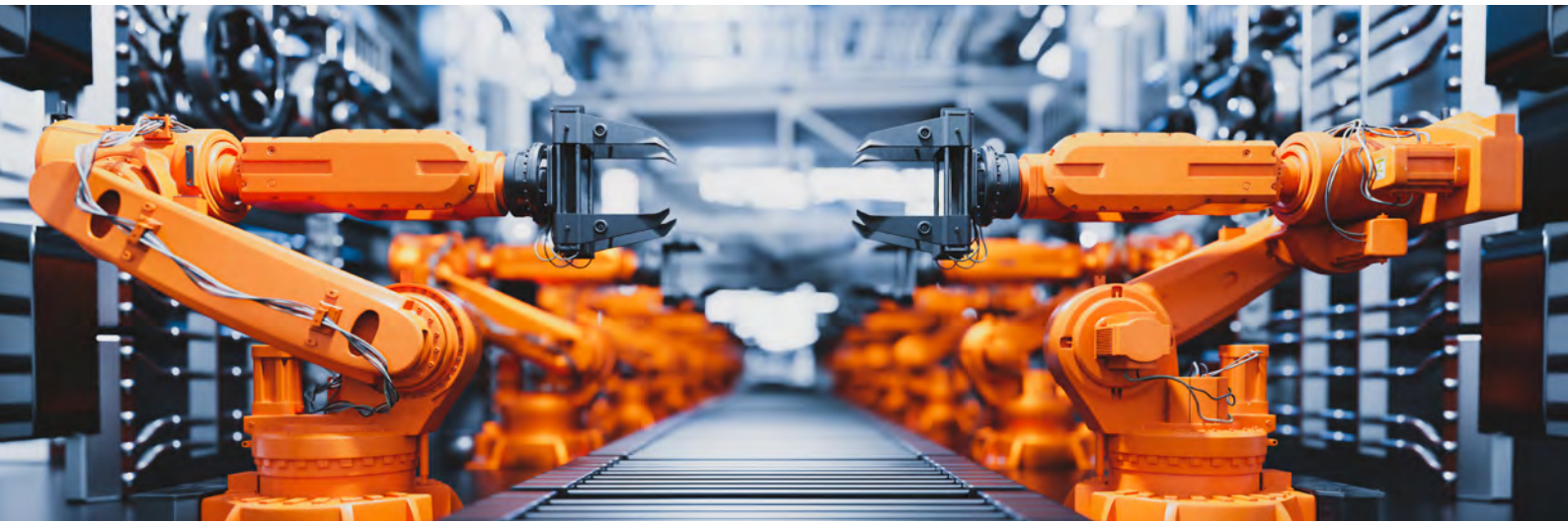


Source: PitchBook Data, Inc.

- Companies invested \$167 billion across 3,048 M&A deals, making acquisitions the primary method for growth, market consolidation, and technology expansion in MES and industry 4.0. Firms pursue acquisitions to integrate complementary automation technologies, enhance data-driven manufacturing, and strengthen industrial intelligence capabilities.
- Private equity and strategic buyouts accounted for \$91 billion across 2,061 deals, reflecting a strong focus on scaling MES platforms and expanding smart manufacturing solutions. Investors target high-growth automation firms, aiming to integrate them into larger industrial ecosystems for increased efficiency and technological advancement.
- M&A transactions outpaced buyouts in both volume and capital investment, reinforcing market consolidation as a key strategy for expanding industrial automation capabilities. Firms rely on acquisitions to accelerate industry 4.0 adoption, optimize production processes, and gain competitive advantages over organic expansion strategies.

## M&A TRANSACTIONS CASE STUDIES

Three major acquisitions in the MES and industry 4.0 sectors highlight a strategic push toward cloud-based smart manufacturing, automation-driven efficiency, and integrated digital transformation solutions. These deals enhanced industrial automation capabilities, strengthened real-time production monitoring, and expanded MES adoption across high-tech and precision-driven industries. Each acquisition underscores how investors prioritize SaaS-based industrial software, end-to-end supply chain visibility, and smart factory solutions to meet evolving manufacturing demands.



### CASE STUDY 01

## PLEX SYSTEMS

**PLEX**

Plex Systems, headquartered in the US, provides cloud-based MES and enterprise resource planning (ERP) software for discrete and process manufacturers. The company specializes in real-time production monitoring, quality control, supply chain management, and analytics. Its solutions support industries such as automotive, aerospace, food and beverage, and industrial manufacturing, enabling greater efficiency, traceability, and operational insight.

#### TRANSACTION TYPE

M&A

#### DEAL DATE

AUGUST 1, 2021

#### ACQUIRER

ROCKWELL AUTOMATION  
(NYSE: ROK)

#### ENTERPRISE VALUE

\$2 BILLION



## TRANSACTION STRUCTURE

Rockwell Automation acquired Plex Systems for \$2 billion in cash on August 1, 2021.

## MARKET AND CUSTOMER SEGMENTS COMBINATION

Rockwell Automation's acquisition of Plex Systems integrated cloud-based MES and ERP solutions with its industrial automation and digital transformation expertise, expanding its presence in automotive, aerospace, food and beverage, and industrial manufacturing. By incorporating Plex's real-time production monitoring and supply chain capabilities, Rockwell enhanced its smart manufacturing and industry 4.0 solutions, delivering end-to-end digital transformation for manufacturers.

## ACQUISITION STRATEGIC RATIONALE

The acquisition strengthened Rockwell Automation's cloud-native smart manufacturing capabilities, accelerating its transition to SaaS-based industrial automation software. Plex's scalable, cloud-based MES and ERP platform complemented Rockwell's factory automation, control, and analytics solutions, enabling manufacturers to increase operational efficiency, enhance data-driven decision-making, and improve supply chain agility. The deal reinforced Rockwell's position as a leader in cloud-based manufacturing software, addressing the rising demand for digitization, connectivity, and real-time production visibility.

