

FORTNIGHTLY NEWSLETTER – 28 FEB 2023

BEYOND THE CLOUD: THE EMERGENCE OF EDGE COMPUTING

\$44.7bn

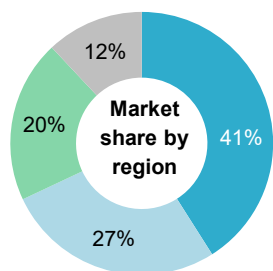
Edge computing market (2022)

17.8%

CAGR (2022-27)

\$101.3bn

Edge computing market (2027)



- North America
- Europe
- Asia Pacific
- Rest of the World

Overview:

- Edge computing is an emerging technology that has the potential to revolutionize the way we process data. As the number of connected devices continues to grow and the volume of data they generate increases, traditional cloud-based computing systems are becoming overwhelmed.
- Edge computing offers a solution to this problem by processing data close to where it is generated, rather than sending it to a centralized data center.

Why is it important now?

- Edge computing is an update for global companies to improve their operational efficiency, improve performance, and keep data secure. Edge technology is important today as it is supplemented by new advances like 5G, digital twin, and cloud-based applications, and data sets.
- Currently there are two main factors that are restricting the use of edge computing – the expense of the hardware and the cost of creating customized edge computing software solutions.
- Once mainstream adoption kickstarts and economies of scale is realized the hardware costs are expected to decline but the software problem is completely different. There are a wide variety of use cases for edge computing and yet no standardized software has been developed yet. Each company deciding to adopt the technology must create its own customized systems and thus adding to the cost. It is generally accepted that, as patterns emerge, standardized software for edge computing will become a reality.
- While the industries and uses may vary, the essential goal of minimizing latency is shared by all. A significant amount of computing is already being done on Edge in manufacturing, hospitals, and retail sectors where most of the data is sensitive. It also provides power to the most critical systems that are required for safe and reliable operation. Edge can facilitate decision-making on these core functional systems. When there is an opportunity for AI and the IoT to connect to these systems, there is a niche for Edge as well.

Will edge computing replace cloud computing?

















- While transferring data over 5G simplifies the edge cloud and creates new services, decentralization of traditional IT infrastructure underpins edge computing and complements centralized cloud computing.
- Edge computing should be thought of as an ally of the cloud that can work together to provide flexible solutions based on the data collection and analysis requirement of each business. Edge can be better used for real-time collection and analysis and for a specific workload. At the same time, the cloud can help create a centralized access point for large-scale analytic operations. When used in an alliance, both can bring real-time and future-ready insights to businesses such as asset performance management and machine learning.
- As edge computing becomes the 'cool' new platform for business computing, it siphons off some of the growth (and hence money) that would otherwise have gone into cloud expansion (but for key hyperscale companies like Microsoft, AWS, Google, that could mean more stickiness and more AI and data).
- In short, cloud and edge infrastructures, as well as connected network services, are critical to today's organizations.

Recent Transactions (1/2)

KEY DEALS

- **Cisco to acquire Valtix:** Cisco is acquiring Valtix, a multi-cloud network security platform as a service, to increase its cloud security capabilities. Valtix will work to integrate into Cisco's security cloud portfolio. In addition, they'll accelerate Cisco's path to delivering a "seamless experience in securing workloads across multi-cloud environments."
- **Sonata Software acquires Quant Systems:** Sonata Software acquired Quant Systems, an Irving, TX-based IT solutions and software company. The largest acquisition by Sonata Software till date, Quant Systems will accelerate Sonata's capabilities in enterprise data analytics, cloud modernization, cyber security, Salesforce, data privacy, Adobe, and digital & mobile app solutions, including differentiated IPs for Salesforce (workbox.io) and Chatbot (Lisa) technologies.
- **GeBBS Healthcare Solutions acquires CPa Medical Billing:** GeBBS Healthcare Solutions, a portfolio company of ChrysCapital, acquired CPa Medical Billing, a provider of revenue cycle services to Federally Qualified Health Centers (FQHCs) and other multi-specialty physician groups. The deal will create a national leader in fully outsourced end-to-end revenue cycle services and technology market.

