MPG | MADISON PARK GROUP

Manufacturing Software Market Update

November 2022









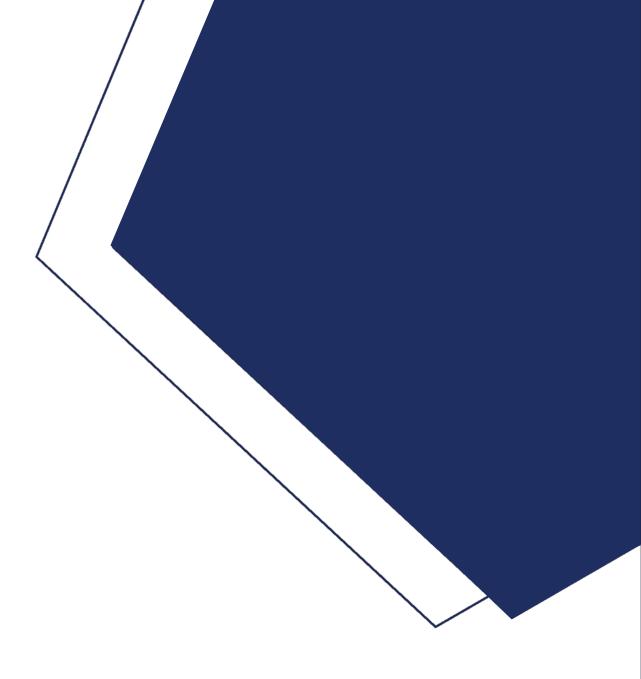
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Industry Trends



Key Participants Across Manufacturing Software

MADISON PARK GROUP

Market Update

Madison Park Group ("MPG") is a premier advisor to the manufacturing software market. Manufacturers have been forced to adapt to COVID-induced disruptions over the past 18 months, including accelerating their digital investments in the age of Industry 5.0. This has led to increased emphasis on personalized production, supply chain resiliency and true collaboration between humans and machines.

Companies Featured In This Report

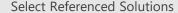




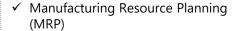












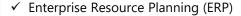
















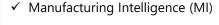


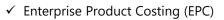














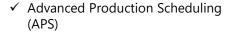






















- ✓ Configure, Price, Quote (CPQ)
- ✓ Computer-Aided Manufacturing (CAM)











MADISON PARK GROUP

Inside The Industry

Market Trends And Notable Transactions

Our Recent Observations

- Manufacturing software providers are evaluating taking SaaS to the next level by offering pricing based on the number of parts manufactured.
- MES providers that monitor manufacturing facilities are gathering data that has value to suppliers and others in the manufacturing ecosystem, leading to new revenue streams. Conversely, manufacturers are having to create internal policies which govern the usage of their data.
- Low-code/No-code application development is allowing companies to more easily leverage the knowledge of their workforce on the manufacturing floor.
- As manufacturing becomes more automated, the end of the supply chain is becoming a larger factor in overall manufacturing efficiency.
- Workplace flexibility and distributed workforces are driving the increased acceptance of cloud-based offerings by large-scale manufacturers, including those in the defense industry.
- Carbon emissions rollup is on the radar of more companies, and as such software tools which address this are starting to emerge.
- The "Made in America" Order is requiring that federal dollars be spent solely on American manufacturers. This is encouraging the creation of resilient and redundant supply chain options that are less reliant on existing global networks.
- IIoT implementations are gathering and analyzing more data than ever before, giving companies a much more accurate view of their manufacturing operations.

Notable Transactions in Profiled Companies	Slide
Aptean acquires Frontix Adds new cloud-based process manufacturing OEE software	9
AspenTechnology acquires Emerson Expands global industrial software leadership	9
Autodesk acquires Prodsmart Real-time automation & digitization of manufacturing processes	10
Dassault Systemes acquires Diota Augmented reality and field	10
Epicor acquires eFlex Systems Modernizing manufacturing production processes	11
Forterro acquires myfactory Cloud ERP software provider	12
Hexagon acquires ETQ SaaS-based QMS platform	12
Infor acquired Lighthouse Systems Provider of MES software for smart manufacturing	13
Revalize acquires Sofon Provider of Guided CPQ software solutions	14
Siemens acquires Brightly Software Digital building operations	16
Xometry acquires Thomas Product sourcing, supplier selection & digital marketing solutions	17

Tech Advancements and Leveraging Non-Machine Data Are Expanding IIoT Efficacy within Asset Management and Manufacturing Facilities



Data Collection

- Monitor multiple data sources including machine performance, humidity, temperature, & vibrational frequency through integrated sensors
- Technology well established

Data Aggregation

- Aggregate and organize machine and non-machine data (e.g., weather, employee attendance, commodity data) for the analysis of broader manufacturing operations.
- > Technology and methods in their infancy

Analytics Engine

- Deploy advanced ML algorithms and statistical methods to analyze broad data sets and create meaningful insights
- Significant refinement still required to leverage large non-machine data sets

Data Reporting & Visualization

- Generate easy-to-ingest visuals of data to provide users with a seamless product
- Majority of offerings are still to complex for easy interpretation

Predictive Engine

- Effectively predict and recommend next-steps to users based on domain knowledge which increases operational efficiency
- Product offerings still lack deep domain knowledge for truly useful predictions

Notable Transactions



Description:

Edge virtualization platform to monitor, visualize, and secure real-time edge applications



Description:

 Cloud-based smart factory data collection and analytics software to monitor production in industrial settings



Description:

 Cloud-based machine monitoring platform to enable predictive maintenance

Notable Transactions In The Last Twelve Months

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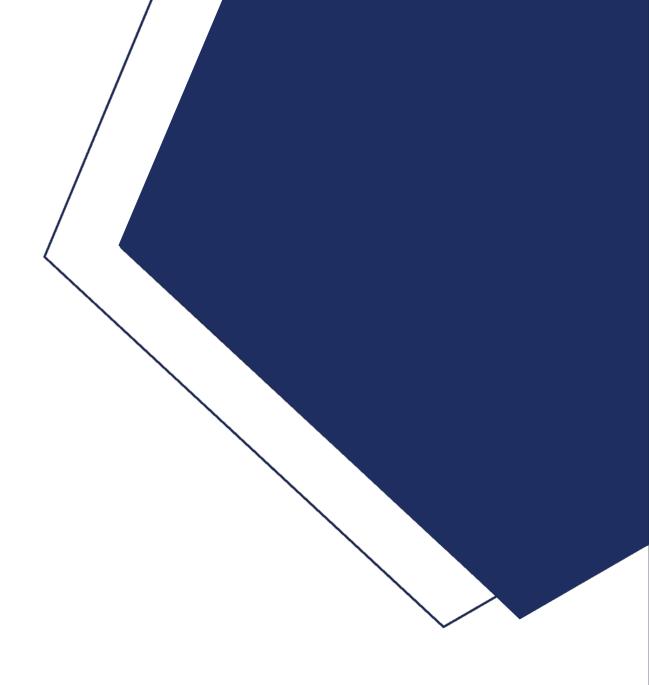
Industrial Software

\$ in millions

Acquirer	Date	MPG Subsector	Transaction Size	Transaction Notes
MDP	Sep-22	Commerce & Supply Chain Management	n/a	Carlyle in Unison, a leading provider of procurement, supply chain, and contract management software to U.S. federal government agencies and government contractors
Trimble	Sep-22	Industrial Tech	Conf.	 Trimble acquires B2W software, provider of estimating and operations solutions for heavy civil construction companies. B2W's integrated suite of applications includes estimating, scheduling, field tracking, equipment maintenance, data capture and business intelligence
TRANSPORE()N transforming transportation	Aug-22	Industrial Tech	n/a	 Transporean acquires Tracks, Al-based analytics carbon visibility tool providing data solutions to monitor and manage carbon emissions
THOMABRAVO	Aug-22	Commerce & Supply Chain Tech	\$ 321	• Thoma Bravo acquires Mercell, a European provider of e- tendering and procurement systems for the public sector
M33 GROWTH	Aug-22	Industrial Tech	Conf.	 M33 Growth re-brands and provides a growth investment in IFS Core, software provider for specialty contractors and field operators
SIEMENS	Aug-22	Industrial Tech	\$1,875 ⁽¹⁾	• Siemens Smart Infrastructure acquires Brightly, a cloud- based asset and maintenance management software
STRATTAM CAPITAL	Mar-22	QMS and EH&S	Conf.	 Strattam provides a growth investment to Intellect, a provider of compliance software for ISO, FDA, EPA and OSHA manufacturing standards and regulations. The company offers QMS and EH&S applications for mid-market and enterprise companies
X ometry	Dec-21	Industrial Tech	\$300	 Xometry acquires Thomas, a provider of product sourcing, supplier selection, and digital marketing solutions aimed at fintech and digital marketing customers
	MDP Trimble TRANSPOREON transforming transportation THOMABRAVO SIEMENS STRATTAM C A P I T A L	MDP Sep-22 Frimble Sep-22 TRANSPOREON Aug-22 THOMABRAVO Aug-22 Aug-22 SIEMENS Aug-22 STRATTAM Mar-22	MDP Sep-22 Commerce & Supply Chain Management Sep-22 Industrial Tech TRANSPORECY Aug-22 Industrial Tech THOMABRAVO Aug-22 Commerce & Supply Chain Tech THOMABRAVO Aug-22 Industrial Tech Aug-22 Industrial Tech SIEMENS Aug-22 Industrial Tech SIEMENS Aug-22 Industrial Tech Mar-22 QMS and EH&S	MDP Sep-22 Commerce & Supply Chain Management N/a Sep-22 Industrial Tech Conf. TRANSPOREON Transforming transportation Aug-22 Industrial Tech N/a THOMABRAVO Aug-22 Commerce & Supply Chain Tech SIEMENS Aug-22 Industrial Tech Conf. SIEMENS CAPITAL Mar-22 QMS and EH&S Conf.

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Featured Companies



Profile



Description:

ABB is a global supplier of electrical equipment and automation products. Automation solutions span both discrete and process manufacturing

Headquarters:	Zurich, Switzerland
Employees (1-Yr. Growth):	2,350 (▲ 3%)
Website:	www.abb.com
Ownership Status:	Public (NYSE: ABB)
Acquisitions Since 2010:	43
TTM Revenue:	\$28,114

News & Notes

<u>ABB</u> wins \$170 million in orders to enhance Europe's railway network

October 2022

ABB to acquire PowerTech Converter to expandd its traction offering

September 2022

ABB partners with Samsung Electronics to drive holistic smart building technology

April 2022



Description:

Aptean provides industry-specific ERP, SCM, MES, asset management and compliance solutions for process & discrete manufacturers, distributors and other organizations

Headquarters:	Alpharetta, GA
Employees (1-Yr. Growth):	5,115 (6%▲)
Website:	<u>www.aptean.com</u>
Ownership Status:	PE-Backed (Vista, TA, Charlesbank)
Acquisitions Since 2010:	49
TTM Revenue:	n/a
	·

Aptean secures strategic growth investment from TA and Insight Partners to accelerate innovation

October 2022

Aptean adds new cloud-based process manufacturing OEE software through the acquisition of Frontix July 2022

Aptean extends its food and beverage ERP presence through the acquisition of Produce Pro July 2022



Description:

Aspen Technology is a provider of asset optimization software that accelerates and maximizes value gained from digital transformation initiatives with a holistic approach to the asset lifecycle and supply chain

Headquarters:	Bedford, MA
Employees (1-Yr. Growth):	3,669 (▲ 7%)
Website:	<u>www.aspentech.com</u>
Ownership Status:	Public (Nasdaq: AZPN)
Acquisitions Since 2010:	11
TTM Revenue:	\$693

Aspen Technology enhances ability to help customers maximize industrial data with acquisition of Inmation October 2022

Birla Carbon selects <u>Aspen Technology's</u> solutions to capitalize on industrial data across enterprise

August 2022

<u>AspenTechnology</u> completes Emerson transaction, expanding global industrial software leadership May 2022

Profile



Description:

Autodesk is a provider of 3D, design and engineering software for the architecture, engineering, construction, manufacturing and media industries

Headquarters:	San Rafael, CA
Employees (1-Yr. Growth):	14,276 (▲ 2%)
Website:	www.autodesk.com
Ownership Status:	Public (Nasdaq: ADSK)
Acquisitions Since 2010:	69
TTM Revenue:	\$4,744

News & Notes

New suite of capabilities in <u>Autodesk</u> Construction Cloud make BIM more valuable

April 2022

<u>Autodesk</u> appoints Rami Rahim to board of directors August 2022

Prodsmart joins <u>Autodesk</u>

February 2022



Description:

AVEVA provides industrial technology solutions with product categories spanning operations management, supply chain, asset performance, engineering and more

Cambridge, U.K.
6,281 (▲ 6%)
www.aveva.com
Public (LON: AVV)
9
\$1,366 ⁽¹⁾

<u>Aveva</u> to unveil new product roadmap following OSIsoft integration

September 2022

Schneider Electric and <u>Aveva</u> partner with shell to accelerate net-zero transition in hard-to-abate sectors September 2022

<u>Aveva</u> announces a strategic licensing partnership with Aras

September 2022



Description:

Dassault is a global provider of on-premise and cloud-based math and sciences solutions for the design, manufacturing and life sciences sectors

Headquarters:	Vélizy-Villacoublay, France
Employees (1-Yr. Growth):	21,942 (▲ 7%)
Website:	www.3ds.com
Ownership Status:	Public (PAR: DSY)
Acquisitions Since 2010:	42
TTM Revenue:	\$5,895

<u>Dassault Systemes</u> acquires Diota, bringing augmented reality and field to its manufacturing customers

March 2022

<u>Dassault Systemes</u> partners with Sanofi to optimize tech transfers and industrialization

<u>Dassault Systemes</u> introduces life cycle assessment solution on the 3DEXPERIENCE platform

Profile



Description:

ECI Software Solutions provides solutions for SMB manufacturing, wholesale/retail distribution, building & construction, and field and IT services organizations

12%)
s.com
reen)
26
n/a

News & Notes

<u>ECI Software Solutions</u> announces strategic alliance with Paperless Parts

October 2022

<u>ECI Software Solutions</u> acquires Data Inventions and Lojic for their intelligence platforms for manufacturers Aug 2022

ECI Software Solutions names seasoned software executive, Chip Coyle, as Chief Marketing Officer March 2022



Description:

Emerson provides two sets of offerings: Automation Solutions for improving the performance of industrial customers and Commercial & Residential Solutions for improving quality of life

Headquarters:	St. Louis, MO
Employees (1-Yr. Growth):	27,111 (▲ 4%)
Website:	www.emerson.com
Ownership Status:	Public (NYSE: EMR)
Acquisitions Since 2010:	46
TTM Revenue:	\$19,629

<u>Emerson</u> to accelerate software strategy in transaction with Aspentech

June 2022

Emerson Ventures makes strategic investment in Spearix

Aug 2022

Emerson's next-generation machine visualization solution differentiates OEM system

March 2022



Description:

Epicor is a developer of enterprise software solutions, specializing in enterprise resource planning, sales management, supply chain management and human resource management

Headquarters:	Vélizy-Villacoublay, France
Employees (1-Yr. Growth):	5,251 (▲ 8%)
Website:	www.epicor.com
Ownership Status:	PE-Backed (<i>CD&R</i>)
Acquisitions Since 2010:	16
TTM Revenue:	n/a

<u>Epicor</u> announces hire of new Chief Marketing Officer November 2022

<u>Epicor</u> acquires MES provider eFlex Systems modernizing manufacturing production processes October 2022

<u>Epicor</u> appoints Lisa Pope as President *March 2022*

MADISON PARK GROUP

Leading Manufacturing Technology Platforms

Profile



Description:

Forterro is a group of ERP software and services companies serving small to midmarket clients around the globe, with a particular focus on Europe

Austin, TX
67 (▲ 49%)
www.forterro.com
PE-Backed (<i>Battery</i>)
10
n/a

News & Notes

Forterro significantly expands UK market footprint with acquisition of Wise Software July 2022

Forterro gains investor in Partners Group March 2022

Forterro acquires cloud ERP software provider myfactory

September 2021



GE Digital

Description:

GE Digital provides industrial software and data solutions to the utilities & telecom, power generation, oil & gas and manufacturing sectors

3,970 (0%)
/w.ge.com
diary (GE)
53
n/a

EY and GE Digital form alliance to help firms improve productivity through data-driven manufacturing June 2022

Scott Reese joins GE Digital as new CEO January 2022

GE Digital will acquire Opus One Solutions to advance their energy transition

December 2021



Description:

Hexagon is a provider of sensor, software and autonomous solutions for industrial, manufacturing, infrastructure, safety and mobility applications

Stockholm, Sweden
23,696 (▲ 10%)
www.hexagon.com
Public (STO: HEXA B)
73
\$4,969

Hexagon acquires iConstruct, expanding its smart digital reality capabilities September 2022

Hexagon acquires ETQ, adding market-leading SaaSbased QMS software platform to its portfolio February 2022