### KEY INTANGIBLE ASSETS



Cloud MES and  
ERP Technology



Customer  
Relationships



Proprietary Data  
and Analytics

### TRANSACTION RATIONALE



Expand Cloud  
Manufacturing Solutions



Strengthen  
Automation and SaaS



Enhance Real-Time  
Visibility and Analytics



## CASE STUDY 02

## CRITICAL MANUFACTURING



Critical Manufacturing, headquartered in Portugal, provides MES for high-tech and regulated industries, including semiconductors, electronics, medical devices, and industrial manufacturing. The company specializes in real-time production monitoring, quality control, automation, and advanced analytics, enabling manufacturers to enhance efficiency, improve traceability, and scale operations in complex production environments.

## TRANSACTION TYPE

M&amp;A

## DEAL DATE

AUGUST 1, 2018

## ACQUIRER

ASMPT (HKG: 00522)

## ENTERPRISE VALUE

UNDISCLOSED

## TRANSACTION STRUCTURE

ASMPT acquired Critical Manufacturing for an undisclosed cash amount on August 1, 2018.

## MARKET AND CUSTOMER SEGMENTS COMBINATION

ASMPT’s acquisition of Critical Manufacturing integrated MES expertise in high-tech and regulated industries with its global presence in electronics and semiconductor manufacturing. This combination enhanced ASMPT’s ability to support advanced manufacturing sectors, including semiconductors, electronics, and medical devices, by expanding smart factory solutions and strengthening software-driven automation capabilities.

## ACQUISITION STRATEGIC RATIONALE

ASMPT acquired Critical Manufacturing to advance its industry 4.0 initiatives and expand its MES and smart factory software portfolio. The acquisition allowed ASMPT to deliver more integrated automation and data-driven manufacturing solutions, helping manufacturers enhance operational efficiency, improve production visibility, and accelerate digital transformation in high-precision production environments.

### KEY INTANGIBLE ASSETS



MES Technology and IP



Customer Relationships



Automation Capabilities

### TRANSACTION RATIONALE



Enhance Industry 4.0



Expand MES in High-Tech



Strengthen Automation Software



## CASE STUDY 03

# CAMSTAR

**CAMSTAR**  
The In-Process Intelligence Company

Camstar Systems, headquartered in the US, provided MES and quality management systems (QMS) for industries including semiconductors, electronics, medical devices, and biotechnology. The company specialized in real-time production monitoring, quality assurance, and process optimization, enabling manufacturers to enhance efficiency and meet regulatory compliance requirements.

#### TRANSACTION TYPE

M&A

#### DEAL DATE

OCTOBER 15, 2014

#### ACQUIRER

SIEMENS (FRA: SIE)

#### ENTERPRISE VALUE

\$160 MILLION

## TRANSACTION STRUCTURE

Siemens acquired Camstar Systems for \$160 million in cash.

## MARKET AND CUSTOMER SEGMENTS COMBINATION

Siemens' acquisition of Camstar integrated MES and QMS expertise with its industrial automation and product lifecycle management (PLM) solutions. This strengthened Siemens' position in semiconductors, electronics, medical devices, and biotechnology manufacturing, enhancing its ability to support highly regulated and precision-driven industries with advanced manufacturing operations management (MOM) solutions.

## ACQUISITION STRATEGIC RATIONALE

Siemens acquired Camstar to expand its industrial digitalization and smart manufacturing capabilities. The integration of Camstar's real-time production monitoring and quality management solutions into Siemens Opcenter and PLM portfolio improved process optimization, regulatory compliance, and automation. The acquisition reinforced Siemens' leadership in industry 4.0 and manufacturing efficiency solutions, providing customers with enhanced operational control and data-driven decision-making.

### KEY INTANGIBLE ASSETS



MES and QMS  
Technology



Industry  
Expertise



Proprietary Data  
and Analytics

### TRANSACTION RATIONALE



Expand Industrial  
Digitization



Strengthen Smart  
Manufacturing



Enhance Automation  
and Compliance

The MES and industry 4.0 sectors continue to advance through strategic M&A, digital transformation, and investment in automation-driven solutions. As manufacturers focus on operational efficiency, data-driven decision-making, and real-time production monitoring, market consolidation is expected to accelerate. Investors prioritize scaling cloud-based MES platforms, integrating IIoT and AI-driven automation, and expanding industry 4.0 capabilities to enhance industrial productivity. Future M&A activity will likely center on SaaS-based industrial software, smart factory technologies, and comprehensive digital transformation initiatives, positioning companies for sustained growth in an increasingly automated and data-driven manufacturing landscape.

## SOURCES

ROCKWELL COMPLETES ITS ACQUISITION OF PLEX SYSTEMS -  
ROCKWELL AUTOMATION



ROCKWELL AUTOMATION TO BUY PLEX SYSTEMS FOR \$2.22 BLN -  
REUTERS



ASM ASSEMBLY SINGAPORE ACQUIRED PORTUGUESE CRITICAL  
MANUFACTURING - CFI



ASMPT TO INVEST IN SMART FACTORY SOFTWARE SOLUTIONS -  
ASMPT



SIEMENS ACQUIRES CAMSTAR: BETTER REALIZING INNOVATION  
FOR 3 VERTICAL INDUSTRIES - LNS RESEARCH



SIEMENS MOVES TO ACQUIRE CAMSTAR - DE247



PITCHBOOK DATA



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