

HW Industrial Software Introduction

HARRIS WILLIAMS ("HW")

- 25+ years and more than 1,000 closed transactions
- 360+ professionals across eight office globally
- 170+ closed transactions in the last 24 months
- 10 industry groups

FOCUSED ADVISORY SERVICES

- Mergers and acquisitions (M&A)
- Capital raises
- Corporate divestitures

CONSISTENT RECOGNITION FOR QUALITY









HW TECHNOLOGY, MEDIA & TELECOM ("TMT") GROUP

- 35+ dedicated TMT professionals
- TMT offices include Boston, San Francisco, and London

KEY TMT THEMES

✓ SaaS / Cloud

✓ Data & Analytics

✓ Digital Transformation

✓ A.I. / Machine Learning

HORIZONTAL FOCUS SECTORS

- Application Software
- Cloud Managed Services and Hosting Solutions
- Compliance Solutions
- CRM and Marketing Automation
- Human Capital Management
- Infrastructure and Security Software
- IT and Tech-Enabled Services
- Marketing, Research, and Insights Software

VERTICAL FOCUS SECTORS

- Architecture, Engineering, and Construction Software
- Education Technology and Services
- Energy Technology
- Facilities and Real Estate Software
- Financial Technology and Payments
- Government Technology
- Healthcare IT
- Industrial and Supply Chain Technology
- Internet and eCommerce
- Retail Technology

INDUSTRIALS

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SELECT HW INDUSTRIAL SOFTWARE EXPERIENCE















HW Current Market Observations and Insights

CURRENT MARKET OBSERVATIONS

Economic Outlook

- Volatility in the public markets will likely remain as investors, businesses, and policymakers evaluate rapidly evolving COVID-19 developments
- Economists and industry analysts expect a meaningful decline in GDP in 2Q'20 and 3Q'20, while they debate the shape and timing of the recovery

Buyer Sentiment

- The desire to invest remains buyers are actively seeking to deploy capital
- Private equity firms and strategic acquirers have focused on meeting near-term operational needs and assessing medium- to long-term impact of COVID-19
- Despite economic uncertainty, financial sponsors have record levels of capital to deploy, and many are communicating that they are "open for business," while acknowledging high-quality deal flow will be limited
- As capital markets stabilize, companies with strong liquidity positions will be wellpositioned to pursue acquisitions that accelerate growth

Debt Markets

- In contrast to the first half of 1Q'20, debt markets have shifted to a risk-off mentality
- Concerns over liquidity and funding availability contribute to uncertainty regarding the duration of the COVID-19 risk mitigation focus

M&A Valuations

- COVID-19 has pushed timelines for many transactions, but select deals are still closing successfully. Some may be temporarily on hold and others are preparing for market and carefully weighing timing
- Companies that prove their ability to weather the current circumstances will receive significant interest and garner premium valuations

LATEST HW MARKET INSIGHTS



For access to HW's latest insight and perspective, email us at insights@harriswilliams.com or visit www.harriswilliams.com/news-insights



Recent Publications

Global Consumer
Businesses Consider
Emergence from COVID-19

M&A Learnings from Past Economic Disruptions

COVID-19 and M&A: Insights from Asia

Deep Sector Expertise Across Key TMT Focus Areas



- · Architecture, Engineering, and Construction
- eCommerce
- Education Technology and Services
- Financial Technology and Payments
- Healthcare IT
- ...and more

For access to HW's TMT content, email us at TMT Insights@harriswilliams.com

The Industrial Sector's Appetite for Software Is Growing, Driving Demand for Integrated Technology and Data Platforms

INDUSTRY TRENDS^{1,2}

- The emergence of Industrial IoT Platform-as-a-Service (PaaS) that connects machines, data, and people to drive unconventional growth through new revenue streams, hybrid business models, and enhanced product innovation
- The global Industrial IoT (IIoT) market is expected to reach \$124B by 2021, growing at a CAGR of more than 7%, driven by improved operational efficiency, improved productivity, creation of new business opportunities, reduction in downtime, and optimization of asset utilization
- > Due to the technical requirements in achieving Manufacturing 4.0, manufacturers today are partnering with IIoT enabled platforms and software providers as a catalyst to achieve digital transformation
- Product lifecycles are becoming increasingly complex as manufacturers seek real-time visibility and integration across their global supply chains and multisite production operations
- The proliferation of connected machines and devices is accelerating the adoption of cloud-based solutions capable of delivering real-time information and connecting plants across geographies without the costs and complexity of managing robust technology infrastructure