Hexagon launches start-up platform to accelerate technology in global manufacturing industry January 2022

Profile



Description:

Honeywell is an American conglomerate providing solutions for aerospace, building technologies, performance materials & technologies and safety & productivity

Headquarters:	Charlotte NC
Employees (1-Yr. Growth):	120,320 (▲ 4%)
Website:	www.honeywell.com
Ownership Status:	Public (NYSE: HON)
Acquisitions Since 2010:	39
TTM Revenue:	\$34,937

News & Notes

Honeywell makes strategic investment in RapidSOS

Honeywell invests in Rhino Health

Honeywell To Acquire US Digital Designs, Inc., **Expanding Public Safety Communications Capabilities** December 2021





Description:

IFS provides ERP, EAM and service management solutions for enterprises. Acumatica provides cloudbased business management solutions for SMBs

Headquarters:	Sweden (IFS), Washington (Acumatica)
Employees:	6,568 (IFS), 443 (Acumatica)
Website:	www.ifs.com, www.acumatica.com
Ownership Status:	PE-Backed (<i>EQT, TA</i>)
Acquisitions Since 2010:	15
TTM Revenue:	n/a

IFS acquires ULTIMO July 2022

Southwest Airlines goes live with IFS maintenance management for entire Boeing 737 fleet April 2022

Acumatica names John Case as new Chief Executive Officer February 2022



Description:

Infor is a global software company that builds SMB and enterprise ERP software cloud products for industries including manufacturing, healthcare and retail

Headquarters:	New York, NY
Employees (1-Yr. Growth):	19,282 (▲ 2%)
Website:	www.infor.com
Ownership Status:	Subsidiary (Koch Equity)
Acquisitions Since 2010:	20
TTM Revenue:	\$1,785 (2020)

Infor partners with NMIS to power model digital factory

October 2022

Rotair chooses Infor cloud ERP to support growth and internationalization

March 2022

Infor acquires Lighthouse Systems October 2021

Profile



Description:

Oracle provides an integrated stack of cloud applications and platform services as well as traditional on-premise infrastructure solutions

Headquarters:	Redwood City, CA
Employees (1-Yr. Growth):	235,178 (▲ 8%)
Website:	<u>www.oracle.com</u>
Ownership Status:	Public (NYSE: ORCL)
Acquisitions Since 2010:	75
TTM Revenue:	\$44,157

News & Notes

<u>Oracle</u> and NVIDIA Partner to Speed Al Adoption for Enterprises

October 2022

<u>Oracle</u> helps high tech and manufacturing businesses automate prevention of asset downtime

October 2022

<u>Oracle</u> helps high tech and manufacturing businesses automate prevention of asset downtime

September 2021



Description:

PTC provides computer-aided design (CAD) modeling, product lifecycle management (PLM), service lifecycle management (SLM) and industrial-focused AR / VR and IoT solutions

Headquarters:	Boston, MA
Employees (1-Yr. Growth):	7,012 (▼ 4%)
Website:	www.ptc.com
Ownership Status:	Public (NasdaqGS: PTC)
Acquisitions Since 2010:	22
TTM Revenue:	\$1,933

PTC brings cloud-native CAM to Onshape with Cloudmilling acquisition

September 2022

PTC completes acquisition of Intland Software April 2022

PTC and Schaeffler announce strategic alliance to accelerate digital transformation roadmap



Description:

Revalize is a provider of revenue operations solutions manufacturers, with solutions spanning CPQ, product selection, PIM and more

Headquarters:	Jacksonville, FL
Employees (1-Yr. Growth):	342 (▲ 10%)
Website:	www.revalizesoftware.com
Ownership Status:	PE-Backed (<i>TA</i>)
Acquisitions Since 2010:	13
TTM Revenue:	n/a

<u>Revalize</u> expands leadership team with key hires July 2022

Revalize secures significant minority investment from HG

July 2022

Revalize acquires Sofon
October 2021

Profile



Description:

Rockwell Automation provides industrial automation and information hardware and software to drive digital transformation for its clients

Headquarters:	Milwaukee, WI
Employees (1-Yr. Growth	n): 21,971(A 4%)
Website:	www.rockwellautomation.com
Ownership Status:	Public (NYSE: ROK)
Acquisitions Since 2010:	22
TTM Revenue:	\$7,760

News & Notes

Rockwell Automation completes acquisition of CUBIC October 2022

Rockwell Automation and Cognite form a strategic partnership to develop Industrial data hub
October 2022

New micro controllers and design software from Rockwell Automation optimize smart machine design May 2021



Description:

Roper is a diversified technology company servicing domain specific markets. Deltek provides enterprise application software and services to project-focused organizations

Sarasota, FL
284 (▲ 9%)
www.ropertech.com
Public (NYSE: ROP)
39
\$7,760

<u>Deltek</u> reaches agreement to acquire TIP Technologies July 2022

Roper Technologies to sell majority stake in its industrial businesses to CD&R

June 202.

<u>Deltek</u> named project-based ERP leader by G2 March 2022



Description:

Sandvik is a global engineering group offering products and services that enhance customer productivity, profitability and sustainability

Headquarters:	Stockholm, Sweden
Employees (1-Yr. Growth):	17,492 (▲ 4%)
Website:	www.sandvik.com
Ownership Status:	Public (STO: SAND)
Acquisitions Since 2010:	32
TTM Revenue:	\$12,407

Sandvik completes acquisition of PCD tools manufacturer Frezite

September 2022

<u>Sandvik</u> acquires precision tools manufacturer Sphinx Tools

August 2022

<u>Sandvik</u> acquires US based tap manufacturer Balax September 2022

Profile



Description:

SAP is a provider business application and technology solutions such as enterprise resource planning, database management, business intelligence and vertical-specific software

Walldorf, Germany
128,158 (▲ 7%)
<u>www.sap.com</u>
Public (ETR: SAP)
34
\$32,906

News & Notes

SAP announces Dominik Asam as new CFO August 2022

Lloyd Adams named President of <u>SAP</u> North America

August 2022

SAP announces CFO Luka Mucic to depart company in 2023

March 2022



Description:

Seeq is a manufacturing and Industrial Internet of Things (IIoT) advanced analytics software platform designed to accelerate process analytics on industrial process data

Headquarters:	Seattle, WA
Employees (1-Yr. Growth):	217 (▲ 15%)
Website:	<u>www.seeq.com</u>
Ownership Status:	VC-Backed (<i>Insight Partners</i>)
Acquisitions Since 2010:	0
TTM Revenue:	n/a

Seeq appoints George Skaryak as Chief Revenue Officer

November 2022

NECI and Seeq announce partnership to deliver advanced analytics solutions

August 2022

<u>Seeq</u> announces industrial digitalizationn agreement with Aramco

December 2021



Description:

Siemens is a German conglomerate which providers electrification, automation and digitalization solutions. IT offerings spanning design, manufacturing and other use cases

Munich, Germany
235,178 (▲ 8%)
www.siemens.com
Public (ETR: SIE)
34
\$77,534

<u>Siemens</u> launches innovative cloud-native software for electrical design

October 2022

<u>Siemens</u> acquires Brightly Software to accelerate growth in digital building operations

June 2022

<u>Siemens</u> acquires Wattsense to boost IoT systems for small and medium buildings

June 2022

Featured Companies

MADISON PARK GROUP

Leading Manufacturing Technology Platforms

Profile



Description:

Xometry creates a marketplace that enables designers and engineers to rapidly source high-quality on-demand manufactured parts and assemblies

Gaithersburg, MD
564 (▲ 24%)
www.xometry.com
Public (NasdaqGS: XMTR)
6
\$350

News & Notes

<u>Xometry</u> promotes Matt Leibel to Chief Technology Officer

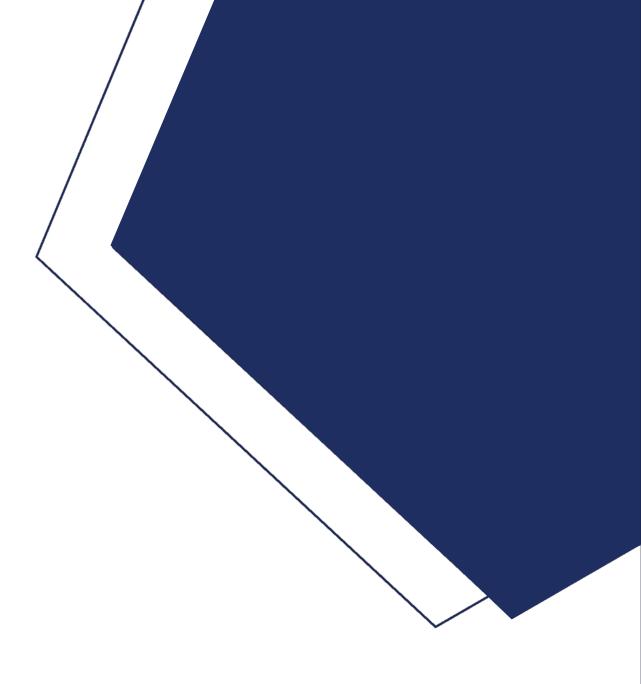
August 2022

<u>Xometry</u> acquires Thomas, accelerating the manufacturing industry's digital transformation August 2022

<u>Xometry</u> inherits cloud-based manufacturing execution system with acquisition of FactoryFour *February 2022*



Appendix Market Comparables



Buyer-Specific Acquisitions: 2011-Present

ABB	Honeywell	(\$ in Million	ns)	Target Overview	Estimated		Tran:	saction Statist Deal Value	
700	1 TOTICY WEIT	Date	Target	Description		BITDA	Value	Revenue	EBITDA
		ABB (NYSE	: ABB)		То	tal Disclosed	M&A Deal Va	lue Since 2011:	\$9.5 Billion
Aptean	IFS / Acumatica	Oct-22	ASKI Energy	Energy management hardware and software	n/a	n/a	n/a	n/a	n/a
		Sep-22	PowerTech Converter	Power supply systems for rail vehicles and industrial applications	n/a	n/a	n/a	n/a	n/a
		Aug-22 Jul-21	Siemens (NEMA Motor Business) ASTI Mobile Robotics	Low voltage NEMA motor Automated intralogistics software solutions	n/a \$50.0	n/a n/a	n/a n/a	n/a n/a	n/a n/a
AspenTech	Infor	Oct-20	Codian Robotics	Industrial application delta robotics	n/a	n/a	n/a	n/a	n/a
		Mar-20	ChargeDot	Vehicle-charging software applications	n/a	n/a	n/a	n/a	n/a
		Mar-20	Cylon Controls	Web-based energy management systems	n/a	n/a	n/a	n/a	n/a
Autodosk	Oracla	Oct-19	ChargeDot	Vehicle-charging technology developer	n/a	n/a	n/a	n/a	n/a
Autodesk	Oracle	Sep-18	Intrion	Automated material handling systems	n/a	n/a	n/a	n/a	n/a
		Sep-18	AB Rotech	Automotive engineering services	n/a	n/a	n/a	n/a	n/a
		Jul-18 Nov-17	GE Industrial Solutions Tekomar Group	Electrical circuits designer & manufacturer Marine diesel engine engineering	\$2,700.0 n/a	\$216.0 n/a	\$2,600.0 n/a	0.96x n/a	12.0x n/a
Aveva	PTC	Jul-17	KEYMILE (Assets)	Telecommunication network services	n/a	n/a	n/a	n/a	n/a
717676	110	Apr-17	B&R	Machine automation systems	\$600.0	\$75.0	\$2,000.0	3.33x	26.7x
		Feb-17	NUB3D	3D scanners and 3D scanning technology	n/a	n/a	n/a	n/a	n/a
- L		May-16	SVIA Automation Solutions	Robot automation equipment	n/a	n/a	n/a	n/a	n/a
Dassault	Revalize	Nov-15	Striebel & John	Energy-distribution systems manufacturing	n/a	n/a	n/a	n/a	n/a
		Aug-15	CGM	Advanced control room environments	n/a	n/a	n/a	n/a	n/a
	5 1 11	Apr-15	Gomtec	Mechatronic systems and robot developer	n/a	n/a	n/a	n/a	n/a
ECi	Rockwell	Jan-15 Nov-14	Viola Systems Spirit IT	Wireless telecommunications products Oil & gas automation products	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a
LCI	Automation	May-14	Terman	Temperature monitoring device mfg.	n/a	n/a	n/a	n/a	n/a
		Oct-13	Los Gatos Research	Laser-based gas and isotope measurement	n/a	n/a	n/a	n/a	n/a
		Sep-13	ELBI Elektrik	Electrical installation product manufacturer	n/a	n/a	n/a	n/a	n/a
Emerson	Roper / Deltek	Aug-13	Newron System	Automation systems software	n/a	n/a	n/a	n/a	n/a
		Jul-13	Alstom's Ring Motor Business	Manufacturer of ring motors	n/a	n/a	n/a	n/a	n/a
		Jul-13	Power One	Power-conversion/management solutions	\$1,000.0	\$120.0	\$762.0	0.76x	6.4x
F .	6 1 1	Jul-13	DynaMotive	UK-based controls and system producer	n/a	n/a	n/a	n/a	n/a
Epicor	Sandvik	Feb-13 Dec-12	APS Technology Group GRESIN	Automated process systems provider Press equipment manufacturer	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a
		Aug-12	Amarcon	Ship motion and performance analysis	n/a	n/a	n/a	n/a	n/a
		Jul-12	RGM (Rail Business)	Auxiliary converters for rail vehicles	n/a	n/a	n/a	n/a	n/a
Forterro	SAP	Jun-12	Tropos	Wireless IP broadband network solutions	n/a	n/a	n/a	n/a	n/a
TOTICHO	3A1	Jan-12	Thomas & Betts	Manufacturer of electrical components	\$2,300.0	\$390.0	\$3,900.0	1.70x	10.0x
		Dec-11	Newave Energy	Manufacturer of power supply equipment	n/a	n/a	\$169.6	n/a	n/a
		Dec-11	Stubán Generál Trafo	Transformers and inductors provider	n/a	n/a	n/a	n/a	n/a
GE / GE Digital	Seeq	Nov-11	Envitech Energy	Manufacturer of electrical power systems	n/a	n/a	n/a	n/a	n/a
		Nov-11 Jul-11	Powercorp Trasfor Group	Automation technologies provider	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a
		Jul-11	Lorentzen & Wettre	Low voltage transformers provider Provider of quality control equipment	n/a	n/a	\$81.1	n/a	n/a
	C:	Jul-11	Epyon Power	Fast charging system for electric vehicles	n/a	n/a	n/a	n/a	n/a
Hexagon	Siemens	May-11	Mincom	Enterprise asset & workforce management	n/a	n/a	n/a	n/a	n/a
		Aptean				Disclosed M		Since 2011: \$1	
		Nov-22	ImPuls	Enterprise resource planning software	n/a	n/a	n/a	n/a	n/a
Xon	netry	Oct-22	Merlin Business Software	Enterprise resource planning software Enterprise business software	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a
		Oct-22	Frontix	Process management software	n/a	n/a	n/a	n/a	n/a
		Aug-22	Aptos	Planning and design management platforms	n/a	n/a	n/a	n/a	n/a
		Aug-22	The Systems House	Enterprise management software for healthcare supply chain sector	n/a	n/a	n/a	n/a	n/a
		Jul-22	Produce Pro	Enterprise resource planning software for food and beverage	n/a	n/a	n/a	n/a	n/a