LATEST DEALS

Date	Buyer	Target	Transaction details	Target expertise
Feb-23	 Index Ventures (and other investors)		<ul style="list-style-type: none"> ▪ Deal size – \$300m ▪ EV / Sales – NA 	New York, NY-based leading cloud infrastructure security platform
Feb-23	 nagarro		<ul style="list-style-type: none"> ▪ Deal size – NA ▪ EV / Sales – NA 	Germany-based product lifecycle management and IT services provider
Feb-23			<ul style="list-style-type: none"> ▪ Deal size – \$125m ▪ EV / Sales – 12.5x 	San Jose, CA-based multi-cloud network security platform
Feb-23			<ul style="list-style-type: none"> ▪ Deal size – NA ▪ EV / Sales – NA 	Bangalore, India-based cybersecurity and IT services provider for hybrid multi-cloud enterprises
Feb-23			<ul style="list-style-type: none"> ▪ Deal size – NA ▪ EV / Sales – NA 	Cary, NC-based warehouse management, labor management strategy, and systems integration firm
Feb-23			<ul style="list-style-type: none"> ▪ Deal size – \$160m ▪ EV / Sales – 4.3x 	Irving, TX-based provider of enterprise data analytics and cloud modernization services.
Feb-23			<ul style="list-style-type: none"> ▪ Deal size – NA ▪ EV / Sales – NA 	Denver, CO-based consultancy specializing in security, cloud computing, networking and infrastructure
Feb-23			<ul style="list-style-type: none"> ▪ Deal size – NA ▪ EV / Sales – NA 	Salt Lake City, UT-based provider of medical coding and compliance services

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Recent Transactions (2/2)

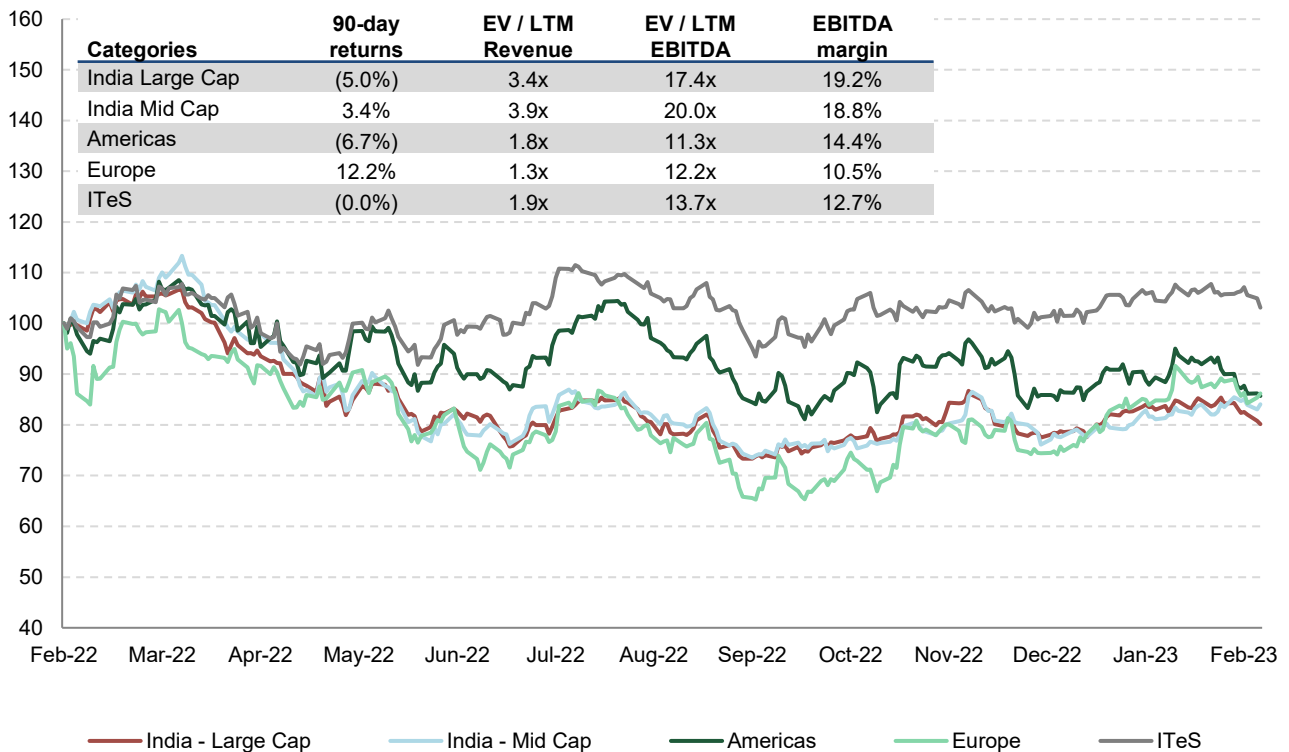
LATEST DEALS (CONT'D)