KEY STATS

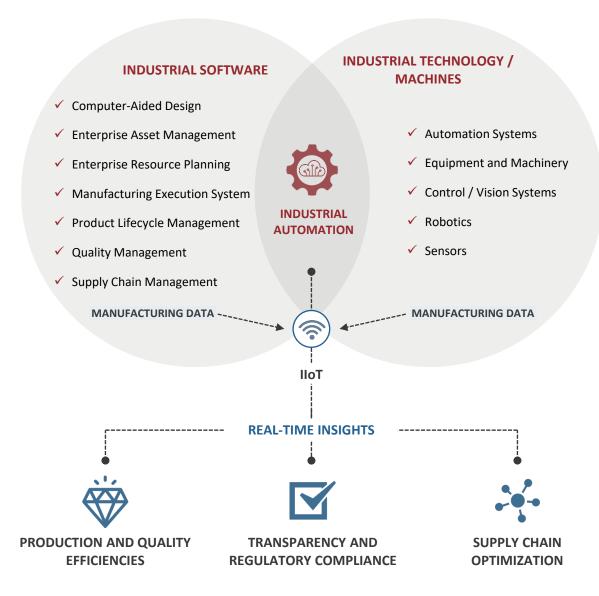
100%

Global Population Expected to Have LPWAN Coverage by 2022

41B+

IIoT Devices Worldwide by 2025

INDUSTRY CONVERGENCE DRIVING INNOVATION^{1,2}



 H_{Λ}

Source: Gartner, IDC.

Digital Innovation Has Become Mission Critical for Industrial Manufacturers

PRODUCTIVITY GAINS FROM GOING DIGITAL³

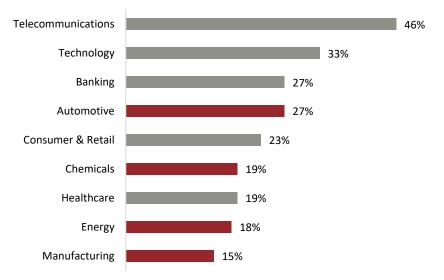




Industrial companies, traditionally the least digitally integrated amongst the industry verticals, are faced with the challenge of digital transformation

DIGITAL CHAMPIONS IN THE U.S.

Percentage of companies



- The U.S. technology, telecommunications, and banking industries have the greatest percentage of digitally integrated companies
- Manufacturing has the lowest percentage due to its nondigital product portfolio

INVESTMENT IN AI, ADVANCED NETWORKING, AND DATA VISUALIZATION TO **AUTOMATE LARGE-SCALE PROCESSES³**

ARTIFICIAL INTELLIGENCE



- All has the potential to create value for industrial manufacturers at every stage of production
- Al-powered analytics can reduce unplanned downtime, and improve efficiency, product quality, and safety performance
- Manufacturers can also leverage Al-fueled algorithms on customer and product data to closely match supply with demand

ADVANCED NETWORKING



- Advanced networking is crucial to connecting assets and devices to deliver real-time flexibility, visibility, and efficiency
- 5G and ultra-broadband can ensure seamless vertical, horizontal, and cross-geographic integration across the value chain
- Benefits include insights into production and product consumption, real-time updates on market conditions, as well as supporting new "asa-service" business models

DATA VISUALIZATION



- Improvements in 3-D visualization, augmented reality, and virtual reality enable industrial manufacturers to more easily digest complex information
- Visualization via a digital twin (an interactive, working, and digital representation of the physical asset) helps companies simulate repairs, enabling safe practice and training ahead of site visits

Source: BCG.