Buyer-Specific Acquisitions: 2011-Present

4.22		(\$ in Million	ns)	Target Overview				action Statisti	
ABB	Honeywell	Date	Target	Description	Estimated Revenue E	BITDA	Deal Value	Deal Value / Revenue	Estimated EBITDA
		Aptean						Since 2011: \$12	
Aptean	IFS / Acumatica	Jun-22 May-22	Prima Solutions RLM Apparel Software	Enterprise resource planning software and implementation services Software system intended to serve the fashion industry	n/a n/a	n/a n/a n/a	n/a n/a	n/a n/a	n/a n/a
AspenTech	Infor	Jan-22 Dec-21 Nov-22 Oct-21	JET ERP Systems Integration Objective International Ramsauer & Sturmer	Enterprise resource planning and business management software Enterprise and manufacturing execution system software Supply chain software streamlining logisitics Enterprise resource planning software for construction industry	n/a n/a n/a n/a	n/a n/a n/a n/a	n/a n/a n/a n/a	n/a n/a n/a n/a	n/a n/a n/a n/a
Autodesk	Oracle	Aug-21 Aug-21 Aug-21 Jul-21	Alternative Business Systems Exenta V-Technologies Ramsauer & Stürmer Software	Supply chain software for fast fashion industry Shipping software services ERP software solutions	n/a n/a n/a n/a	n/a n/a n/a n/a	n/a n/a n/a n/a	n/a n/a n/a n/a	n/a n/a n/a n/a
Aveva	PTC	Apr-21 Apr-21 Dec-20 Nov-20	Task Performance Group Applied Business Services Modula Society Lascom	Industrial EDI, EDIFACT and XML integration Business application solutions Manufacturing execution and ERP solutions Cloud-based industrial PLM platform	\$21.3 \$2.6 n/a n/a	n/a n/a n/a n/a	n/a n/a n/a n/a	n/a n/a n/a n/a	n/a n/a n/a n/a
Dassault	Revalize	Nov-20 Oct-20 Aug-20 Jul-20	Open Systems Adaptable Solutions Agiles Informationssysteme Innovative Systems DIN Solutions	F&B focused ERP software Process automation and ERP services Total management software solutions Holland-based F&B ERP vendor	n/a n/a n/a n/a	n/a n/a n/a n/a	n/a n/a n/a n/a	n/a n/a n/a n/a	n/a n/a n/a n/a
ECi	Rockwell Automation	Jun-20 Mar-20 Nov-19 Oct-19	WorkWise Paragon Software Systems Schouw Information Linkfresh Software	Discrete manufacturing ERP Vehicle routing optimization software Food ERP software platform Fresh produce ERP software	n/a n/a n/a n/a	n/a n/a n/a n/a n/a	n/a n/a n/a n/a	n/a n/a n/a n/a n/a	n/a n/a n/a n/a
Emerson	Roper / Deltek	Sep-19 Sep-19 May-19 Mar-18 Dec-17	Beck Consulting Sanderson Group Optiware IndustryBuilt Software TheySay	Food enterprise software solutions Digital retail and enterprise software Enterprise asset management software Business management software Online sentiment-analysis software	n/a \$45.4 n/a n/a n/a	99.3 n/a n/a n/a	n/a \$109.7 n/a n/a n/a	2.41x n/a n/a n/a n/a	n/a 9.3x n/a n/a n/a
Epicor	Sandvik	Dec-17 Dec-17 Dec-17 Jun-17 May-17	Praeses (Assets) Infl. Health (Assets) FDM Software Apprise Software	Jurisdiction Online Division Patient data solutions Public safety dispatch software Cloud-based ERP and SCM software	n/a n/a n/a n/a n/a	n/a n/a n/a n/a n/a	n/a n/a n/a n/a n/a	n/a n/a n/a n/a n/a	n/a n/a n/a n/a n/a
Forterro	SAP	Feb-17 Oct-16 Aug-16 Jun-16	Upp Technology GQ Life Sciences Diamond Municipal Trimble Public Safety	Warehouse and asset management Genomic software Financial and revenue management Public safety software	n/a n/a n/a n/a n/a	n/a n/a n/a n/a n/a	n/a n/a n/a n/a n/a	n/a n/a n/a n/a n/a	n/a n/a n/a n/a n/a
GE / GE Digital	Seeq	Jan-16 Dec-15 Oct-15 Oct-15	AssetPoint Computron Software Medworxx CoreTrac	Asset management software Accounting and finance ERP Medical information systems CRM services	n/a n/a \$6.1 n/a	n/a n/a n/a n/a n/a	n/a n/a \$18.7 n/a	n/a n/a n/a 3.06x n/a	n/a n/a n/a n/a n/a
Hexagon	Siemens	Jun-15 Jun-15 Jan-15 Aug-12	Cinram Group CRM Culture Verdiem CDC Software	Inventory management and BI Productivity software assets Power management ERP, manufacturing operations and SCM	n/a n/a n/a n/a	n/a n/a n/a n/a	n/a n/a n/a n/a	n/a n/a n/a n/a	n/a n/a n/a n/a
	otr.	Aspen Tech	nnology (Nasdaq: AZPN)		To	al Disclosed	M&A Deal Val	ue Since 2011: :	\$0.8 Billion
Xom	etry	Oct-22 Jul-22 Dec-20 Nov-20 Jul-19	inmation Software Micromine OptiPlant Camo Analytics Mnubo	Industrial information management system Modular data management software Automation for engineering and design Data simulation and prediction software IoT analytics & AI for product manufactures	n/a n/a n/a n/a n/a	n/a n/a n/a n/a n/a	n/a \$639.9 \$8.2 \$12.7 \$77.6	n/a n/a n/a n/a n/a	n/a n/a n/a n/a n/a

Buyer-Specific Acquisitions: 2011-Present

		(\$ in Million	s)	Target Overview			Trans	action Statistic	cs
ABB	Honeywell				Estimated		Deal	Deal Value /	Estimated
		Date	Target	Description	Revenue EB	ITDA _	Value	Revenue	EBITDA
		Aspen Tech	nology (Nasdaq: AZPN)		Tota	ıl Disclose <u>d</u>	M&A Deal Val	ue Since 2011: :	\$0.8 Billion
Aptean	IFS / Acumatica	Jun-19	Sabisu	Analytics and digital solutions for manufacturing	n/a	n/a	\$9.7	n/a	n/a
		Feb-18	Greenfern Dynamics	Dynamic optimization technology software	n/a	n/a	\$23.0	n/a	n/a
		Oct-16 Jun-16	Mtell Fidelis Group	Machinery monitoring software Asset reliability software	n/a n/a	n/a n/a	\$37.4 \$10.0	n/a n/a	n/a n/a
AspenTech	Infor	Apr-14	Sulsim Software	Gas plant simulation software	n/a	n/a	n/a	n/a	n/a
		Feb-12	SolidSim Engineering	Solids process modeling software	n/a	n/a	n/a	n/a	n/a
		Autodesk (1	NASDAQ: ADSK)		Tota	ıl Disclosed	M&A Deal Val	ue Since 2011: :	\$3.6 Billion
Autodesk	Oracle	Mar-22	The Wild	VR/AR collaboration platform	n/a	n/a	n/a	n/a	n/a
		Feb-22	Prodsmart	Real-time tracking application	n/a	n/a	n/a	n/a	n/a
		Jan-22	Moxion	SaaS-based digital media platform	n/a	n/a	n/a	n/a	n/a
Aveva	PTC	Dec-22	ProEst	Construction estimating and digital takeoff software	n/a	n/a	n/a	n/a	n/a
Aveva	FIC	Nov-22 May-21	Tangent Labs Upchain	Cloud-based production software pipeline tool Cloud-based manufacturing PLM	n/a n/a	n/a n/a	n/a \$139.8	n/a n/a	n/a n/a
		Feb-21	Innovyze	Infrastructure modeling and simulation software	\$104.1	\$41.6	\$1,040.9	10.00x	25.0x
		Nov-20	Spacemaker	Al-based building site analysis software	n/a	n/a	\$252.0	n/a	n/a
Dassault	Revalize	Oct-20	CAMplete Solutions	Manufacturing process and verification solutions	n/a	n/a	n/a	n/a	n/a
		Jul-20	Pype	Cloud-based construction project mgmt.	n/a	n/a	n/a	n/a	n/a
		Dec-18	BuildingConnected	Preconstruction planning solutions	n/a	n/a	\$275.0	n/a	n/a
EC:	Rockwell	Nov-18	PlanGrid	Digital blueprint solutions	\$100.0	n/a	\$875.0	8.75x	n/a
ECi	Automation	Jul-18	Assemble Systems	BIM solutions for construction	n/a	n/a	n/a	n/a	n/a
	Automation	Nov-17 Jun-16	BioLite CadSoft	Carbon credit license permits PCB Design	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a
		Apr-16	Solid Angle	Animation & visual effects rendering	n/a	n/a	n/a	n/a	n/a n/a
Emerson	Roper / Deltek	Feb-16	Monolith	Voxel modelling	n/a	n/a	n/a	n/a	n/a
EITICISOTI		Jan-16	Autodesk Substation Design	AutoCAD software developer	n/a	n/a	n/a	n/a	n/a
		Jan-16	SDS	AutoCAD software systems	n/a	n/a	n/a	n/a	n/a
		Oct-15	Configure One	CPQ software	n/a	n/a	n/a	n/a	n/a
Epicor	Sandvik	Oct-15	Indeeo	Apple graphic design applications	n/a	n/a	n/a	n/a	n/a
· ·		Sep-15	NetFabb	Additive design & mfg. software	\$18.6	\$1.0	\$44.5	2.39x	n/m
		Aug-15	SeeControl	IoT business applications platform	n/a	n/a	n/a	n/a	n/a
E a ut a uu a	SAP	Feb-15 Jan-15	Tweak Software Synthicity	PLM software hosting Urban planning data processing	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a
Forterro	SAP	Dec-14	Magestic Systems	3D nesting of composites	\$3.0	n/a	\$10.0	3.33x	n/a
		Nov-14	Terrible Labs	Mobile and web application development	n/a	n/a	n/a	n/a	n/a
		Nov-14	TeamUp Technologies	Three dimensional cloud platform	n/a	n/a	\$60.0	n/a	n/a
GE / GE Digital	Seeq	Nov-14	Lagoa	3D rendering platform	n/a	n/a	\$60.0	n/a	n/a
GE / GE Digital	3669	Oct-14	Modio	Character animation software	n/a	n/a	n/a	n/a	n/a
		Oct-14	Robobat Polska	Structural engineering software	n/a	n/a	n/a	n/a	n/a
		Jun-14 Jun-14	Shotgun Software The Living	Animation & creative software Building design studio	n/a n/a	n/a n/a	\$54.5 n/a	n/a n/a	n/a
Hexagon	Siemens	Jun-14 Jun-14	Bitsquid	Mobile game engine	n/a	n/a	n/a	n/a	n/a n/a
		May-14	Within Technologies	Engineering design optimization	n/a	n/a	\$88.8	n/a	n/a
		May-14	NEi Nastran Solver	Engineering analysis and simulation	n/a	n/a	n/a	n/a	n/a
Van	notry.	Apr-14	llesfay Technology	PLM data replication	n/a	n/a	n/a	n/a	n/a
Xom	letry	Mar-14	Creative Market Labs	Digital content design marketplace	n/a	n/a	n/a	n/a	n/a
		Feb-14	Delcam	Automated multi-vertical CAD/CAM	\$75.6	n/a	\$285.4	3.78x	n/a
		Jan-14	Schrauwen Bruneel	Electronic circuits design software	n/a	n/a	n/a	n/a	n/a
		Jan-14	Circuits.io	Application for designing electronic circuits	n/a	n/a	n/a	n/a	n/a
		Jan-14	Majestic Systems	Industrial manufacturing software	n/a	n/a	n/a	n/a	n/a

Buyer-Specific Acquisitions: 2011-Present

		(\$ in Millions) Target Overview						Transaction Statistics			
ABB	Honeywell				Estimated		Deal	Deal Value /	Estimated		
		Date	Target	Description	Revenue E	BITDA _	Value	Revenue	EBITDA		
		Autodesk (I	NASDAQ: ADSK)		Tot	al Disclose <u>d</u>	M&A Deal Val	ue Since 2011: \$	3.6 Billion		
Aptean	IFS / Acumatica	Dec-13	Azalient	Traffic simulation modelling	n/a	n/a	n/a	n/a	n/a		
		Dec-13	Graitec Innovation	Structural building construction CAD	n/a	n/a	\$88.1	n/a	n/a		
		Nov-13 Oct-13	Virtual Shape for-each	Automotive modelling & design Software focused on mobile development	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a		
AspenTech	Infor	Aug-13	Bestech Systems	Bridge span analysis	n/a	n/a	n/a	n/a	n/a		
		Aug-13	Savoy Computing	Transportation path analysis	n/a	n/a	n/a	n/a	n/a		
		May-13	Tinkercad	Cloud-based 3D design tools	n/a	n/a	n/a	n/a	n/a		
Autodesk	Oracle	Mar-13	Firehole Technologies	Composite materials design	n/a	n/a	\$10.0	n/a	n/a		
Autodesk	Oracle	Jan-13	Allpoint	3D data processing	n/a	n/a	n/a	n/a	n/a		
		Jan-13 Oct-12	PI-VR Qontext	Automotive visualization Enterprise social collaboration	n/a n/a	n/a n/a	\$49.3 \$26.0	n/a n/a	n/a n/a		
		Oct-12	HSMWorks	Computer aided manufacturing	n/a	n/a	\$20.0 n/a	n/a	n/a		
Aveva	PTC	Aug-12	Inforbix	Product data searching	n/a	n/a	n/a	n/a	n/a		
		Aug-12	Exotic Matter	3D fluid solver and dynamics framework	n/a	n/a	n/a	n/a	n/a		
		Jul-12	Socialcam	Video data capture	n/a	n/a	\$60.0	n/a	n/a		
Deservit	Dovalina	Jun-12	Vela Systems	Construction field software	n/a	n/a	\$76.0	n/a	n/a		
Dassault	Revalize	Dec-11	T-Splines	Surface modelling software	n/a	n/a	n/a	n/a	n/a		
		Dec-11 Nov-11	Horizontal Systems GRIP Entertainment	BIM platform Artificial intelligence games	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a		
	Rockwell	Oct-11	Micro Application	CAD/CAM for fabrication & construction	n/a	n/a	\$23.0	n/a	n/a n/a		
ECi		Aug-11	Numenus	High-end visualization	n/a	n/a	n/a	n/a	n/a		
261	Automation	Aug-11	Darwin Dimensions	3D character modelling	n/a	n/a	n/a	n/a	n/a		
		Aug-11	Instructables	User-generated DIY content	n/a	n/a	\$30.2	n/a	n/a		
_		Jul-11	Code Mine	Cloud-based image tools and utilities	n/a	n/a	n/a	n/a	n/a		
Emerson	Roper / Deltek	May-11	Datastay	PLM software	n/a	n/a	n/a	n/a	n/a		
		Mar-11 Mar-11	Blue Ridge Numerics Scaleform	Fluid dynamics and simulation UI software for consumer electronics	n/a	n/a	\$39.0 \$36.0	n/a	n/a		
				Of software for consumer electronics	n/a	n/a		n/a	n/a		
Epicor	Sandvik	AVEVA (LO	N: AVV)		Tot			ue Since 2011: \$	7.4 Billion		
		Mar-21	OSIsoft	Data mgmt. for industrial operations	\$488.5	\$111.3	\$5,000.0	10.24x	n/m		
		Mar-20	MES Enter ErrorSolver	Production accounting software	n/a	n/a	n/a	n/a	n/a		
	CAD	May-19 Sep-17	Maxgrip (Software Assets) Schneider Electric Software	Asset management software solutions Industrial software merger	n/a \$575.7	n/a \$118.9	\$28.2 \$2,307.1	n/a 4.01x	n/a 19.4x		
Forterro	SAP	Jun-15	FabTrol Systems	Steel fabrication management software	\$5/5./ n/a	\$110.9 n/a	\$2,307.1	n/a	n/a		
		Jan-15	8over8	Asset risk management software	\$10.2	(\$8.0)	\$40.8	4.02x	n/m		
		Dec-12	Global Majic Software	3D interactive visualization applications	n/a	n/a	n/a	n/a	n/a		
GE / GE Digital	Seeq	May-12	Bocad Service International	Building information modelling software	n/a	n/a	\$22.5	n/a	n/a		
Cz / Cz Digital	Seeq	Oct-11	Z+F UK	Laser scanning software	n/a	n/a	\$9.9	n/a	n/a		
		Dassault Sy	stemes (PAR: DSY)		Tot	al Disclosed	M&A Deal Val	ue Since 2011: \$	9.0 Billion		
Hexagon	Siemens	Oct-22	StyleSage	Image recognition and retail analytics platform	n/a	n/a	n/a	n/a	n/a		
пехадоп	Siemens	Sep-22	Diota	Augmented reality technologies designed to materialize data	n/a	n/a	n/a	n/a	n/a		
		Jul-22	Wave Six	Noise simulation and vibration analysis software	n/a	n/a	n/a	n/a	n/a		
		Jul-21	Iterop	Cloud BPM software	n/a	n/a	n/a	n/a	n/a		
Xon	netry	Nov-20 Jul-20	NuoDB Proxem	Cloud-native distributed SQL database	\$6.0 n/a	n/a n/a	n/a n/a	n/a n/a	n/a		
		Jui-20 Aug-21	AllStripes (M)	Al-based semantic processing software Drug research and tracking platform	n/a n/a	n/a n/a	n/a \$50.0	n/a n/a	n/a n/a		
		Oct-20	MC10 (M)	Conformal electronics for digital healthcare services	n/a	n/a	n/a	n/a	n/a		
		Jun-19	Medidata	Clinical development SaaS	\$661.0	\$85.4	\$5,763.8	8.72x	n/m		
		Feb-19	Elecwork (Assets)	Electrical design, product line & IP assets	n/a	n/a	n/a	n/a	n/a		