Date	Buyer	Target	Transaction details	Target expertise
Feb-23	 CLARAPATH	 Crossscope	<ul style="list-style-type: none"> Deal size – NA EV / Sales – NA 	Mountain View, CA-based digital pathology firm developing an AI and ML platform for cancer imaging & diagnosis
Feb-23	 Deloitte	 GLASS FUTURE FOCUSED	<ul style="list-style-type: none"> Deal size – NA EV / Sales – NA 	Australian management consultancy providing innovation, data and technology led transformation
Feb-23	 BPEA Baring Private Equity Asia	 INTANGLES A DIGITAL TWIN COMPANY	<ul style="list-style-type: none"> Deal size – \$10m EV / Sales – NA 	Pune, India-based digital twin solution provider
Feb-23	 WPP	 diff	<ul style="list-style-type: none"> Deal size – NA EV / Sales – NA 	Montreal, Canada-based leading commerce agency
Feb-23	 GRAFENIA plc	 topfloor	<ul style="list-style-type: none"> Deal size – NA EV / Sales – NA 	Dublin, Ireland-based property management software services provider
Feb-23	 Orion Innovation	 sryas	<ul style="list-style-type: none"> Deal size – NA EV / Sales – NA 	New York, NY-based digital transformation services provider for telecom industry
Feb-23	 BLEND360	 forthpoint	<ul style="list-style-type: none"> Deal size – NA EV / Sales – NA 	UK based data engineering, AI and ML solutions provider
Feb-23	 creode	 blue digital	<ul style="list-style-type: none"> Deal size – NA EV / Sales – NA 	UK based digital marketing agency
Feb-23	 DNV	 NIXU cybersecurity.	<ul style="list-style-type: none"> Deal size – \$109m EV / Sales – 1.7x 	Finland based cybersecurity services provider
Feb-23	 INVESTCORP	 NETROM SOFTWARE	<ul style="list-style-type: none"> Deal size – NA EV / Sales – NA 	Netherlands based leading cloud-first, digital transformation and software engineering company
Feb-23	 wisetech global	 BLUME global.	<ul style="list-style-type: none"> Deal size – \$414m EV / Sales – 9.2x 	Pleasanton, CA-based supply chain technology software provider
Feb-23	 Hewlett Packard Enterprise	 athonet	<ul style="list-style-type: none"> Deal size – NA EV / Sales – NA 	Italy-based provider of mobile core networks to enterprises and communication service providers

Market performance

MARKET METRICS (AS OF 28 FEB 2023)

Indexed to 100



HIGHLIGHTS:

- Over the past 15 days, the valuation of Indian large cap players decreased by 4.1% while that of Indian mid cap players increased by 1.8%.
- Tech Mahindra's** shares shot up by 9.8% over the last 15 days after a long period of consolidation with rangebound movement. The company's shares had been in a low swing lately, but now that the overall market sentiment is improving it is gaining momentum.
- Cognizant's** shares slipped by 7.6% in the past 15 days as hotter-than-expected inflation data has cast doubt on whether a disinflationary process has begun. Concerns that the central bank would stick with rate hikes in the near future has weighed on the sentiment in the US market.
- Wipro's** shares declined by 3.4% in the past 15 days as IT employee union Nascent Information Technology Employees Senate (NITES) has filed a complaint against Indian IT major with the Labor Ministry. The complaint stresses that the company is now reducing the salary of freshers unethically, which is a clear violation of the terms of the offer letter and a breach of contract. Wipro has rolled out a revised offer letter for recruits awaiting onboarding at the company for over 12 months now. The revised offer letters assured immediate onboarding to freshers if they accepted a reduction in cost to the company (CTC). The initial CTC or salary being offered was INR 6.5 lakh and the fresh CTC being offered was INR 3.5 lakh.
- Coforge's** valuation increased by 6.6% in the past 15 days as the mid cap IT player launched a cloud-based platform, Quasar eBOL, for the logistics sector. The company said the solution will be used for extraction and process automation of unstructured paper bill of lading (BOL) and will help in improving asset utilization and reducing costs as it digitizes, streamlines and automates load planning and billing for freight handling.