Increasing M&A Momentum Across the Industrial Software Market

SELECT NOTABLE INDUSTRIAL SOFTWARE M&A ACTIVITY

----- HW TRANSACTION



NOTABLE INDUSTRY CONSOLIDATORS



















Notable 1Q 2020 Industrial Software Transactions⁴

Completed: March 17, 2020





Enterprise Value: NP

EV / Rev: NP

EV / EBITDA: NP Revenue: NP

HEXAGON'S ACQUISITION OF CAEFATIGUE

- CAEfatigue is a provider of mechanical fatigue simulation software solutions for validating design and manufacturing methods across multiple industries, including automotive and aerospace
- CAEfatigue's solutions help improve product quality, save production time, reduce costs, and eliminate waste for manufacturers
- The acquisition provides a valuable addition to Hexagon's "Smart Factory" and "Smart Industrial Facility" offerings

Completed: February 12, 2020



ENVERUS

Enterprise Value: NP Revenue: NP

EV / Rev: NP

EV / EBITDA: NP

ENVERUS' ACQUISITION OF RS ENERGY GROUP

- RS Energy is a provider of analytics, data-driven intelligence, and research with a focus on the upstream oil and gas industry
- Since partnering with Warburg Pincus in 2015, RS Energy has grown nearly six-fold and transformed into a technology and data science-driven organization that allows investors and corporate executives to operationalize analytics and increase transparency at enterprise scale
- Together, Enverus and RS Energy will help transform the way energy companies and investors perform technical workflows, automate business processes, and ultimately deliver shareholder value

Completed: February 11, 2020





EV / Rev: NP

Enterprise Value: \$1.1B

EV / EBITDA: NP Revenue: NP

INSIGHT PARTNERS' ACQUISITION OF ARMIS

- Armis provides an agentless, enterprise-class IoT security platform to the high tech, healthcare, industrial, retail, and transportation sectors
- Armis enables businesses to adopt new connected devices without fear of compromise by cyberattack, and is used by global organizations such as Allergan, Mondelez, Oracle and Sysco Foods
- Under Insight's ownership, Armis will continue to invest in its technology platform to help organizations identify devices, track their behavior, and respond to threats

Completed: February 1, 2020





Enterprise Value: \$540M Revenue: NP

EV / Rev: NP

EV / EBITDA: NP

VEXCEL IMAGING'S ACQUISITION OF GEOMNI

- Geomni provides multitier geospatial data and imagery acquisition, analytics, and distribution technology solutions
- The acquisition will combine Geomni's imagery surveying and content-related teams and assets with Vexcel
- The combination of Geomni's fleet of fixed-wing aircraft and aerial operations, mapping business, and oblique aerial image library together with Vexcel's sensor business and data program will create one of the world's largest geospatial data libraries
- The deal demonstrates both companies' resolve to drive rapid innovation across imagery and analytics to enter new markets, create new categories, and better serve commercial and insurance customers

Completed: January 16, 2020





Amount Raised: \$23M

Revenue: NP

CALIBRATE VENTURES AND MATERIAL IMPACT'S SERIES B INVESTMENT IN SOFT ROBOTICS

- Soft Robotics is a provider of proprietary grasping technology, machine vision, and software automation solutions
- By offering a system that is able to grasp and manipulate items that vary in size, shape, and weight, Soft Robotics is able to solve the problem of high variability in both products and manufacturing processes
- With its patented and proven technology and unique ability to handle the most unstructured and delicate items, Soft Robotics is also bringing automation to industries impacted by the global shortage of qualified workers
- The Series B funding will allow Soft Robotics to power its next phase of growth and innovation

Potential Impact of COVID-19 on Industrial Software Providers

INDUSTRIAL AUTOMATION

Short-Term Impact

- Manufacturing has been redefined as many 3D printers have been retooled to produce respiratory ventilators or nasopharyngeal test swabs
- In factories and warehouses, robotics have been reassigned to support automated storage and retrieval systems

Impact



Long-Term Impact

A virus-related recession may prompt an acceleration of automation technologies as companies attempt to increase labor productivity with smaller workforces

Impact



INDUSTRIAL IOT

Short-Term Impact

Industrial IoT enablement providers are offering temporary remote access licenses and reconfiguring license keys to support the growing work-fromhome population



Impact

Long-Term Impact

 The 3GPP committee working on 5G-related infrastructure standards voted to delay important industrial releases by three months as a result of COVID-19; further delays could be expected