Buyer-Specific Acquisitions: 2011-Present

ABB	Honeywell	(\$ in Million	ns)	Target Overview	Estimated		Tran: Deal	saction Statist Deal Value	
ADD	Honeyweii	Date	Target	Description		BITDA	Value	Revenue	EBITDA
		Dassault Sy	stemes (PAR: DSY)		То	tal Disclosed	M&A Deal Val	ue Since 2011:	\$9.0 Billion
Aptean	IFS / Acumatica	Jan-19	IQMS	Manufacturing ERP software & SaaS	\$56.0	n/a	\$425.0	7.59x	n/a
		Jan-19	Argoism	System requirements validation software	n/a	n/a	n/a	n/a	n/a
		Dec-19	COSMOlogic	Computational chemistry software	n/a	n/a	n/a	n/a	n/a
AspenTech	Infor	Jul-18 Jun-18	Centric Software No Magic	PLM software for operations management BPM software & SaaS	n/a n/a	n/a n/a	\$228.1 n/a	n/a n/a	n/a n/a
		Nov-17	Exa Corporation	Simulation & engineering software & SaaS	\$73.0	\$1.5	\$400.0	5.48x	n/m
		Jun-17	Outscale	Provider of laaS	n/a	n/a	n/a	n/a	n/a
A t = al = al .	0	Jun-17	AITAC	Marine and offshore engineering software	n/a	n/a	n/a	n/a	n/a
Autodesk	Oracle	Dec-16	Next Limit Dynamics	Graphics simulation software asset	n/a	n/a	n/a	n/a	n/a
		Jul-16	CST	Electromagnetic field simulation software	\$47.0	n/a	\$243.7	5.18x	n/a
		Jun-16	Ortems 3DPLM Software Solutions	Manufacturing planning software	n/a	n/a	n/a	n/a	n/a
Aveva	PTC	Apr-16 Apr-15	Modelon	Software development & implementation CAD & simulation software	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a
, tve va	110	Jul-14	Quitiq	Supply planning & optimization software	\$96.0	n/a	\$337.0	3.51x	n/a
		Jul-14	SIMPACK	Simulation software provider	n/a	n/a	n/a	n/a	n/a
		Jan-14	Accelrys	Scientific PLM software	\$166.0	n/a	\$750.0	4.52x	n/a
Dassault	Revalize	Jan-14	Real time Technology	3D visualization technology	n/a	n/a	\$245.4	n/a	n/a
		Oct-13	Inceptra	Horizontal PLM software	n/a	n/a	n/a	n/a	n/a
	D. a. alas sa II	Sep-13 Jul-13	Safety Technology SFE	Supplier of safety training and equipment	n/a	n/a	\$1.0	n/a	n/a
ECi	Rockwell	Jul-13 Jul-13	Apriso	CAE-driven development software Manufacturing operations platform	n/a n/a	n/a n/a	n/a \$205.0	n/a n/a	n/a n/a
LCI	Automation	Apr-13	Archividéo	Production of 3D images for construction	\$1.3	n/a	n/a	n/a	n/a
		Apr-13	Fe-Design	Simulation and automation software	n/a	n/a	n/a	n/a	n/a
		Apr-13	Simpoe	Injection-molding simulation software	n/a	n/a	n/a	n/a	n/a
Emerson	Roper / Deltek	Jan-13	SquareClock	Provides 3D space planning solutions	\$2.7	n/a	n/a	n/a	n/a
		Dec-12	Tuscany Design Automation	Engineering software for circuit design	n/a	n/a	n/a	n/a	n/a
		Jul-12 Feb-12	Dassault Systèmes GEOVIA Netvibes	Supplier of mining productivity solutions Dashboard publishing platform	n/a \$2.8	n/a (\$2.5)	\$354.9 n/a	n/a n/a	n/a n/a
Epicor	Sandvik	Oct-11	Elsys International	Collaborative management software	\$0.7	(\$0.2)	n/a	n/a	n/a
Lpicoi	Saliuvik	Oct-11	Simulayt	Draping simulation technology services	\$1.1	\$3.0	n/a	n/a	n/a
		Apr-11	Enginuity PLM	R&D software for chemical companies	n/a	n/a	n/a	n/a	n/a
	C.1.D.	Mar-11	Intercim	Operations management software	n/a	n/a	\$36.5	n/a	n/a
Forterro	SAP	ECi				Total Di	sclosed M&A I	Deal Value Sind	e 2011: n/a
		Oct-22	ES Tech Group	eCommerce software with marketing and catalog features	n/a	n/a	n/a	n/a	n/a
		Aug-22	Lojic	Business management software catering to the manufacturing	n/a	n/a	n/a	n/a	n/a
GE / GE Digital	Seeq	Aug-22	Data Inventions	Business analytics platform improving the productivity of machines	n/a	n/a	n/a	n/a	n/a
		Oct-21 Nov-21	MyProduction INseARCH Interactive	Cloud-based material and management tools 2D and 3D visualization software	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a
		Oct-21	eCommonSense	2D and 3D visualization software	n/a	n/a	n/a	n/a	n/a
Ноходор	Ciamana	Sep-21	Deacom	ERP for process and batch manufacturers	n/a	n/a	n/a	n/a	n/a
Hexagon	Siemens	Nov-20	Shoptech Industrial Software	ERP shop management software	n/a	n/a	n/a	n/a	n/a
		Oct-20	Bolt Software Technology	Cloud-based construction business management solution	n/a	n/a	n/a	n/a	n/a
		Sep-20	ThermoGRID	Cloud-based field service software	n/a	n/a	n/a	n/a	n/a
Xom	netry	Jun-20 May-20	Prosperity BuildTools	Lumber and building materials software Web-based construction management	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a
		Aug-19	Trivest Software Group	Software for SME manufacturers	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a
		Jul-19	Pacsoft	Inventory management	n/a	n/a	n/a	n/a	n/a
		Dec-18	Lasso Data Systems	Cloud-based CRM applications	n/a	n/a	n/a	n/a	n/a
		Nov-18	Print Audit	Device and print management software	n/a	n/a	n/a	n/a	n/a

Buyer-Specific Acquisitions: 2011-Present

Aptean IFS / Accumation IFS /			(\$ in Million	is)	Target Overview	Target Overview				Transaction Statistics			
Aptean IFS / Acumatica Coffee Bocument comulting Cost Coffee Bocument comulting Cost Coffee Bocument comulting Cost C	ABB	Honeywell						Deal	Deal Value /	Estimated			
Aptean IFS Accumation Section Sectio			Date	Target	Description	Revenue E	BITDA _	Value	Revenue	EBITDA			
Sep-18			ECi				Total Di	sclosed M&A [Deal Value Sinc	e 2011: n/a			
Sep-18	Aptean	IFS / Acumatica	Oct-18	Office Document consulting	Developer of sales automation software	n/a	n/a	n/a	n/a	n/a			
August A													
Autodesk						n/a	n/a	n/a	n/a	n/a			
August A	A sin ain Taish	Infor	Aug-17	Exact Group (Assets)	Manufacturing software assets	n/a	n/a	n/a	n/a	n/a			
Autodesk Oracle Au-15	Aspentech	Infor	Mar-17	Mark Systems	Home builder ERP software	n/a	n/a	n/a	n/a	n/a			
Autodesk				,	, ,			, .		, .			
Aveva PTC Surely System Solutions Surely Soluti													
Apr-12 Blussyl System Solutions Computer software and IT service provider n/a n/	Autodesk	Oracle											
Aveva PTC	ratoacsk	Oracie											
Aveva			·		Computer software and it service provider								
May-22 Aspen Technology Software solutions that optimize asset design and operations \$955.6 \$315.0 \$6,000 6,28x 190/x		57.0	Emerson (N	YS: EMR)		Tota	al Disclosed N	1&A Deal Valu	e Since 2011: \$	15.1 Billion			
Dassault Revalize	Aveva	PIC											
Dassault Revalize													
Dassault Revalize													
Bear Control Proges Analytics, visualization, IloT technologies n/a	Dassault	Povalizo		5									
Rockwell	Dassault	Revalize											
Feb-20					, ,			, .		, .			
Nov-19		Pockwall			5								
Spence and Nicholson Steam regulators and traps n/a 57.0 \$85.4 n/a 1.2x	FCi												
May-19		Automation	Nov-19	Spence and Nicholson		n/a	\$7.0	\$85.4	n/a	12.2x			
Apr-19			Aug-19	Zedi (Assets)	O&G SCADA platform	n/a	n/a	n/a	n/a	n/a			
Oct-18							n/a	n/a		n/a			
Dec. 17	Emerson	Roper / Deltek						, .					
Li-18													
Forterro Sandvik Jul-18 ProSys Global process control consulting services n/a													
Jan-18	Enicar	Canduile			•								
Jan-18	Epicoi	Saliuvik		, ,									
Dec-17				,				, .	, .				
May-17													
May-17	Forterro	SAP	Oct-17	GeoFields	O&G pipeline data management software	n/a	n/a	n/a	n/a	n/a			
Nov-16	10110110	5,		MYNAH Technologies	Dynamic simulation software	n/a	n/a			n/a			
Oct-16				, ,		, ,				, .			
Aug-16													
Aug-16	GE / GE Digital	Seeq					,						
Nov-14													
Hexagon Siemens Oct-15													
Sep-15 Spectrex Flame & gas detector mfg. n/a	Hoyagan	Ciamana											
Xometry Jun-15 ESI Pipeline support services n/a n/a n/a n/a n/a n/a n/a n/a n/a Dec-14 Cascade Technologies (Assets) Gas emission monitoring systems n/a n/a n/a n/a n/a n/a n/a Nov-14 Paine Electronics Pressure transducer manufacturer n/a n/a n/a n/a n/a n/a n/a Jul-14 Valvulas Automation control products n/a n/a n/a n/a n/a n/a May-14 Management Resources Group Engineering and maintenance services n/a n/a n/a n/a n/a Jan-14 EGS (Minority Stake) Industrial electrical products manufacturer \$500.0 n/a \$1,283.1 2.57x n/a	пехадоп	Siemens	Sep-15	Spectrex	,		n/a	n/a	n/a	n/a			
Dec-14 Cascade Technologies (Assets) Gas emission monitoring systems n/a			Jul-15	Yggdrasil	O&G production optimization software	n/a	n/a	n/a	n/a	n/a			
Nov-14 Paine Electronics Pressure transducer manufacturer n/a													
Jul-14 Valvulas Automation control products n/a n/a n/a n/a n/a n/a n/a n/a May-14 Management Resources Group Engineering and maintenance services n/a n/a n/a n/a n/a n/a n/a n/a n/a Jan-14 EGS (Minority Stake) Industrial electrical products manufacturer \$500.0 n/a \$1,283.1 2.57x n/a	_Xom	etrv											
May-14 Management Resources Group Engineering and maintenance services n/a	7,311												
Jan-14 EGS (Minority Stake) Industrial electrical products manufacturer \$500.0 n/a \$1,283.1 2.57x n/a					•			, .		, .			
			,										
						,	.,-	.,,=	.,-	, -			

Buyer-Specific Acquisitions: 2011-Present

Aptean IFS / Acumatical Date Triget Description			(S in Millions) Target Overview					Transaction Statistics			
Industrial aurge protection in feature and protection features Industrial aurge protection mfg Industr	ABB	Honeywell						Deal	Deal Value /	Estimated	
Apteam IFS Accumatica Chr. 13 Advanced Protection Rechnology Chr. 13 Chr. 13 Flavor Chr. 13			Date	Target	Description	Revenue EBI	TDA _	<u>Value</u>	Revenue	EBITDA	
AspenTech			Emerson (N	IYS: EMR)		Total I	Disclosed N	1&A Deal Valu	e Since 2011: \$1	5.1 Billion	
AspenTech	Aptean	IFS / Acumatica	Dec-13	Advanced Protection Technology	Industrial surge protector mfg.	n/a	n/a	n/a	n/a	n/a	
April											
Apr-12						n/a	n/a	n/a	n/a	n/a	
Mar 12	AspenTech	Infor		,				, .			
Autodesk Oracle	Азрептест	111101									
Autodesk					·						
Autodesk PTC Nov-22 Even Computer System Dossault Revalize R											
Aveva PTC	Autodesk	Oracle				.,,=					
Aveva						Total					
Aveva											
Mar-22 MO Systems No-code full-stack business intelligence (8ll) platform N/a n/	Λνονο	PT <i>C</i>									
Dassault Revalize	Aveva	110		· · · · · · · · · · · · · · · · · · ·				, .	, .		
Dassault Revalize											
May-21 M								, .			
EC Rockwell Automation	Dassault	Revalize					n/a	n/a	n/a		
Beautiful						n/a	n/a	n/a		n/a	
Automation				,				, .			
Automation Jan-16	EC:	Rockwell									
Feb-15 Insite Software Manufacturing commerce tools n/a	ECI	Automation									
Emerson Roper / Deltek Jan-15 Shopy/sible Order management and digital commerce n/a n/a 1/3		racomación									
Nov-14											
Oct-12 Solarsoft Business ERP for midisized mfg. & distribution \$90.0 n/a \$15.5.0 1.72x n/a	Emerson	Roper / Deltek	Nov-14				n/a	n/a	n/a		
May-12 Internet AutoParts Auto replacement parts eCommerce n/a		1 1									
Forterro Sandvik May-11 Activant Solutions Business management and SCM n/a n											
Forterro SAP Jul-22	Faire	والمرام والمرام									
SAP	Epicor	Sandvik		Activant Solutions	Business management and SCIVI	n/a					
Dec-21 myfactory			Forterro				Total Dis	closed M&A [Deal Value Since	2011: n/a	
Jul-21 123 Insight MRP and ERP manufacturing software \$9.6 n/a			Jul-22	Orderwise	Software intended for a fully integrated ERP software system	n/a	n/a	n/a	n/a	n/a	
Jul-21 123 Insight MRP and ERP manufacturing software \$9.6 n/a	Forterro	SAP									
Hexagon Seeq Mar-18 Silog France-based ERP platform Poland-based ERP platform Poland-based ERP platform N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a N/a											
Seeq Jun-17 Clip Industrie French VSE & SMB ERP platform n/a											
Hexagon Siemens Siemens Feb-1/ BPSC Polanti-based ERP platform N/a N	CF / CF Digital	Cons									
Hexagon Siemens May-16 SYLOB France-based industrial SME ERP platform n/a	GE / GE Digital	Seeq			·						
Hexagon Siemens Dec-13 Infocube Jeeves reseller and implementation partner Total Disclosed M&A Deal Value Since 2011: \$106.7 Billion Jul-22 Nexus Controls Dec-21 Opus One Solutions Sep-21 BK Medical Advanced surgical visualization Aug-20 Frontier Wind Sep-18 Alstom Provider of renewable energy services N/a			May-16	SYLOB			n/a	n/a	n/a		
According to the following special sectors of the following special sp								, .			
Xometry Jul-22 Nexus Controls Industrial automation controls system and safety system solutions n/a	Hexagon	Siemens	Dec-13	Infocube	Jeeves reseller and implementation partner	n/a	n/a	n/a	n/a	n/a	
Dec-21 Opus One Solutions Real-time energy management software n/a n/a \$70.0 n/a n/a n/a \$70.0 n/a n/a n/a n/a \$70.0 n/a n/a n/a n/a n/a n/a n/a n/a \$70.0 n/a n			General Elec	ctric (NYS: GE)		Total D	isclosed M	&A Deal Value	Since 2011: \$10	06.7 Billion	
Dec-21 Opus One Solutions Real-time energy management software n/a n/a \$70.0 n/a n/a n/a \$70.0 n/a n/a n/a n/a \$70.0 n/a n/a n/a n/a n/a n/a n/a n/a \$70.0 n/a n			Jul-22	Nexus Controls	Industrial automation controls system and safety system solutions	n/a	n/a	n/a	n/a	n/a	
Sep-21 BK Medical Advanced surgical visualization n/a n/a \$1,450.0 n/a n/a Aug-20 Frontier Wind Blade technology for wind turbines reducing the cost of energy n/a n/a n/a n/a n/a Sep-18 Alstom Provider of renewable energy services n/a n/a n/a \$3,020.0 n/a n/a Dec-17 YPF Energia Electrica Electricity generation business n/a n/a n/a n/a n/a n/a		ootry/						, .	, .		
Sep-18 Alstom Provider of renewable energy services n/a n/a \$3,020.0 n/a n/a Dec-17 YPF Energia Electrica Electricity generation business n/a n/a n/a n/a n/a	XOII	letry			Advanced surgical visualization	n/a	n/a		n/a	n/a	
Dec-17 YPF Energia Electrica Electricity generation business n/a n/a n/a n/a n/a											
					3,						
				9							
11/4 11/4 11/4 11/4 11/4 11/4 11/4 11/4			1404-17	GCOTIA	virtual manaracturing platform	11/ d	11/0	11/ a	11/ d	11/ a	