SMART MANUFACTURING APPLICATIONS



Impact

LOCATION INTELLIGENCE

Short-Term Impact

Geospatial technology and analytics have been instrumental in mapping COVID-19 cases, identifying vulnerable populations, and mapping medical resources and capacity

Impact

Short-Term Impact

Several software providers are providing enhanced service, additional technical support, and complimentary trials of upgraded solutions or modules as organizations navigate through the challenges of COVID-19



Impact

As the COVID-19 crisis wages on, manufacturers around the world are having to quickly adapt their already robust safety initiatives to include strict protocols to prevent the spread of the virus

Long-Term Impact⁵

Although 75% of manufacturers seek to deploy Industry 4.0-related measures, even before COVID-19, only 10% of companies had a long-term plan to take advantage of digital technology and smart manufacturing – we expect to see accelerated adoption over time



Impact

Long-Term Impact

Manufacturers and industrial service providers are expected to further invest in location based intelligence solutions to gain competitive advantages and streamline their production and logistics operations



Impact



Moderate Impact

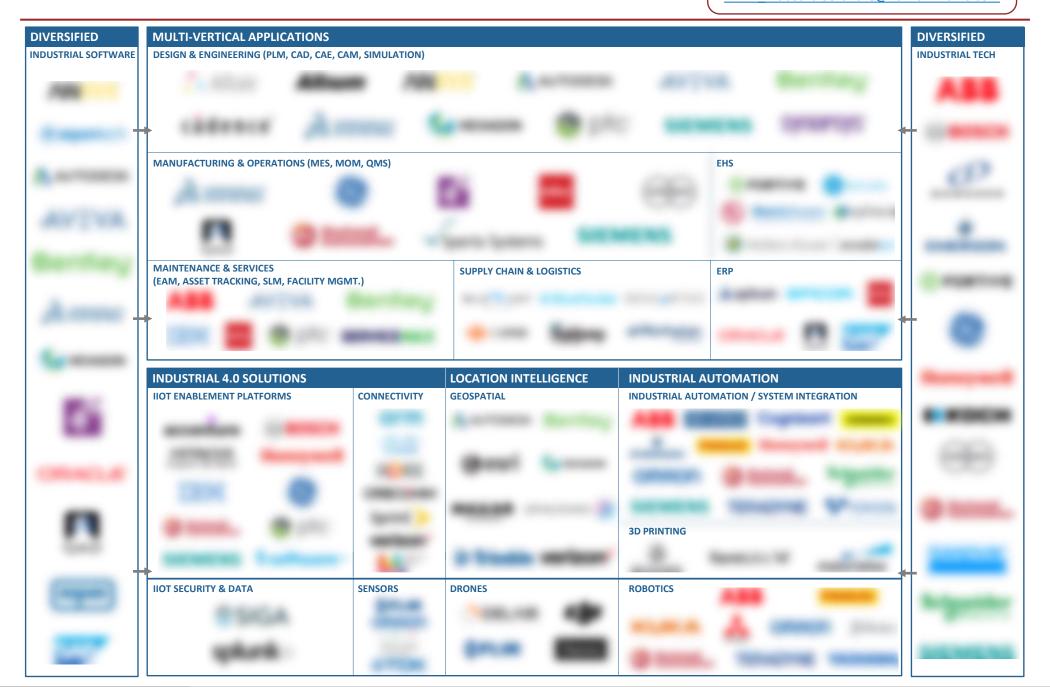




Significant Impact

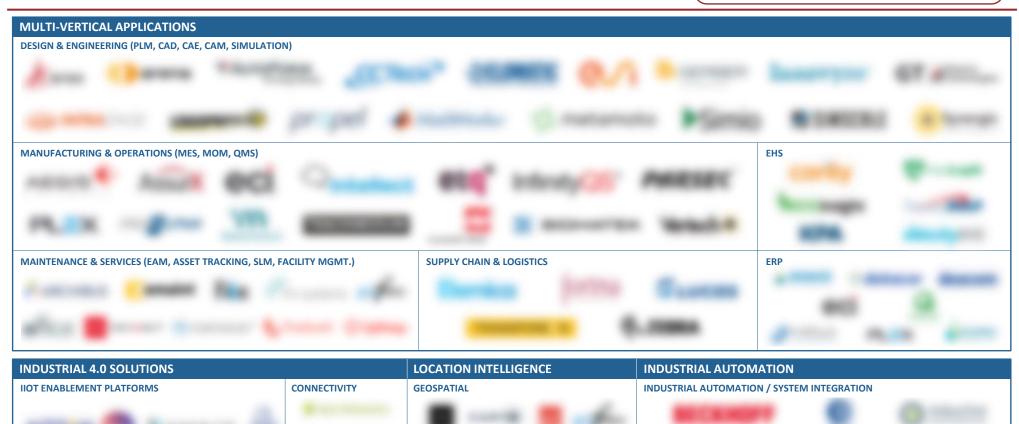
Industrial Software Landscape – Incumbents

To receive the latest Industrial Software market maps, please contact HW at *TMT IndustrialSoftware@harriswilliams.com



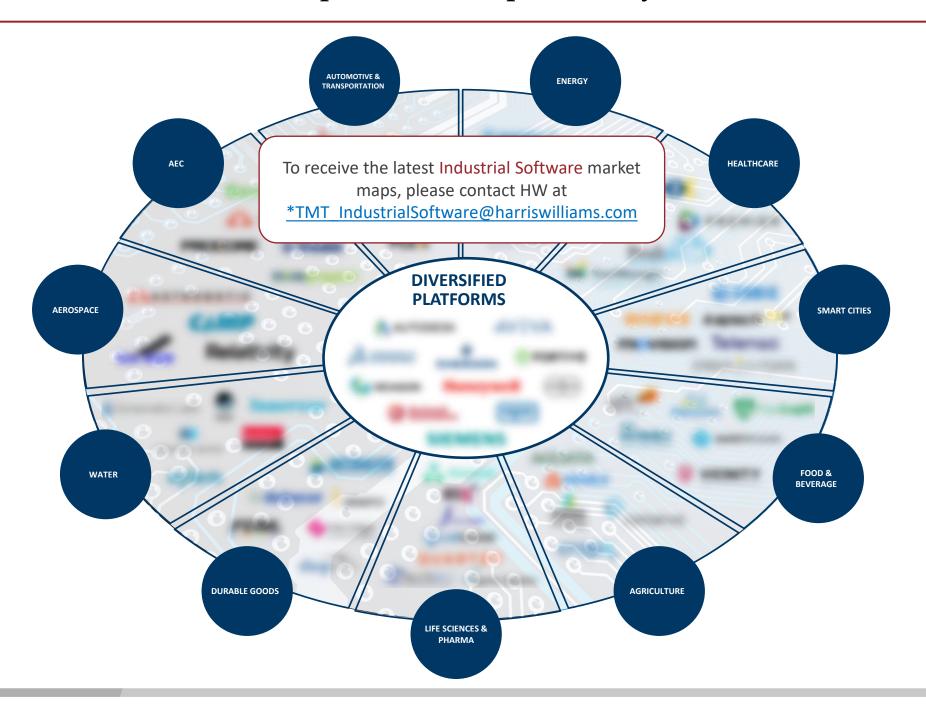
Industrial Software Landscape – Emerging Players

To receive the latest Industrial Software market maps, please contact HW at *TMT IndustrialSoftware@harriswilliams.com



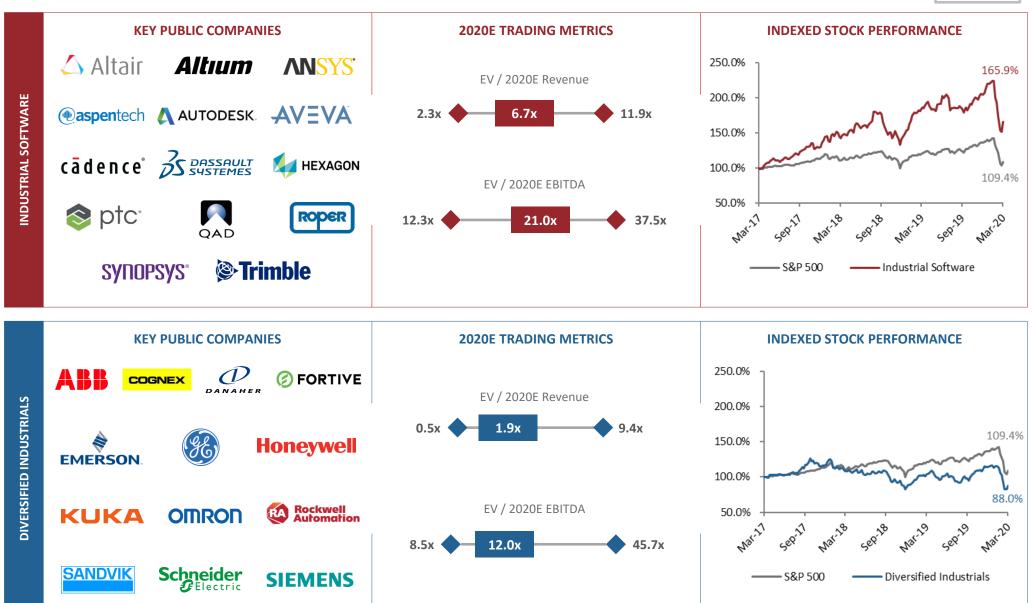
INDUSTRIAL 4.0 SOLUTIONS		LOCATION INTELLIGENCE	INDUSTRIAL AUTOMATION INDUSTRIAL AUTOMATION / SYSTEM INTEGRATION				
IIOT ENABLEMENT PLATFORMS	CONNECTIVITY	GEOSPATIAL					
	A 100 A	• ************************************	CONTRACTOR				
	-	-	3D PRINTING				
IIOT SECURITY & DATA	SENSORS	DRONES	ROBOTICS				
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Industrial Software Landscape – Vertical-Specific Players