Buyer-Specific Acquisitions: 2011-Present

4.0.0		(\$ in Millio	ns)	Target Overview				saction Statist	
ABB	Honeywell	Date	Target	Description	Estimate Revenue	d EBITDA	Deal Value	Deal Value / Revenue	ESTIMATED EBITDA
		General Ele	ectric (NYS: GE)		Tota	al Disclosed N	1&A Deal Value	Since 2011: \$1	06.7 Billion
Aptean	IFS / Acumatica	Nov-17 Jul-17	Markbygden ETT IQP	Swedish wind farm project Code-free application development tool	n/a n/a	n/a n/a	\$352.0 \$40.0	n/a n/a	n/a n/a
AspenTech	Infor	Jul-17 Apr-17 Apr-17 Feb-17	Baker Hughes LM Wind Power Lokomotiv Kurastyru Nurego	Oilfield products and services Wind turbine industry mfg. Manufacturer of locomotives Monetization and business operations tool	\$28,000.0 \$1,086.4 n/a n/a	\$5,040.0 \$192.5 n/a n/a	\$55,440.0 \$1,650.0 n/a n/a	1.98x 1.52x n/a n/a	11.0x 8.6x n/a n/a
Autodesk	Oracle	Jan-17 Dec-16 Nov-16 Nov-16	ServiceMax Concept Laser Bit Stew Systems Alstom Bharat Forge	Field-service management platform 3D metal printing technology Industrial operations management Manufacturer of turbines and generators	\$60.0 n/a \$15.0 n/a	n/a \$27.7 n/a n/a	\$915.0 \$762.8 \$153.0 n/a	15.25x n/a 10.20x n/a	n/a 27.6x n/a n/a
Aveva	PTC	Sep-16 Sep-16 Sep-16 Aug-16	Meridium Arcam SLM Solutions ShipXpress	Asset performance management Metal-based additive mfg. technology Metal-based additive mfg. technology Rail and shipping SCM software	n/a \$78.0 \$74.0 n/a	n/a \$0.2 n/a n/a	\$366.3 \$685.0 \$762.0 n/a	n/a 8.78x 10.30x n/a	n/a n/m n/a n/a
Dassault	Revalize	Apr-16 Apr-16 Dec-15 Nov-15	NeuCo Metem Alstom Bharat Forge Alstom (Power & Grid)	Plant optimization software Manufacturer of alloy components Manufacturer of turbines and generators Thermal, renewable and grid business	n/a n/a n/a n/a	n/a n/a n/a n/a	n/a \$140.0 n/a \$10,300.0	n/a n/a n/a n/a	n/a n/a n/a n/a
ECi	Rockwell Automation	Jun-15 Mar-15 Jun-14 May-14	Alstom India Oceaneering Int. Cameron Int. Wurldtech Security	Power services Subsea electric actuator product line Flow equipment products Software security products	n/a n/a n/a n/a	n/a n/a n/a n/a	n/a n/a \$550.0 n/a	n/a n/a n/a n/a	n/a n/a n/a n/a
Emerson	Roper / Deltek	Apr-14 Mar-14 Feb-14 Jan-14	Medical Universal Ther. Fisher (Assets) Allen Gearing Finnamore	Manufacturer of medical imaging systems Life sciences operations High performance gearboxes Health care consultancy services	\$5.3 \$250.0 \$35.4 \$16.4	\$0.1 n/a \$5.8 \$0.3	n/a \$1,060.0 n/a n/a	n/a 4.24x n/a n/a	n/a n/a n/a n/a
Epicor	Sandvik	Dec-13 Aug-13 Jul-13 Jun-13	Gestamp Aguascali. GE Avio Lufkin Industries Salof Companies	Manufacturer of metal components Civil and military aeronautics components Artificial lift and parts Small scale cryogenic liquefaction plants	n/a \$2,710.2 \$1,319.6 n/a	n/a n/a \$191.3 n/a	\$14.2 \$4,330.0 \$3,236.9 n/a	n/a 1.60x 2.45x n/a	n/a n/a 16.9x n/a
Forterro	SAP	Jan-13 Nov-12 Oct-12 Aug-12	BLS Energieplan Albeo Technologies Metlife (Assets) Naxys Prairie Rose Wind	Energy development and consulting Manufacturer of led lighting products Portfolio of bank's assets and deposits Manufacturer of oil and gas equipment	n/a \$10.6 n/a n/a n/a	n/a n/a n/a n/a n/a	n/a n/a \$7,000.0 n/a n/a	n/a n/a n/a n/a n/a	n/a n/a n/a n/a
GE / GE Digital	Seeq	Aug-12 Aug-12 May-12 Apr-12 Jan-12	Presens Industrea Chisholm View Wind RMI	Utility-scale wind-energy project Pressure-sensor devices Mining products and services Owner and operator of a wind farm Rail and shipper eCommerce	n/a n/a \$370.0 n/a \$45.0	n/a n/a \$116.8 n/a n/a	n/a n/a \$678.4 \$375.0 n/a	n/a n/a 1.83x n/a n/a	n/a n/a 5.8x n/a n/a
Hexagon	Siemens	Sep-11 Apr-11 Mar-11 Feb-11	Lightech Electronic John Wood Group Lineage Power Wellstream Holdings	Consumer & commercial lighting products Support services for the O&G industry Power supply products Pipeline systems for the oil & gas industry	n/a \$1,478.0 \$450.0 n/a	n/a \$259.1 n/a \$2.0	\$18.7 \$2,779.1 \$525.0 \$1,275.1	n/a 1.88x 1.17x n/a	n/a 10.7x n/a n/m
Xom	netry	Feb-11 Jan-11 Jan-11	Dresser NBCUniversal Remote Energy Mon.	Engineered infrastructure products Media and entertainment company Manufacturer of energy measuring devices	n/a \$20,234.0 n/a	n/a n/a n/a	\$3,000.0 \$5,800.0 n/a	n/a 0.29x n/a	n/a n/a n/a
		Hexagon (Oct-22	STO: HEXA B) Avvir	Automated construction verification and progress monitoring	n/a	otal Disclosed n/a	M&A Deal Val n/a	ue Since 2011: n/a	\$7.7 Billion n/a
		Sep-22	iConstruct	Building information modeling (BIM) software	n/a	n/a	n/a	n/a	n/a

Buyer-Specific Acquisitions: 2011-Present

4.00		(\$ in Million	ns)	Target Overview				saction Statist	
ABB	Honeywell	Date	Target	Description	Estimat Revenue	ed EBITDA	Deal Value	Deal Value / Revenue	Estimated EBITDA
Aptean	IFS / Acumatica		TO: HEXA B)			Total Disclosed		ue Since 2011:	
Aptean	1137 Acumatica	Apr-22 Feb-22	ETQ Minnovare	Quality, EHS, Food Safety and Compliance management software	\$75.0		\$1,200.0	16.00x	24.6x
		Oct-21	Hexagon EAM Business	Industrial drilling technology Enterprise asset management software	n/a n/a		n/a \$2,850.0	n/a n/a	n/a n/a
		Sep-21	Jovix	Material tracking software	n/a		φ <u>z</u> ,030.0 n/a	n/a	n/a
AspenTech	Infor	Jul-21	Immersal	3D mapping and visual infotainment platform	n/a		n/a	n/a	n/a
		Jul-21	Infor (EAM business unit)	Industrial EAM software	\$184.0		\$2,750.0	14.95x	n/m
		Apr-21	CADLM	CAE, AI, and ML design software platform	n/a		n/a	n/a	n/a
Autodesk	Oracle	Jan-21	DP Technology	CAM software for CNC machine tools	n/a		n/a	n/a	n/a
Autoucsk	Oracic	Dec-20 Nov-20	OxBlue PAS Global	Construction streaming camera systems Cybersecurity, inventory and configuration management	\$45.2 \$40.7	n/a n/a	n/a n/a	n/a n/a	n/a n/a
		Jul-20	TACTICAWARE	LiDAR 3D surveillance software	\$40.7 \$2.8		n/a	n/a	n/a
		Mar-20	CAEFatigue	Mechanical fatigue simulation	n/a	, .	n/a	n/a	n/a
Aveva	PTC	Feb-20	Romax Technology	Computer aided engineering software	Conf		Conf.	Conf.	Conf.
		Jan-20	COWI (Assets)	Mapping and geospatial services	n/a	n/a	n/a	n/a	n/a
		Jan-20	Geopraevent	Sensors and measuring technologies	n/a	n/a	n/a	n/a	n/a
December	Doveline	Jan-20	Blast Movement Technology (BMT)	Blast monitoring and analysis for mining	n/a		n/a	n/a	n/a
Dassault	Revalize	Jan-20	Volume Graphics	Industrial tomography software	n/a		n/a	n/a	n/a
		Jun-19 Jun-19	Melown Technologies AMendate	Web-based 3D visualization software	n/a		n/a n/a	n/a n/a	n/a
	Rockwell	Feb-19	Thermopylae	Additive manufacturing design Govt. & defense geospatial applications	n/a \$20.0		n/a	n/a	n/a n/a
ECi	Rockwell	Jan-19	i5 International	Operational risk management software	\$20.0 n/a		\$16.6	n/a	n/a
201	Automation	Jan-19	Etalon	Machine / equipment calibration solutions	n/a		n/a	n/a	n/a
		Oct-18	Bricsys	CAD software for AEC market	\$14.7		n/a	n/a	n/a
		Sep-18	External-Array Software	CMM manufacturing software	n/a	n/a	n/a	n/a	n/a
Emerson	Roper / Deltek	Jun-18	Geocloud (Assets)	Ski slope infrastructure measurement	n/a		n/a	n/a	n/a
		Jun-18	SPRING Technologies	Machine tool simulation software	\$9.5		n/a	n/a	n/a
		Jun-18	AutonomouStuff	Integrated autonomous vehicle solutions	\$45.0		n/a	n/a	n/a
Fusiona	Conduite	May-18 Apr-18	Nextsense	Non-contact profile measurement Alphacam CAM software distributor	\$13.5		n/a n/a	n/a n/a	n/a n/a
Epicor	Sandvik	Apr-18	Licom Systems ProCAM Group	Italian distributor of Vero Software	n/a n/a		n/a	n/a	n/a
		Mar-18	AGTEK	Construction project modelling software	n/a		n/a	n/a	n/a
		Jan-18	Plant Design Solutions	CADWorx & Analysis software	n/a		n/a	n/a	n/a
Forterro	SAP	Jan-18	Industrial Business Solutions	Digital project completion	n/a	n/a	n/a	n/a	n/a
10110110	3, (1	Oct-17	Luciad	Geospatial information visualization	\$21.7	n/a	n/a	n/a	n/a
		Jun-17	InfraMeasure	Laser-based rail measurement system	n/a		n/a	n/a	n/a
		Jun-17	DST Computer Services	Pipe stress analysis software	n/a		n/a	n/a	n/a
GE / GE Digital	Seeq	Jun-17 May-17	FASys Industrie VIRES	DIN 4000/4003 tool & resource management Driver-assisted & autonomous simulation	n/a n/a		n/a n/a	n/a n/a	n/a n/a
		May-17	Catavolt	Mobile app development	n/a		n/a	n/a	n/a
		Apr-17	MSC Software	Computer aided engineering software	\$230.0		\$834.0	3.63x	n/a
Цоугаар	Siamans	Jan-17	MiPlan Consulting	Mobile mine management software	n/a		n/a	n/a	n/a
Hexagon	Siemens	Sep-16	GISquadrat	Location-based geospatial software	n/a		n/a	n/a	n/a
		Aug-16	Apodius	Composite measurement solutions	n/a		n/a	n/a	n/a
		Aug-16	Multivista	Construction visual documentation services	n/a		n/a	n/a	n/a
Xom	etrv	Aug-16	P3D Systems	Laser scanning & 3D modelling software	n/a		n/a	n/a	n/a
		Jun-16 Jun-16	Ingegneria dei Sistemi (Assets)	Structural health monitoring solutions	\$20.0		n/a	n/a	n/a
		Jun-16 Mar-16	Nestix AICON 3D Systems	Production control software Industrial 3D optical measuring systems	n/a \$21.1	n/a \$1.8	n/a n/a	n/a n/a	n/a n/a
		Mar-16	Forming Technologies (FTI)	Sheet metal forming mfg. software	∌∠1.1 n/a		n/a	n/a	n/a
		Mar-16	M&P Survey Equipment	Surveying equipment & construction lasers	n/a		n/a	n/a	n/a
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Buyer-Specific Acquisitions: 2011-Present

100		(\$ in Million	ıs)	Target Overview				saction Statisti	
ABB	Honeywell	Date	Target	Description	Estimate Revenue I	d EBITDA	Deal Value	Deal Value / Revenue	Estimated EBITDA
		Hexagon (S	TO: HEXA B)		To	otal Disclosed	M&A Deal Val	ue Since 2011:	\$7.7 Billion
Aptean	IFS / Acumatica	Feb-16 Jan-16	Sigma Space SCCS	Optoelectronic aerospace instrumentation Provider of survey equipment for Leica	\$25.0 \$15.0	n/a \$7.8	n/a n/a	n/a n/a	n/a n/a
AspenTech	Infor	Apr-15 Jul-14 Jul-14 Jun-14	Q-Das Vero Software Geodata Diffusion North West Geomatics	Statistical process control (SPC) services CAD/CAM software Real time kinematic correction services Digital remote sensing/aerial photography	n/a \$106.2 \$4.0 \$13.5	n/a n/a \$1.8 n/a	n/a n/a n/a n/a	n/a n/a n/a n/a	n/a n/a n/a n/a
Autodesk	Oracle	Jun-14 Jun-14 Apr-14 Mar-14	iLab Sistemas Mintec Arvus Tecnologia Veripos	Planning/optimization for agro businesses Software services for mining industry Software services for agro businesses Satellite position software	n/a n/a n/a \$44.0	n/a n/a n/a \$15.8	n/a n/a n/a n/a	n/a n/a n/a n/a	n/a n/a n/a n/a
Aveva	PTC	Mar-14 Feb-14 Dec-13 Oct-13 Jun-13	SAFEmine Aibotix Pixis Devex Tecnologia e Sistemas Geosoft	Traffic safety products and services Manufacturer of flying robots Provider of digital engineering services Mine-management software services Software for cartography/photogrammetry	\$17.2 n/a n/a n/a n/a	n/a n/a n/a n/a n/a	n/a n/a n/a n/a n/a	n/a n/a n/a n/a n/a	n/a n/a n/a n/a n/a
Dassault	Revalize	May-13 Apr-13 Jan-13 Jan-13	Navgeokom Manfra & Companhia LISTECH New River Kinematics	Surveying and mapping products Topography software systems Developer of construction software Metrology application software	n/a \$9.2 n/a \$13.3	n/a n/a n/a n/a n/a	n/a n/a n/a n/a n/a	n/a n/a n/a n/a n/a	n/a n/a n/a n/a n/a
ECi	Rockwell Automation	Dec-12 Jan-12 Aug-11	GTA Geoinformatik Microsurvey Software Sisgraph	Provider of 3D city mapping technologies Surveying and mapping software Engineering and geospatial software	n/a \$2.6 \$14.3	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a
		Honeywell (NAS: HON)		Tot	al Disclosed N	∕I&A Deal Valu	e Since 2011: \$	13.5 Billion
Emerson	Roper / Deltek	Jul-22 Jan-22 Sep-21 Jun-21	Rhino Health US Digital Designs Performix Cambridge Quantum Computing	Artifical intelligence healthcare data platform Mission-critical systems reducing dispatch call-processing time Manufacturing execution software Quantum computing software	n/a n/a n/a n/a	n/a n/a n/a n/a	n/a \$185.0 n/a \$300.0	n/a n/a n/a n/a	n/a n/a n/a n/a
Epicor	Sandvik	Mar-21 Feb-21 Dec-20	Fiplex Communications Sparta Systems Sine	Quantum computing Software Public safety telecommunication applications Al-enabled life sciences SaaS QMS platform Visitor management software	n/a n/a n/a n/a	n/a n/a n/a n/a	n/a \$1,303.0 n/a	n/a n/a n/a n/a	n/a n/a n/a n/a
Forterro	SAP	Nov-20 Oct-20 Oct-20 Dec-19	Trinity Mobility Ballard Unmanned Systems Rocky Research Rebellion Photonics	Urban digital transformation applications Unmanned vehicle fuel cell solutions Thermal and testing management products Hyperspectral imaging technology	n/a n/a n/a n/a n/a	n/a n/a n/a n/a n/a	n/a n/a n/a n/a n/a	n/a n/a n/a n/a n/a	n/a n/a n/a n/a n/a
GE / GE Digital	Seeq	Jul-19 Jun-19 Nov-18 Dec-17	TruTrak Flight Systems Theatro Transnorm FLUX (25%)	Light sport aircraft autopilot products Wearable communication device Warehouse conveyor solutions Warehouse management and supply chain	n/a n/a \$153.4 n/a	n/a n/a n/a n/a	n/a \$15.0 \$495.2 n/a	n/a n/a 3.23x n/a	n/a n/a n/a n/a n/a
Hexagon	Siemens	Nov-17 Aug-17 Jun-17 Dec-16	Scame Sistemi Corsair Components NextNine Munters (Bid)	Provider of fire and gas safety systems PC component designer & manufacturer Industrial cyber security software Humidity control products and services	n/a n/a n/a \$631.3	n/a \$55.0 n/a n/a	n/a \$525.0 n/a \$1,084.9	n/a n/a n/a 1.72x	n/a 9.5x n/a n/a
Xon	netry	Aug-16 Apr-16 Mar-16 Mar-16 Feb-16 Jan-16 Dec-15	Intelligrated Xtralis Movilizer Videofied COM DEV SECAN Elster Group	Warehouse execution systems Technology for fire detection and gas leaks Cloud-based field service applications Wireless alarm system Space communications products Heat and cooling steam systems Metering and data communication	\$900.0 n/a n/a \$108.7 \$181.3 \$40.6 n/a	\$125.0 n/a n/a n/a \$10.4 n/a \$404.8	\$1,500.0 \$480.0 n/a \$123.0 \$345.6 n/a \$5,100.0	1.67x n/a n/a 1.13x 1.91x n/a	12.0x n/a n/a n/a n/m n/a 12.6x