Industrial Software Public Market Observations⁴





Industrial Software Market Valuations⁴

Company	Market	Enterprise Value	Revenue		EBITDA Margin		Multiples Summary			
							Enterprise Value/Revenue		Enterprise Value / EBITDA	
	Capitalization		CY2020E	CY2021E	CY2020E	CY2021E	CY2020E	CY2021E	CY2020E	CY2021E
			Indust	rial Software						
Dassault Systèmes SE	\$38,575,242	\$41,616,651	\$5,302,814	\$5,846,228	31.6%	32.7%	7.8x	7.1x	24.8x	21.8x
Autodesk, Inc.	34,267,295	34,968,195	3,906,116	4,666,723	33.1%	37.0%	9.0x	7.5x	27.1x	20.3x
Roper Technologies, Inc.	33,086,053	37,928,453	5,583,100	5,789,903	35.3%	35.9%	6.8x	6.6x	19.2x	18.2x
ANSYS, Inc.	19,972,516	19,708,592	1,659,255	1,831,589	43.5%	44.9%	11.9x	10.8x	27.3x	24.0x
Synopsys, Inc.	19,347,753	19,511,778	3,751,506	3,958,956	31.6%	32.5%	5.2x	4.9x	16.5x	15.1x
Cadence Design Systems, Inc.	18,502,295	18,248,844	2,555,502	2,740,652	36.0%	36.7%	7.1x	6.7x	19.8x	18.2x
Hexagon AB (publ)	15,687,171	17,967,050	4,300,860	4,570,577	34.0%	34.4%	4.2x	3.9x	12.3x	11.4x
Trimble Inc.	7,962,789	9,761,189	3,184,667	3,452,421	22.8%	22.1%	3.1x	2.8x	13.4x	12.8x
PTC Inc.	7,069,417	8,152,748	1,506,031	1,704,128	31.2%	35.9%	5.4x	4.8x	17.4x	13.3x
AVEVA Group plc	7,010,511	7,024,901	1,072,365	1,134,652	29.6%	31.1%	6.6x	6.2x	22.1x	19.9x
Aspen Technology, Inc.	6,456,380	6,756,585	627,247	676,953	51.4%	51.7%	10.8x	10.0x	21.0x	19.3x
Altium Limited	2,296,082	2,228,142	204,189	257,336	40.8%	41.0%	10.9x	8.7x	26.8x	21.1x
Altair Engineering Inc.	1,922,290	1,907,156	486,250	528,341	10.5%	12.4%	3.9x	3.6x	37.5x	29.0x
QAD Inc.	812,608	707,718	312,498	342,268	4.4%	7.3%	2.3x	2.1x	NM	28.4x
Median	\$11,824,980	\$13,864,120	\$2,107,378	\$2,286,120	32.4%	35.1%	6.7x	6.4x	21.0x	19.6x
			Diversit	ied Industrials						
Danaher Corporation	\$96,457,260	\$100,681,860	\$20,726,010	\$22,747,179	26.5%	27.8%	4.9x	4.4x	18.3x	15.9x
Honeywell International Inc.	94,627,885	101,137,885	35,897,627	37,162,429	23.6%	24.8%	2.8x	2.7x	12.0x	11.0x
General Electric Company	69,406,059	150,488,059	88,676,240	91,084,092	11.0%	13.3%	1.7x	1.7x	15.4x	12.4x
Siemens	68,084,887	103,419,867	95,829,142	100,527,775	11.2%	12.8%	1.1x	1.0x	9.7x	8.0x
Schneider Electric S.E.	47,525,475	54,799,631	29,417,827	30,888,253	17.6%	18.7%	1.9x	1.8x	10.6x	9.5x
ABB Ltd	37,652,625	44,077,625	24,542,777	27,530,521	13.1%	15.1%	1.8x	1.6x	13.7x	10.6x
Emerson Electric Co.	29,154,226	34,075,226	17,901,492	18,929,906	20.1%	20.8%	1.9x	1.8x	9.5x	8.7x
Fortive Corporation	18,566,758	23,917,058	7,557,953	7,902,574	24.0%	24.9%	3.2x	3.0x	13.2x	12.1x
Sandvik AB	17,835,323	18,231,925	9,625,122	10,081,733	22.2%	23.4%	1.9x	1.8x	8.5x	7.7x
Rockwell Automation, Inc.	17,533,275	19,548,075	6,537,333	6,817,085	20.4%	22.2%	3.0x	2.9x	14.7x	12.9x
OMRON Corporation	10,712,317	9,127,437	6,238,978	6,715,363	12.8%	13.7%	1.5x	1.4x	11.4x	9.9x
Cognex Corporation	7,295,073	6,901,145	734,750	882,295	20.6%	27.4%	9.4x	7.8x	45.7x	28.6x
KUKA	1,271,941	1,683,679	3,276,923	3,294,505	4.4%	0.0%	0.5x	0.5x	11.6x	NM
Median	\$29,154,226	\$34,075,226	\$17,901,492	\$18,929,906	20.1%	20.8%	1.9x	1.8x	12.0x	10.8x
Total Median	\$18,502,295	\$19,511,778	\$4,300,860	\$4,666,723	23.6%	24.9%	3.9x	3.6x	15.9x	14.2x

Case Study: Iptor

HW's TMT Group advised Iptor Supply Chain Systems, a portfolio company of Marlin Equity Partners, on its sale to Bregal Unternehmerkapital.



TRANSACTION OVERVIEW

Iptor Supply Chain Systems is a global leader in supply chain management, planning, and logistics software and services. The company helps distribution-focused organizations solve their most complex order management and fulfillment challenges within fast-moving, multichannel, and global supply chains.

Serving 1,250 customers with 4,000 installations in more than 40 countries, Iptor provides fully integrated enterprise solutions, with highly adaptable and robust software backed by world-class support from supply chain experts. With a flexible cloud-based platform, Iptor offers a compelling value proposition to clients across the distribution, 3PL, and publishing sectors.

Marlin Equity Partners is a global investment firm with over \$6.7 billion of capital under management. The firm is focused on providing corporate parents, shareholders, and other stakeholders with tailored solutions that meet their business and liquidity needs. Marlin invests in businesses across multiple industries where it can significantly enhance a company's value.

RELEVANT SUB-SECTORS

WAREHOUSE MANAGEMENT SYSTEMS

DIGITAL SUPPLY CHAIN COLLABORATION

ERP SOFTWARE

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Case Study: IQMS Software

HW's TMT Group advised IQMS, a portfolio company of Technology Crossover Ventures and Banneker Partners, on its sale to Dassault Systemes.



a portfolio company of



AND



has been acquired by



TRANSACTION OVERVIEW

IQMS is a leading provider of fully integrated manufacturing and supply chain software solutions that manage, optimize, and automate production operations and back-office workflows for manufacturers across diverse end markets globally.

Through its comprehensive manufacturing execution system (MES) and enterprise resource planning (ERP) software platform, IQMS' solutions provide manufacturers with a comprehensive end-to-end suite that provides real-time visibility and actionable insights throughout the manufacturing lifecycle.

IQMS serves over 1,000 long-standing customers across diverse end markets, including automotive, medical, packaging, consumer goods, electronics, and aerospace and defense in a growing \$35 billion global market.

Post acquisition, Dassault Systemes will help IQMS expand its customer base by leveraging the presence in the mid-market space established through Dassault's SOLIDWORKS applications, which are delivered and supported by the company's Professional Solutions global partner channel.

RELEVANT SUB-SECTORS

EXECUTION SYSTEMS

QUALITY MANAGEMENT SOFTWARE

INDUSTRIAL IOT

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Case Study: ComputerEase

HW's TMT Group advised ComputerEase on its sale to Deltek, a subsidiary of Roper Technologies.



has been acquired by



a subsidiary of



TRANSACTION OVERVIEW

ComputerEase is a leading provider of mission-critical construction accounting, project management, and payroll processing solutions that enable contractors to manage and gain real-time visibility into their company's operations and financial performance — whether in the office or remotely in the field.

ComputerEase's fully integrated, cloud-based solution is purpose built to meet the unique needs of diverse contractor trades and sizes, with complex and varying union, labor, and equipment requirements. Today, more than 6,000 contractors rely on ComputerEase to streamline their operations and increase profits.

Deltek is a leading global provider of enterprise software and information solutions for project-based businesses. More than 23,000 organizations and millions of users in over 80 countries around the world rely on Deltek for superior levels of project intelligence, management, and collaboration. The company's industry-focused expertise powers project success by helping firms achieve performance that maximizes productivity and revenue.

RELEVANT SUB-SECTORS

PROJECT MANAGEMENT

FIELD SERVICE MANAGEMENT

ARCHITECTURE, ENGINEERING, AND CONSTRUCTION SOFTWARE

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Case Study: Cority

HW's TMT Group advised Cority, a portfolio company of Norwest Venture Partners, on the sale of a majority stake to Thoma Bravo.



a portfolio company of



has received a majority investment from



TRANSACTION OVERVIEW

Cority is the most trusted environmental, health, safety, and quality (EHSQ) software for ensuring client success. Cority enables organizations to utilize EHSQ software to advance their journey to sustainability and operational excellence by combining the deepest domain expertise with the most comprehensive and secure true SaaS platform.

With 30+ years of innovation and experience, Cority's team of over 350 experts serve over 800 clients in 100 countries, supporting 2.5 million end users. The company enjoys the industry's highest levels of client satisfaction and has received many awards for its strong employee culture and outstanding business performance.

Thoma Bravo is a leading private equity firm focused on the software and technology-enabled services sectors. With a series of funds representing more than \$30 billion in capital commitments, Thoma Bravo partners with a company's management team to implement operating best practices, invest in growth initiatives, and make accretive acquisitions intended to accelerate revenue and earnings, with the goal of increasing the value of the business.

RELEVANT SUB-SECTORS

ENVIRONMENTAL, HEALTH, SAFETY AND QUALITY (EHSQ)

GOVERNANCE, RISK AND COMPLIANCE (GRC)

INDUSTRIAL SOFTWARE

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Harris Williams Capabilities and Locations

Harris Williams has a broad range of industry expertise, which creates powerful opportunities. Our clients benefit from our deep-sector experience, integrated industry intelligence, and collaboration across the firm, and our commitment to learning what makes them unique. For more information, visit our website at www.harriswilliams.com/industries.





















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Sources & Disclosures

SOURCES

- 1. Gartner.
- 2. IDC.
- 3. BCG.
- 4. CapIQ.
- 5. Clean Energy Smart Manufacturing Innovation Institute.

DISCLOSURES

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