Buyer-Specific Acquisitions: 2011-Present

		(\$ in Millio	ns)	Target Overview			Trans	saction Statist	ics
ABB	Honeywell	Date	Target	Description	Estimate Revenue E	BITDA	Deal Value	Deal Value / Revenue	
		Honeywell	(NAS: HON)		Tot	al Disclosed I	M&A Deal Valu	e Since 2011: \$	S13.5 Billion
Aptean	IFS / Acumatica	Dec-15 Nov-15	Satcom1 Sigma Aldrich	On board communications software Laboratory research chemicals business	\$25.0 n/a	n/a n/a	n/a \$112.8	n/a n/a	n/a n/a
AspenTech	Infor	Sep-15 Mar-15 Dec-13 Jun-13	Aviaso Datamax O'Neil Deverill Black & Co. Infonet Services	Flight management systems Bar code and RFID labeling products Financial-advisory in the UK Voice and data communications services	n/a n/a \$0.7 \$801.0	n/a n/a (\$0.1) \$18.2	n/a \$185.0 \$1.6 \$513.1	n/a n/a 2.35x 0.64x	n/a n/a n/m 28.3x
Autodesk	Oracle	Jun-13 Feb-13 Oct-12 Jun-12	RAE Systems Saia-Burgess UOP Russell INNCOM International	Multi-sensor chemical and radiation Electrical parts and equipment Modular plant designer Energy-management software	\$107.0 \$94.2 n/a \$24.0	n/a n/a \$100.0 n/a	\$340.0 \$130.0 \$750.0 n/a	3.18x 1.38x n/a n/a	n/a n/a 7.5x n/a
Aveva	PTC	Jan-12 Sep-11 Aug-11	Fire Sentry Sunoco (Assets) IRIS Systems	Fire detection and control products Frankford Phenol Operations Flame monitoring products	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a
		IFS / Acum			101	tal Disclosed	M&A Deal Valu	ue Since 2011: !	\$8.9 Million
Dassault	Revalize	Jul-22 Jan-22 Jul-21 Jun-21	Ultimo Software Solutions (IFS) Integrated Business Systems Customerville	Software designed for the functional management of business Information technology services intended for the real estate industry Customer experience platform IT service and asset management software	n/a n/a n/a \$24.5	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a
	Rockwell	Nov-20	Axios Systems Clevest Solutions	Workforce automation software	\$24.5 n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a
ECi	Automation	Jan-20	Jaas (Acumatica)	Cloud-based ERP platform provider	n/a	n/a	n/a	n/a	n/a
	Automation	Dec-19 Nov-17	Astea International (IFS) WorkWave (IFS)	Management software solutions Scalable SaaS last-mile delivery software	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a
		Aug-17	Field Service Mgt. (IFS)	Service management software services	n/a	n/a	n/a	n/a	n/a
Emerson	Roper / Deltek	Aug-17	mplSystems (IFS)	Customer and field service technology	n/a	n/a	n/a	n/a	n/a
		Jan-17	Mxi Technologies (IFS)	Maintenance management software	n/a	n/a	n/a	n/a	n/a
		Mar-16 Jul-15	MainIoT Software (IFS) VisionWaves (IFS)	SaaS-based Enterprise Asset Management Management software systems.	\$5.5 n/a	\$1.4 n/a	\$8.9 n/a	1.60x n/a	6.4x n/a
Epicor	Sandvik	Dec-11	LatinIFS Tecnologia (IFS)	Distributor of application software	\$13.1	\$2.4	n/a	n/a	n/a
Ерісоі	Janavik	Infor					M&A Deal Val		
		Oct-21	Lighthouse Systems	Manufacturing execution system (MES) software	n/a	n/a	n/a	n/a	n/a
Forterro	SAP	Jan-20	Intelligent InSites	Healthcare automation services	n/a	n/a	n/a	n/a	n/a
10110110	37 (1	Apr-19	ReServe Interactives	Catering management software	n/a	n/a	n/a	n/a	n/a
		Dec-18	Alfa-Beta Solutions Vivonet	System integration services	n/a	n/a	n/a	n/a	n/a
	Coon	Sep-18 Jun-17	Birst	Cloud-based POS software Networked business analytics	n/a n/a	n/a n/a	n/a \$100.7	n/a n/a	n/a n/a
GE / GE Digital	Seeq	Mar-17	Ciber (Infor Practice)	Infor consulting services & reseller	n/a	n/a	n/a	n/a	n/a
		Mar-17	Accentia Middle East	ERP software	n/a	n/a	\$18.0	n/a	n/a
		Jun-16	Predictix	Retail applications	n/a	n/a	n/a	n/a	n/a
Hexagon	Siemens	May-16	Merit Globe GT Nexus	Infor software consulting Cloud-based global commerce platform	n/a \$150.0	n/a n/a	n/a \$675.0	n/a 4.50x	n/a n/a
		Aug-15 Apr-14	GRASP	Healthcare resource management	n/a	n/a	n/a	4.50x n/a	n/a
		Jan-14	PeopleAnswers	Talent assessment	n/a	n/a	n/a	n/a	n/a
_Xon	netry	May-13	TDCI	Product configuration	n/a	n/a	n/a	n/a	n/a
3,011	. Total y	Apr-13	CERTPOINT	Corporate training & learning	n/a	n/a	\$26.5	n/a	n/a
		Dec-12 Aug-12	Orbis Global Laurier CIM Group	Marketing resource management Wholesale distribution ERP	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a
		Jun-12	EasyRMS	Hospitality industry revenue management	\$11.5	\$4.0	n/a	n/a n/a	n/a
		Oct-11	ENXSuite	Energy performance management	n/a	n/a	n/a	n/a	n/a
		Jul-11	Lawson Software	Manufacturing & maintenance ERP	\$755.2	\$134.5	\$1,697.8	2.25x	12.6x

Buyer-Specific Acquisitions: 2011-Present

Aptean IFS / Acumatica I			(\$ in Millions)		Target Overview			Trans	action Statistic	TS .
Aptean IFS Acumatica Sop 22 Sop X Pugin interface software Healthcare information technology solutions 15.7 (50 13.15.0 13.210.0 Adds 17.8	ABB	Honeywell						Deal	Deal Value /	Estimated
Aptean			Date	larget	Description	Revenue E	BITDA	<u>Value</u>	Revenue	EBITDA
AspenTech Infor			Oracle			Total Disc	closed M&A	Deal Value S	ince 2010: \$5	3.6 Billion
AspenTech	Aptean	IFS / Acumatica	Sep-22 FC	DEX	Plugin interface software	n/a	n/a	n/a	n/a	n/a
AspenTech Inflor Jan - 22 Verenia Neckolite (PQ) Product configurator streamlining quoting and reduce costs n/a								\$23,300.0	4.04x	17.7x
Aspentiecn Infor Dec-21 Federes Antificial intelligence optimized assurance, analytics and automation r/a										
Autodesk Oracle	AspenTech	Infor		,						
Autodesk Oracle	7.56.11.661.									
Autodesk										
Apr-20										
Aveva	Autodesk	Oracle	Oct-20 Ch	natLabs	Marketing, e-commerce and data management services	n/a	n/a	n/a	n/a	n/a
Aveva										
Aveva										
Dassault Revalize Dayer Systems (Brazil) Provider of localization solutions in Brazil n/a	Δνονα	DT.C			* * * * * * * * * * * * * * * * * * * *					
Dassault Revalize	Aveva	FIC			There is a second of the secon		, .	, .		, .
Nov-18										
Dassault Revalize								, .		, .
Beautiful Beau	Dassault	Revalize								
Apr-18			Oct-18 Irio	dize	Customer training and on-boarding	n/a	n/a	n/a	n/a	n/a
Apr-18 Vocado Financial aid management platform n/a n/a x139.0 n/a n										n/a
Automation	FC:	Rockwell								
Dec-17	ECI	Automation								
Apr-17		Automation								
Emerson Roper / Deltek					3					
Apr-17	Emerson	Roper / Deltek								
Nov-16	Efficisoff	Roper / Bettek						, .		
Palera			Jan-17 Ap	piary	API documentation development	n/a	n/a	n/a	n/a	n/a
Sep-16 Palerra Cloud security automation n/a										
Sep-16 Palerra Cloud secunity automation n/a	Epicor	Sandvik					,			
May-16										
Forterro SAP										
Apr-16 Crosswise (Assets) Cross device data services n/a n/a \$50.0 n/a n/a Feb-16 Ravello Systems Nested virtualization software n/a n/a \$50.0 n/a n/a	Fortorro	SAB								
Feb-16 Ravello Systems Nested virtualization software n/a n/a \$500.0 n/a n/a	Forterro	SAP								
Jan-16										
Hexagon Siemens Aug-15 CloudMonkey Mobile Mobile software application testing n/a			Jan-16 Ac	ddThis	Social infrastructure and data platform	n/a		\$200.0	n/a	n/a
Hexagon Siemens Aug-15 CloudMonkey Mobile Mobile software application testing n/a	GE / GE Digital	Seea		•						
Hexagon Siemens Jan-15 Datalogix Online advertising data & technology \$125.0 n/a \$1,200.0 9.60x n/a 0.70x 0.70	oz, oz bigitai	Seeq					, .	, .	, .	, .
Hexagon Siemens Oct-14 Front Porch Digital Content storage management n/a n/										
Sep-14 MICROS Systems Hospitality & retail management solutions \$1,405.4 \$291.3 \$5,701.2 \$4.06x 19.6x Jul-14 TOA Technologies Mobile workforce software n/a n/a n/a n/a n/a n/a Jul-14 LiveLOOK Customer collaboration tools n/a n/a n/a n/a n/a Jun-14 LiveLOOK Customer collaboration tools n/a n/a n/a n/a n/a Jun-14 GreenBytes Desktop virtualization n/a n/a n/a n/a n/a Mar-14 Corente Enterprise network security n/a n/a n/a n/a n/a n/a Nam-14 Nam-							, .			, .
Jul-14	Hexagon	Siemens								
Jul-14 BlueKai Enterprise marketing data activation n/a n/a \$425.0 5.90x n/a Xometry Jun-14 LiveLOOK Customer collaboration tools n/a n/a n/a n/a n/a n/a n/a Jun-14 GreenBytes Desktop virtualization n/a n/a n/a n/a n/a n/a Mar-14 Corente Enterprise network security n/a n/a n/a n/a n/a n/a										
Jun-14 GreenBytes Desktop virtualization n/a n/a n/a n/a n/a n/a n/a n/a n/a n/										
Mar-14 Corente Enterprise network security n/a n/a n/a n/a n/a n/a	Yom	petry	Jun-14 Liv	/eLOOK	Customer collaboration tools	n/a	n/a	n/a	n/a	n/a
	XOIII	icti y								
Dec 17 December 51040 \$1000 770/										
				esponsys	Email marketing	\$194.3	\$13.8	\$1,500.0	7.72x	n/m
Dec-13 Nirvanix Internet storage services n/a										
NOV-13 Digital times 1 Touche Committee quoting \$35.0 1/4 \$40.0 0.50X 11/4			1404-12 DI	giriacimies	1 Todact comigaration & quoting	Ψ.Ο.Ο	11/ a	φ -1 00.0	0.508	11/0

Buyer-Specific Acquisitions: 2011-Present

		(\$ in Millions)		Target Overview			Tran	saction Statisti	ics
ABB	Honeywell	Date	Target	Description	Estimat		Deal	Deal Value /	
		Date	Target	Description	Revenue	EBITDA	Value	Revenue	EBITDA
		Oracle			Total Di	sclosed M&	A Deal Value :	Since 2010: \$5	3.6 Billion
Aptean	IFS / Acumatica	Nov-13 Bi	itzer Mobile	Enterprise mobility management	n/a	n/a	n/a	n/a	n/a
			ompendium	Content marketing start-up	n/a		n/a	n/a	n/a
			ekelec	Network signaling applications	n/a		n/a	n/a	n/a
A ava ava Ta ala	lua fa u	Mar-13 A	cme Packet	Session delivery network	\$274.4	\$8.4	\$1,741.5	6.35x	n/m
AspenTech	Infor	Mar-13 El	loqua	Marketing automation software	\$95.8	(\$8.6)	\$871.0	9.10x	n/m
			limbula	Cloud infrastructure software	n/a		\$100.0	n/a	n/a
			ataRaker	Utilities big data analytics	n/a	n/a	n/a	n/a	n/a
Autodesk	Oracle		stantis	Project portfolio management	n/a	n/a	n/a	n/a	n/a
Autouesk	Oracle		electMinds	Social talent sourcing	n/a	n/a	n/a	n/a	n/a
			ivolver	Video campaign marketing	n/a	n/a	n/a	n/a	n/a
			sigo Systems	Virtualized infrastructure services	n/a		n/a	n/a	n/a
Aveva	PTC		kire ollective Intent	Facility management solutions	n/a	n/a	n/a	n/a	n/a
Aveva	110		itrue	Social media analytics Social media marketing services	n/a n/a	n/a n/a	n/a \$300.0	n/a n/a	n/a n/a
			learTrial	Clinical trials operations	n/a	n/a	\$500.0 n/a	n/a	n/a
			aleo	Talent management software	\$308.9	\$16.2	\$608.1	1.97x	n/m
Dassault	Revalize		ightNow Tech.	CRM and customer service software	\$216.2	\$22.3	\$1,500.0	6.94x	n/m
	110101120		ndeca Technologies	Information management software	n/a	n/a	\$1,080.0	n/a	n/a
			oAhead	Integrated middleware for manufacturers	n/a	n/a	n/a	n/a	n/a
	Rockwell		Quira	Natural language search	n/a	n/a	n/a	n/a	n/a
ECi			splice	Linux update software	n/a	n/a	n/a	n/a	n/a
	Automation	Jul-11 Pi	illar Data Systems	Network storage systems	n/a	n/a	n/a	n/a	n/a
		Jun-11 Fa	atWire Software	Web experience management	n/a	n/a	n/a	n/a	n/a
			atanomic	Compliance screening software	n/a	n/a	n/a	n/a	n/a
Emerson	Roper / Deltek	Jan-11 A	rt Technology Group	Cross-channel commerce	\$193.9	\$25.5	\$848.0	4.37x	n/m
		PTC (NAS: PTC))		1	Total Disclose	d M&A Deal Va	lue Since 2011:	\$2.7 Billion
		Sep-22 C	loudMilling	Software intended to make CAM accessible to everyone	n/a	n/a	n/a	n/a	2/2
Epicor	Sandvik		itland Software	Lifecycle management platform and software tools	n/a n/a		\$277.2	n/a	n/a n/a
Epicoi	Salluvik		E'FLEKT	Augmented and virtual reality technology	n/a		n/a	n/a	n/a
			rena Solutions	SaaS-based PLM platform	\$50.0	n/a	\$715.0	14.30x	n/a
			хр	AR design software	n/a		n/a	n/a	n/a
Forterro	SAP		Inshape	Cloud-based 3D CAD platform	\$10.0	n/a	\$469.0	n/m	n/a
Torterio	SAI		WNKLS	Augmented reality solutions & services	n/a		n/a	n/a	n/a
		Apr-19 Fa	actora Solutions	IIoT systems integration	n/a	n/a	n/a	n/a	n/a
			rustum	Topology optimization & generative design	n/a	n/a	\$69.6	n/a	n/a
GE / GE Digital	Seeq		/aypoint Labs	Augmented reality for frontline workers	\$20.0	n/a	n/a	n/a	n/a
32 / 32 Digital	3669		epware	Manufacturing device connectivity	\$20.0	n/a	\$118.0	5.90x	n/a
			uforia	Vision-based AR platform	n/a		\$64.8	n/a	n/a
			oldLight Solutions	Machine learning predictive analytics	\$7.1	n/a	\$103.8	14.56x	n/a
Hexagon	Siemens		augnate	Augmented reality technologies services	n/a	n/a	n/a	n/a	n/a
			A Holdings	Sensor connectivity	n/a	n/a	\$170.0	n/a	n/a
			tego	Model-based systems applications	\$20.0 \$6.0	n/a	\$49.3 \$130.0	2.47x 21.67x	n/a n/a
			hingWorx letIDEAS	IoT platform for machines Product development and PLM	\$6.0 \$1.0	n/a n/a	\$130.0 \$20.0	21.67x 20.00x	n/a n/a
Xom	etry		nigma	Aftermarket technical content management	\$1.0 n/a	n/a n/a	\$20.0 \$10.0	20.00x n/a	n/a n/a
			nigma ervigistics	Strategic service management	n/a \$80.0	n/a n/a	\$10.0	n/a 2.75x	n/a n/a
			CS	Warranty lifecycle management	n/a	n/a	\$220.0 \$14.9	n/a	n/a
			fortice Kern Systems	Configuration management software	\$67.9	\$10.1	\$304.0	4.48x	n/m
					401.3	4	,		.,

Buyer-Specific Acquisitions: 2011-Present

		(\$ in Million	ns)	Target Overview			Trans	action Statistic	rs
ABB	Honeywell				Estimated		Deal	Deal Value / I	Estimated
		Date	Target	Description	Revenue EB	ITDA _	Value	Revenue	EBITDA
		Revalize				Total Dis	sclosed M&A [Deal Value Since	2011: n/a
Aptean	IFS / Acumatica	Dec-21	Procad	Product and document lifecycle management (PDM and PLM) platform	n n/a	n/a	n/a	n/a	n/a
		Nov-21	Tenado	Computer-aided design (CAD) software	n/a	n/a	n/a	n/a	n/a
		Oct-21	Sofon	Uided selling and configure price quote software	n/a	n/a	n/a	n/a	n/a
AspanTash	Infor	Oct-21	SpecPage	Product lifecycle management and data management software	n/a	n/a	n/a	n/a	n/a
AspenTech	IIIIOI	Aug-21	Attainia	Cloud-based foreign-trade-zone software and services	n/a	n/a	n/a	n/a	n/a
		Aug-21	BCA Technologies	Strategic sourcing and supplier management software	n/a	n/a	n/a	n/a	n/a
		Aug-21	LeadMethod	Channel partner engagement and sales enablement	n/a	n/a	n/a	n/a	n/a
Autodesk	Oracle	Aug-21 Jun-21	MicroD Configure One	Enterprise quality management solutions CPQ software for manufacturers	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a
ratoaesk	Gracie	Jun-21 Jun-21	FPX	Enterprise CPQ for manufacturers	n/a	n/a	n/a	n/a	n/a
		Jun-21	Pump-Flo	Hydraulic analysis for piping systems	n/a	n/a	n/a	n/a	n/a
		Jun-21	Lighting Analysts	Illumination engineering software	n/a	n/a	n/a	n/a	n/a
Aveva	PTC	Jun-21	AutoQuotes	CPQ for Foodservice industry	n/a	n/a	n/a	n/a	n/a
			utomation (NYS: ROK)		Tota	l Disclosed	M&A Dool Val	ue Since 2011: \$	
			, in the second		,	ii Disclosed	, ivida Deal Vali		
Dassault	Revalize	Oct-22	Cubic-Modulsystem	Electronic modules and components catering to renewable energy	n/a	n/a	n/a	n/a	n/a
Dassault	Revalize	Nov-21 Jun-21	AVATA Plex Systems	Supply chain management services Manufacturing cloud-based ERP platform	n/a \$150.0	n/a n/a	n/a \$2,220.0	n/a 14.80x	n/a n/a
		Dec-20	Fiix	Cloud-based maintenance and asset management platform	\$25.0	n/a	\$2,220.0	14.00x 11.00x	n/a
	Rockwell	Oct-20	Cybersec Culture & Awareness	Critical process and control system cybersecurity services	\$5.6	n/a	n/a	n/a	n/a
ECi		Apr-20	Asem	Computer designer and retailer	n/a	n/a	n/a	n/a	n/a
	Automation	Apr-20	Kalypso	Software delivery and consulting services	n/a	n/a	n/a	n/a	n/a
		Feb-20	Avnet Data Security	Cybersecurity training services	n/a	n/a	n/a	n/a	n/a
		Feb-20	Sensia JV	Digital oilfield automation solutions	n/a	n/a	n/a	n/a	n/a
Emerson	Roper / Deltek	Sep-19	MESTECH Services	IT consulting services	n/a	n/a	n/a	n/a	n/a
	-	Jan-19	Emulate3D	Engineering software for control testing	n/a	n/a	n/a	n/a	n/a
		Dec-17	Odos Imaging	Time-of-flight 3D imaging technology	n/a	n/a	n/a	n/a	n/a
		Sep-16	MAVERICK Technologies	Industrial automation services	n/a	n/a	n/a	n/a	n/a
Epicor	Sandvik	Sep-16	Automation Control Products	Thin client hardware products	n/a	n/a	n/a	n/a	n/a
		Mar-16	MagneMotion	Automation and transportation services	n/a	n/a	n/a	n/a	n/a
		Oct-14	ESC Services	Hazardous energy control services	n/a	n/a	n/a	n/a	n/a
Fautama	CAD	Nov-13 Nov-13	vMonitor Jacobs Automation	Communication services for O&G industry Linear synchronous motor technologies	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a
Forterro	SAP	Oct-12	Harbin Jiuzhou Electric (Assets)	Manufacturer of medium voltage drives	n/a	n/a	\$78.9	n/a	n/a
		Mar-12	SoftSwitching Technologies	Power quality and monitoring services	n/a	n/a	n/a	n/a	n/a
		Dec-11	Lektronix	Industrial automation-repair services	n/a	n/a	\$9.4	n/a	n/a
GE / GE Digital	Seeq	Apr-11	HIPROM	Engineering integration services	n/a	n/a	n/a	n/a	n/a
GE / GE Digital	Seeq	Roper / Del	tek (NYS: ROP)		Total	Disclosed N	1&Δ Deal Valu	e Since 2011: \$2	0.5 Billion
		Oct-22	Frontline Education	Cloud-based educational software	\$370.0	\$175.0	\$3,730.0	10.08x	21.3x
Hexagon	Siemens	Sep-22	TIP Technologies	Quality management services	n/a	n/a	n/a	n/a	n/a
		Aug-21 Sep-20	ArchiSnapper (Deltek) Vertafore	SaaS and mobile applications for architects and engineers Cloud-based insurance software	n/a \$590.0	n/a \$290.0	n/a \$5,350.0	n/a 9.07x	n/a 18.4x
		Jun-20	Team TSI (Roper)	Healthcare data systems software	\$590.0 n/a	\$290.0 n/a	\$5,550.0 n/a	9.07x n/a	10.4x n/a
		Aug-19	Internet Pipeline (Roper)	Life insurance & annuity distribution software	\$200.0	n/a	\$1,625.0	8.13x	n/a
Xom	netry	Aug-19	ComputerEase (Deltek)	Construction project management software	n/a	n/a	\$185.0	n/a	n/a
		Apr-19	Foundry (Roper)	Computer graphics and VFX software	\$61.0	\$20.9	\$537.0	8.80x	25.7x
		Jan-19	Avitru (Deltek)	SaaS-based construction software	n/a	n/a	n/a	n/a	n/a
		Jun-18	ConceptShare (Deltek)	Creative operations management platform	n/a	n/a	n/a	n/a	n/a
		Jun-18	PowerPlan (Roper)	Financial forecast and analytics software	\$150.0	n/a	\$1,100.0	7.33x	n/a

Buyer-Specific Acquisitions: 2011-Present

<u> </u>									
4.55		(\$ in Million	ns)	Target Overview			Tran	saction Statistic	cs
ABB	Honeywell	Date	Target	Description	Estimated Revenue E	BITDA	Deal Value	Deal Value / Revenue	Estimated EBITDA
					Revenue L	JIIDA _	value	Revenue	LUITUA
	15C / A	Roper / Del	tek (NYS: ROP)		Tota	l Disclosed I	M&A Deal Valu	ue Since 2011: \$2	20.5 Billion
Aptean	IFS / Acumatica	Nov-17	Onvia (Deltek)	Business information and research services	\$24.7	\$0.8	\$70.0	2.83x	n/m
		Sep-17	WorkBook (Deltek)	Business procurement ERP software	n/a	\$1.7	n/a	n/a	n/a
		Dec-16 Oct-16	Deltek (Roper) ConstructConnect (Roper)	Software for project-focused clients Pre-construction mgmt. & bid solicitation	\$535.0 \$150.0	\$200.0 n/a	\$2,800.0 \$632.0	5.23x 4.21x	14.0x n/a
AspenTech	Infor	Jul-16	Union Square (Deltek)	AEC collaboration software	\$150.0 \$15.1	\$4.9	₃032.0 n/a	4.21X n/a	n/a
		Jan-16	CliniSys Group (Roper)	Laboratory information management	\$53.0	\$16.4	\$245.3	4.63x	15.0x
		Oct-15	Atlas Medical (Roper)	Healthcare software applications	n/a	n/a	\$48.0	n/a	n/a
Autodesk	Oracle	Oct-15	Aderant Holdings (Roper)	Financial management software	\$125.0	n/a	\$675.0	5.40x	n/a
Autodesk	Oracle	Sep-15	Atlantic Health (Roper)	Vaccination provider services	n/a	n/a	n/a	n/a	n/a
		Sep-15 Jul-15	RFIDeas (Roper)	Security applications solutions	n/a	n/a n/a	n/a \$157.0	n/a	n/a
		Mar-15	On Center (Roper) HRsmart (Deltek)	Project management & training software SaaS-based talent management services	n/a n/a	n/a n/a	\$157.0 n/a	n/a n/a	n/a n/a
Aveva	PTC	Feb-15	Data Innovations (Roper)	Clinical laboratory middleware software	n/a	n/a	\$230.0	n/a	n/a
		Feb-15	SoftWriters (Roper)	Pharmacy-focused software provider	n/a	n/a	\$220.0	n/a	n/a
		Jan-15	Strata Decision (Roper)	Healthcare financial performance analytics	\$26.3	n/a	\$140.0	5.32x	n/a
Deservit	Davidina	Aug-14	Strategic Healthcare (Roper)	Healthcare business analytics provider	n/a	n/a	n/a	n/a	n/a
Dassault	Revalize	Aug-14	Innovative Product (Roper)	Linen distribution systems	n/a	n/a	n/a	n/a	n/a
		Jul-14	Foodlink Online (Roper)	Fresh food SCM solutions	n/a	n/a	n/a	n/a	n/a
	Rockwell	Jun-14 Mar-14	Axium Software (Deltek) Sohnar (Deltek)	Architecture and engineering software Project management and workflow services	n/a \$2.9	n/a n/a	n/a n/a	n/a n/a	n/a n/a
ECi	Rockwell	Nov-13	Centurion Research (Deltek)	Developer of enterprise software	n/a	n/a	n/a	n/a	n/a
201	Automation	Oct-13	Advanced Sensors (Roper)	Water analyzers and sensing equipment	\$11.6	\$2.1	\$54.0	4.66x	26.1x
		Jul-13	Acumen (Deltek)	Project management software	\$5.9	n/a	n/a	n/a	n/a
		May-13	Managed HealthCare (Roper)	Site health care services and technology	n/a	\$95.0	\$1,000.0	n/a	10.5x
Emerson	Roper / Deltek	Aug-12	Sunquest (Roper)	Healthcare automated information systems	\$195.5	\$140.0	\$1,415.0	7.24x	10.1x
	, in the second second	Jul-12	Ascension (Roper)	Developer of 3D tracking devices	n/a	n/a	\$19.0	n/a	n/a
		Jun-11 Apr-11	Northern Digital (Roper) Washington (Deltek)	Optical 3D/electromagnetic tracking systems Schedule consulting services	\$61.7 \$15.0	\$20.0 n/a	\$205.9 \$26.0	3.34x 1.73x	10.3x n/a
Epicor	Sandvik			Scriedule Consulting Services					
Lpicoi	Saliuvik	Sandvik (ST	: SAND)		Tot	al Disclosed	M&A Deal Va	lue Since 2011: \$	\$2.0 Billion
		Oct-22	SP Mining	High-capacity feeding and screening media	n/a	n/a	n/a	n/a	n/a
		Aug-22	Balax	Manufacturer and supplier of cold forming taps	n/a	n/a	n/a	n/a	n/a
Forterro	SAP	Jul-22 Jul-22	Peterson Tool Company Preziss	Custom tooling systems catering to the general engineering Precision polycrystalline diamond and carbide cutting tools	n/a	n/a	n/a	n/a	n/a
		Jun-22 Jun-22	Akkurate	Agile battery consulting and engineering services	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a
		Apr-22	Deswik	Mine planning software	n/a	n/a	n/a	n/a	n/a
GE / GE Digital	Seeq	Jan-22	German Gerling	Tool manufacturing systems, assembly plants and special machinery	n/a	n/a	n/a	n/a	n/a
GL / GL Digital	seeq	Dec-21	Dimensional	Hydrocarbon fuels intended to utilize and distribute sunlight	n/a	n/a	n/a	n/a	n/a
		Dec-21	ICAM Technologies	Post-processing solutions for computer numerical control machines	n/a	n/a	n/a	n/a	n/a
		Nov-21	Fvabryka	Manufacturer and supplier of machining tools	n/a	n/a	n/a	n/a	n/a
Hexagon	Siemens	Oct-21 Oct-21	Accuratech	Medical wire forming and components	n/a n/a	n/a	n/a n/a	n/a	n/a
		Oct-21	DWFritz Automation Tricon Drilling Solutions	Custom automation systems for advanced manufacturing Rock drilling tools to the mining industry	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a
		Aug-21	Mastercam	CAD/CAM for manufacturing industry	n/a	n/a	n/a	n/a	n/a
Von	actry	Aug-21	Chuzhou Yongpu Carbide Tools	Tool manufacturer	\$44.9	n/a	n/a	n/a	n/a
Xom	letry-	Jul-21	Fabryka Narzędzi FANAR	Machine tool manufacturer	n/a	n/a	n/a	n/a	n/a
		Jul-21	DWFritz Automation	Automation systems for high-volume manufacturing	n/a	n/a	n/a	n/a	n/a
		Jul-21	DSI Underground Systems	Mining and tunneling systems	n/a	n/a	\$1,128.6	n/a	n/a
		Jul-21 Jun-21	Cambrio Tricon Drilling Solutions	CAD/CAM software	\$68.0 n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a
		Juli-21	Tricon Drilling Solutions	Rock drilling tools	n/a	II/a	n/a	n/a	11/ d

Buyer-Specific Acquisitions: 2011-Present

		(\$ in Millio	ns)	Target Overview			Tran	saction Statist	tics
ABB	Honeywell	Date	Target	Description	Estimat Revenue	ed EBITDA	Deal Value	Deal Value , Revenue	/ Estimated EBITDA
									-
Aptean	IFS / Acumatica	Sandvik (S	T: SAND)			Total Disclosed	M&A Deal Va	lue Since 2011:	\$2.0 Billion
Aptean	ii 3 / Acumatica	May-21	Kwatani	Mining equipment	\$19.0		n/a	n/a	n/a
		Dec-20 Jan-20	CGTech Summerill Tube	CNC simulation and verification software Tube manufacturer	n/a n/a		n/a n/a	n/a n/a	n/a n/a
		Jun-19	Newtrax Technologies	Mine monitoring products	\$20.1		\$88.3	4.40x	n/a
AspenTech	Infor	Feb-19	Artisan Vehicle Systems	Mining equipment	n/a		n/a	n/a	n/a
		Aug-18	Custom Electric Manufacturing	Heating element manufacture	n/a		n/a	n/a	n/a
		Jul-18	Metrologic Group	3D inspection software	n/a	n/a	\$215.6	n/a	n/a
Autodesk	Oracle	Jul-18	INROCK Drilling	Drilling tools, equipment, and services	\$7.5		\$76.2	10.10x	n/a
Autouesk	Oracle	May-14	Varel International	Drill bits for oil and gas drilling	\$340.0		\$450.3	1.32x	n/a
		Oct-13	Precorp	Polycrystalline diamond supplier	n/a		\$31.6	n/a	n/a
		Sep-13 Jun-13	TPSTechnopartner Samtronic Cubex	Scattering machine manufacturer Drilling equipment	n/a \$39.8		n/a \$40.5	n/a 1.02x	n/a n/a
Aveva	PTC			Drilling equipment	\$39.0	11/4	\$40.5		
7.1.0.1.0		SAP (ETR: S			Т	otal Disclosed I	M&A Deal Valu	ie Since 2011: 5	\$29.2 Billion
		Jul-22	Askdata	Al platform empowering humans to interact with data	n/a		n/a	n/a	n/a
Dassault	Boyalizo	Feb-22	Taulia	Financial supply chain platform	n/a		n/a	n/a	n/a
Dassault	Revalize	Aug-21	SwoopTalent	Talent data intelligence Web-based BPM software	n/a \$100.0		n/a	n/a 12.10x	n/a
		Mar-21 Feb-21	Signavio AppGyver	No-code app-building platform	\$100.0 n/a		\$1,210.0 n/a	12.10x n/a	n/a n/a
	Rockwell	Nov-21	Emarsys eMarketing Systems	Digital customer engagement platform	n/a		n/a	n/a	n/a
ECi	ROCKWEII	Jan-19	Qualtrics	Surveying software	\$372.0		\$8,000.0	21.51x	n/a
201	Automation	Nov-18	Contextor	Robotic process automation tool	n/a		n/a	n/a	n/a
		May-18	Coresystems	Workforce management software	n/a		n/a	n/a	n/a
		Apr-18	Callidus Software	Cloud-based sales solutions	\$253.0	(\$5.6)	\$2,400.0	9.49x	n/m
Emerson	Roper / Deltek	Jan-18	Recast.Al	Collaborative bot platform	n/a		n/a	n/a	n/a
		Jan-17	Abakus	Attribution software	n/a		n/a	n/a	n/a
		Sep-16	Plat.One	Software services	n/a		n/a	n/a	n/a
Fulleau	والدوام والمراد	Sep-16 Jun-16	Altiscale Fedem Technology	Data management platform Providers of engineering software	n/a		\$125.0 n/a	n/a n/a	n/a n/a
Epicor	Sandvik	Feb-16	Roambi	Business information management	n/a n/a		n/a	n/a	n/a
		Apr-16	Jirafe	Analytics for e-commerce retailers	n/a		n/a	n/a	n/a
		Oct-15	Multiposting	Online e-recruitment systems	\$9.4		n/a	n/a	n/a
Forterro	SAP	Dec-14	Concur	Business management software	\$702.6	\$24.0	\$7,430.7	10.58x	n/m
10110110	37 (1	May-14	SeeWhy	Web analytic applications	n/a	n/a	n/a	n/a	n/a
		May-14	Fieldglass	Vendor management system	n/a		\$974.4	n/a	n/a
		Dec-13	KXEN	Knowledge management	n/a		\$30.5	n/a	n/a
GE / GE Digital	Seeq	Aug-13	SAP Hybris	E-commerce data platform	\$110.0		\$1,500.0	13.64x	n/a
		May-13 Apr-13	KMS Software SmartOps	Human capital management software Supply chain optimization services	n/a n/a		n/a n/a	n/a n/a	n/a n/a
		Apr-13	Camilion Solutions	Product development and management	n/a		n/a	n/a	n/a
Havenen	Ciamana	Mar-13	Ticket-Web	Ticketing systems	n/a		n/a	n/a	n/a
Hexagon	Siemens	Oct-12	SAP Ariba	Collaborative business commerce	\$516.8		\$4,282.4	8.29x	n/m
		Jun-12	Syclo	Mobile enterprise app platform	n/a		n/a	n/a	n/a
		Feb-12	SuccessFactors	Human resources performance	\$327.9		\$3,235.0	9.86x	n/m
Xon	netry	Feb-12	Datango	eLearning and electronic performance	\$10.7		n/a	n/a	n/a
	,	Nov-11	Crossgate	Electronic data exchange services	n/a		n/a	n/a	n/a
		Sep-11 Jan-11	Right Hemisphere Secude (Assets)	Visual enterprise solutions	n/a n/a		n/a n/a	n/a n/a	n/a n/a
		Jan-11	Secure (Assets)	Security software assets	n/a	II/a	n/a	n/a	11/4

Buyer-Specific Acquisitions: 2011-Present

		(\$ in Million	ns)	Target Overview			Trans	saction Statisti	cs
ABB	Honeywell				Estimate		Deal	Deal Value /	Estimated
		Date	Target	Description	Revenue E	EBITDA _	Value	Revenue	EBITDA
		Seeq				Total Dis	sclosed M&A [Deal Value Sinc	e 2011: n/a
Aptean	IFS / Acumatica	No acquisit	tions to date		n/a	n/a	n/a	n/a	n/a
		Siemens (E						e Since 2011: \$	
		Aug-22	Brightly Software	Cloud-based operations management software	\$180.0	n/a	\$1,880.0	10.44x	n/a
AspenTech	Infor	Jul-22	Zona Technology	Software and provider of engineering services serving aerospace	n/a	n/a	\$1,000.0 n/a	n/a	n/a
		Jul-22	Innovation Strategies	SaaS solutions for energy, safety and IT asset management	n/a	n/a	n/a	n/a	n/a
		Jul-22	Radica Software	CAD software designed to help engineers shorten project timelines	n/a	n/a	n/a	n/a	n/a
Autodesk	Oracle	Jun-22 Oct-21	Senseye Wattsense	Cloud-based machine monitoring and diagnostics platform IoT device designed to control and monitor buildings of any size	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a
		Oct-21	Sqills	Freight railway management and maintenance workflow software	\$47.0	11/4	\$645.5	13.73x	n/a
		Aug-21	SupplyFrame	Intelligence platform designed to provide information about electronic		n/a	\$700.0	10.00x	n/a
Aveva	PTC	Jun-21	Nextflow Software	Computational Fluid Dynamics (CFD) simulation software	n/a	n/a	n/a	n/a	n/a
Aveva	FIC	May-21 Jul-20	Padam Mobility Abacus Medicine	Demand-responsive transport services using routing algorithms Pharmaceutical products committed to improving global healthcare	\$1.7 \$722.7	n/a n/a	n/a n/a	n/a n/a	n/a n/a
		Jun-20	SCNB	EWSD switching systems	n/a	n/a	n/a	n/a	n/a
		Jun-20	Vizendo	Virtual operator training	n/a	n/a	n/a	n/a	n/a
Dassault	Revalize	Feb-20	C&S Electric	Manufacturer of low voltage products	n/a	n/a	\$4.2	n/a	n/a
		Jan-20	AIT Goehner	Consultancy and development services	n/a	n/a	n/a	n/a	n/a
	Daalassall	Jan-20	Multimechanics	Virtual testing software	n/a	n/a	n/a	n/a	n/a
ECi	Rockwell	Nov-19 Nov-19	Atlas 3D Process Systems Enterprise	Cloud-based printing toolset Advanced modelling software	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a
LCI	Automation	Sep-19	Pixeom	Software defined edge platform	n/a	n/a	n/a	n/a	n/a
		Jul-19	Innovation Systems (IST)	Industrial transport planning software	n/a	n/a	n/a	n/a	n/a
		Jun-19	ESTEQ (South Africa)	PLM and MOM distributor	n/a	n/a	n/a	n/a	n/a
Emerson	Roper / Deltek	Jun-19	Saab Medav (Assets)	NVH testing products and services	n/a	n/a	n/a	n/a	n/a
		Dec-18	Comsa Mendix	Wire-harness engineering software	n/a	n/a	n/a	n/a	n/a
		Oct-18 Dec-18	Comsa Computer & Software	Application development platform Automotive design & analysis software	\$97.3 n/a	n/a n/a	\$730.0 n/a	7.50x n/a	n/a n/a
Epicor	Sandvik	Sep-18	Lightwork Design	3D rendering visualization systems	n/a	n/a	n/a	n/a	n/a
Epicoi	Sandvik	Jun-18	Comfy	Smart building management software	n/a	n/a	n/a	n/a	n/a
		Jun-18	Austemper Design	Electronic design for circuit components	n/a	n/a	n/a	n/a	n/a
	0.15	Mar-18	Agilion	Real-time location systems (RTLS)	n/a	n/a	n/a	n/a	n/a
Forterro	SAP	Feb-18 Jan-18	Sarokal Test Systems Milanovic Engineering	Testing equipment for ASIC & FPGA Engineering and manufacturing services	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a
		Dec-17	Solido Design	Variation-aware design	n/a	n/a	n/a	n/a	n/a
		Oct-17	Mentor Infolytica	Electromagnetic and thermal analysis	n/a	n/a	n/a	n/a	n/a
GE / GE Digital	Seeq	Oct-17	Wi-Tronix	Predictive maintenance for rail services	n/a	n/a	n/a	n/a	n/a
GE / GE Bigitai	Seed	Aug-17	TASS International	Automotive design and testing software	n/a	n/a	n/a	n/a	n/a
		Mar-17	Mentor Graphics	Electronic design automation Lab device interfaces	\$1,282.5	\$267.2	\$4,500.0	3.51x	16.8x
	C:	Nov-16 Mar-16	Conworx Technology CD-adapco	Specialized simulation based on CFD	n/a \$190.0	n/a n/a	n/a \$970.0	n/a 5.11x	n/a n/a
Hexagon	Siemens	Mar-16	Neo New Oncology	Medical diagnostic technology	n/a	n/a	₩570.0 n/a	n/a	n/a
		Nov-15	Polarion Software	Application lifecycle management	n/a	n/a	n/a	n/a	n/a
		Jul-15	Zenco Systems	Traffic enforcement technology	n/a	n/a	n/a	n/a	n/a
_Xom	netry	Mar-15	AxIT	Order management & logistics	n/a	n/a	n/a	n/a	n/a
		Oct-14 Jan-14	Camstar IBS	Manufacturing execution systems	n/a	n/a	\$160.0	n/a	n/a
		Jan-14 Dec-13	TESIS PLMware	Industrial productivity software Product lifecycle management	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a
		Jun-13	Sky Eye	Transport fleet management	n/a	n/a	n/a	n/a	n/a
		Jun-13	Preactor	Manufacturing planning & scheduling	n/a	n/a	n/a	n/a	n/a

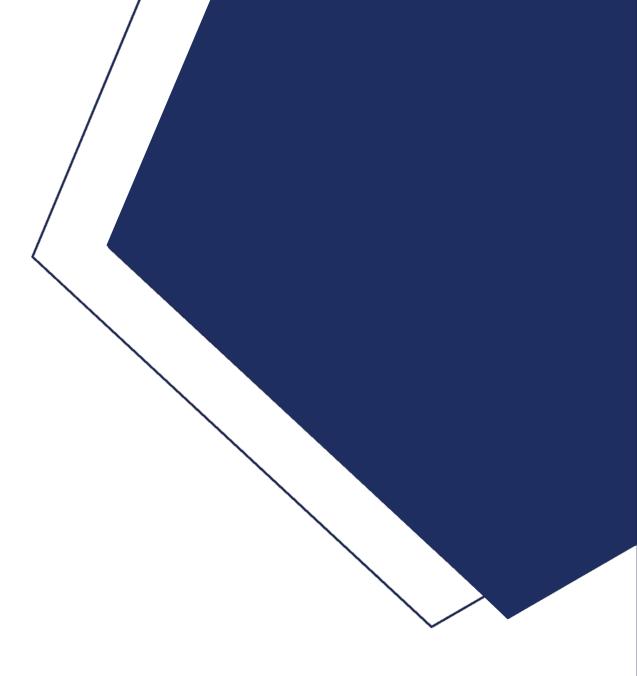
MADISON PARK GROUP

Buyer-Specific Acquisitions: 2011-Present

ABB	Hanavaya	(\$ in Millio	ons)	Target Overview			Trans	saction Statistic	cs
ADD	Honeywell	Date	Target	Description	Estimated Revenue EB	ITDA _	Deal Value	Deal Value / Revenue	EBITDA
Andrew	IEC / A	Siemens (ETR: SIE)		Total	Disclosed N	∕I&A Deal Valu	ıe Since 2011: \$1	13.1 Billio
Aptean	IFS / Acumatica	May-13 Nov-12	Invensys Rail LMS	Railway design & system automation PLM simulation & testing	\$1,179.5 \$241.7	n/a n/a	\$2,660.0 \$870.0	2.26x 3.60x	n/ n/
		Sep-12	VRcontext	Visualization technology	n/a	n/a	n/a	n/a	n,
AspenTech	Infor	Jan-12 Dec-11	eMeter Vistagy	Energy information management Specialized engineering environments	n/a \$18.0	n/a n/a	n/a n/a	n/a n/a	r r
		Aug-11	Advanced Telemetry	Energy management	n/a	n/a	n/a	n/a	n
		Xometry			Total D	isclosed M	ጷA Deal Value	Since 2011: \$28	5.1 Mill
Autodesk	Oracle	Dec-21	Thomas Publishing	Online advertising and digital marketing marketplace for manufacturer		n/a	\$276.3	n/a	n
		Nov-21 Nov-21	FactoryFour Big Blue Saw	Automated manufacturing software Waterjet and laser cutting services	n/a n/a	n/a n/a	\$6.3 \$2.5	n/a n/a	n, n
Aveva	PTC	Dec-19	Shift	Online platform providing machining services	n/a	n/a	n/a	n/a	n
Aveva	FIC	Jan-19 Jul-18	Machine Tool & Supply MakeTime	Abrasives and cutting tools to storage equipment On-demand manufacturing platform offering machine capacity	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n n
		Average			, ,	•	,-	6.31x	15.
Dassault	Revalize	Median						4.66x	12.
Emerson	Roper / Deltek								
Epicor	Sandvik								
Forterro	SAP								
iE / GE Digital	Seeq								
Hexagon	Siemens								
Xon	netry	_							

IV.

Appendix About MPG



Trusted Advisors To Manufacturing, Engineering & IIoT Companies & Boards

Hand-Crafted, Dedicated Advisory Team Combines Tenured Investment Bankers, Operating Executives, and Stalwart Transaction Support

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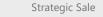


Strategic Sale













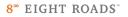












Founding Team

Founding Team



Founding Team









ISOMETRIX





HassoPlattner VENTURES

Recapitalization

















THE CARLYLE GROUP





SCALE

Founding Team

Founding Team

Founding Team

Founding Team

NEWVIEW CAPITAL

Notes:

- i) Vistagy's sale to Siemens was completed representative of transaction experience prior to joining MPG
- (ii) Bottom logos and text for each tombstone represent client's prior ownership status

MPG Testimonials

MADISON PARK GROUP

We Work Diligently To Ensure Highly Successful Outcomes For Our Clients



"MPG invested an enormous amount of time to learn our business and prepare our team. The culture fit was nonnegotiable for us, so the time spent tirelessly learning our business and culture paid off. We found what we feel is a perfect culture match in Thompson Street Capital Partners, achieving the outcome MPG assured us was possible in every respect."

- Jim Jacobs, Green Mountain Technology



"I've known Madison Park Group for over 16 years. They have been my trusted advisors and sounding board over many years. With their prudent and long-term approach to advisory, we were able to find the perfect home for Cityworks in Trimble. With Trimble as our backer, I'm more confident than ever in the future of our great company as we accelerate the vision of our GIS-centric approach to infrastructure optimization."

- Brian Haslam, Cityworks



"It was a pleasure working with the Madison Park Group. Professional, and with a deep understanding of the nuances of our industry, they provided solid structures and advice as they moved the process forward. At all times we felt that they put our interests first."

- Paul Marketos, IsoMetrix



"Working with Madison Park Group undoubtedly altered the trajectory of Omnify for the better. They went the extra mile throughout the entire process to ensure success not just for the shareholders, but also for customers and employees alike. I greatly appreciate MPG's unique and significant knowledge of the engineering software and PLM market. It clearly enhanced the vision to create a player that will redefine the mainstream PLM market."

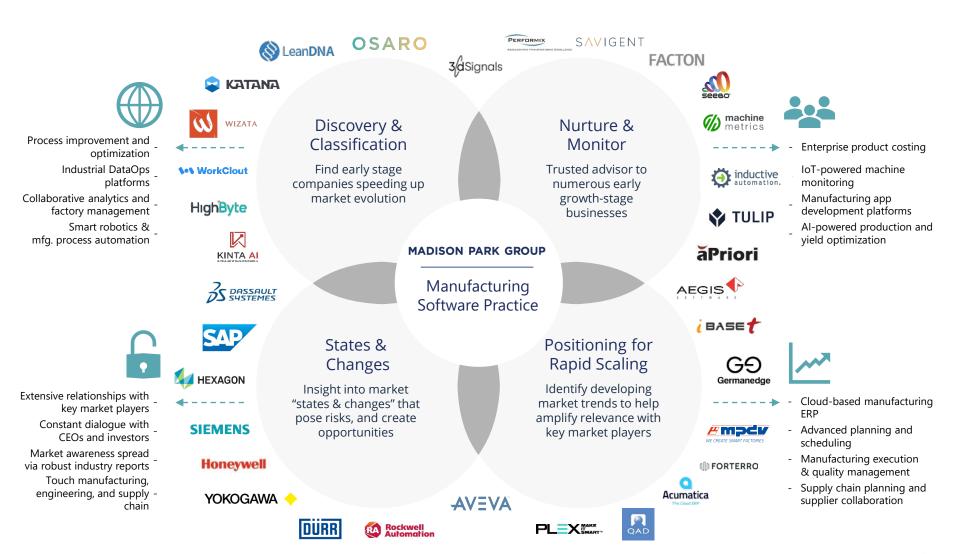
- Brad Paul, Omnify Software



"The MPG team was critical in outlining our go-to-market strategy and made sure that we engaged with all the financial sponsors who could have made sense as a partner for us. Their insights and coaching ensured we found the best possible backer for our next stage of growth, but also let us continue running our business without distractions."

- Craig Livingston, Arena Solutions

MPG holds active dialogue with product-driven market contenders of all sizes. This coverage model provides an end-to-end view of the market - from startups to public acquirers - and outperforms both boutique advisors with limited buyer insights and large investment banks which are insulated from emerging strategic threats.



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ement Software - Market Oort t Comming 2022 Report

See our 2021 Report



Public Market Coverage

<u>See our Q3 2022 Public Markets</u> <u>Report</u>

M&A Market Coverage

Cause & Community Software



<u>See our 2022 Public Good</u> <u>Primer</u>

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BHSQ Softheare - Market Update Port Corning Society

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Marketing Tech



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Supply Chain Planning



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Cybersecurity



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Sources & Disclosures

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