Appendix - Market Multiples

Company	Market data					LTM Performance				Growth	Valuation multiples		
	Price \$	52 week		Market cap \$m	EV \$m	Revenue \$m	EBITDA \$m	Net income \$m	EBITDA margin	CAGR 3 years	EV / Sales	EV / EBITDA	P/E
India - Large Cap													
Cognizant Technology Solutions Corporation	62.6	93.1	52.0	31,897	30,943	19,428	3,558	2,290	18.3%	5.0%	1.6x	8.7x	13.9x
HCL Technologies Limited	13.0	15.9	11.0	35,315	34,045	12,344	2,622	1,828	21.2%	8.5%	2.8x	13.0x	19.3x
Infosys Limited	18.0	25.1	16.8	74,122	72,647	17,937	4,162	2,989	23.2%	12.4%	4.1x	17.5x	24.8x
LTIMindtree Limited	57.2	84.1	48.4	16,909	16,207	2,559	439	332	17.1%	20.7%	6.3x	36.9x	NM
Mphasis Limited	24.6	45.2	23.1	4,642	4,510	1,657	271	196	16.3%	11.4%	2.7x	16.7x	23.6x
Tata Consultancy Services Limited	40.1	50.6	36.6	146,733	141,048	26,207	6,731	4,916	25.7%	6.4%	5.4x	21.0x	29.9x
Tech Mahindra Limited	13.3	20.6	12.0	11,717	11,237	6,246	871	631	13.9%	7.0%	1.8x	12.9x	18.6x
Wipro Limited	4.7	8.0	4.6	25,660	23,302	10,652	1,900	1,373	17.8%	7.9%	2.2x	12.3x	18.7x
Average									19.2%	8.0%	3.4x	17.4x	21.3x
India - Mid Cap													
Accelya Solutions India Limited	13.9	21.0	10.8	207	198	51	18	12	35.6%	(6.9%)	3.9x	10.8x	16.6x
Birasoft Limited	3.3	6.5	3.2	915	840	564	59	43	10.4%	8.2%	1.5x	14.3x	21.5x
Coforge Limited	52.0	62.5	40.6	3,178	3,233	917	140	95	15.3%	17.3%	3.5x	23.0x	33.4x
Cyient Limited	11.4	12.5	8.8	1,264	1,323	658	85	61	13.0%	1.2%	2.0x	15.5x	20.7x
Happiest Minds Technologies Limited	10.4	15.3	10.1	1,482	1,476	163	38	27	23.2%	24.2%	9.0x	38.9x	NM
InfoBeans Technologies Limited	6.1	10.7	5.7	147	142	46	9	6	19.2%	33.9%	3.1x	15.9x	26.1x
Latent View Analytics Limited	4.2	6.9	4.0	851	760	62	18	19	28.5%	NA	12.2x	42.9x	44.9x
L&T Technology Services Limited	44.6	68.9	37.3	4,710	4,677	923	179	136	19.3%	5.8%	5.1x	26.2x	34.7x
Mastek Limited	20.2	44.3	18.6	607	635	294	52	36	17.5%	27.9%	2.2x	12.3x	16.7x
Perficient, Inc.	70.8	115.1	60.1	2,452	2,835	905	181	104	20.0%	17.0%	3.1x	15.6x	23.5x
Persistent Systems Limited	58.0	65.2	38.8	4,227	4,176	935	162	105	17.3%	24.2%	4.5x	25.8x	40.2x
Sasken Technologies Limited	10.5	12.9	9.3	157	146	55	14	13	25.4%	(8.9%)	2.7x	10.5x	11.9x
Sonata Software Limited	8.8	8.9	6.0	1,218	1,167	846	67	53	7.9%	18.1%	1.4x	17.4x	23.0x
Zensar Technologies Limited	3.5	5.1	2.4	795	674	579	61	41	10.5%	(0.8%)	1.2x	11.0x	19.5x
Average									18.8%	12.1%	3.9x	20.0x	25.6x

Company	Market data					LTM Performance				Growth	Valuation multiples		
	Price \$	52 week		Market cap \$m	EV \$m	Revenue \$m	EBITDA \$m	Net income \$m	EBITDA margin	CAGR 3 years	EV / Sales	EV / EBITDA	P/E
Americas													
Accenture plc	265.6	344.5	250.1	167,227	165,315	62,377	10,576	7,051	17.0%	12.4%	2.7x	15.6x	23.7x
CGI Inc.	89.9	93.6	73.9	21,230	23,104	9,772	1,709	1,094	17.5%	1.3%	2.4x	13.5x	19.4x
DXC Technology Company	27.7	35.7	23.3	6,382	10,350	14,847	2,696	718	18.2%	(9.5%)	0.7x	3.8x	8.9x
EPAM Systems, Inc.	307.7	458.0	174.8	17,745	16,198	4,825	783	419	16.2%	28.1%	3.4x	20.7x	42.3x
Globant S.A.	165.1	275.7	156.1	6,896	6,743	1,780	308	149	17.3%	39.2%	3.8x	21.9x	46.3x
Thoughtworks Holding, Inc.	7.4	22.9	7.4	2,317	2,568	1,296	(18)	(105)	NM	NA	2.0x	NM	NM
Grid Dynamics Holdings, Inc.	11.7	22.0	9.2	864	615	310	(14)	(29)	NM	37.9%	2.0x	NM	NM
Positivo Tecnologia S.A.	1.3	2.6	1.0	178	376	887	87	38.3	9.8%	25.1%	0.4x	4.3x	4.6x
Sonda S.A.	0.5	0.5	0.3	429	650	1,257	123	42	9.8%	3.7%	0.5x	5.3x	10.3x
The Hackett Group, Inc.	18.6	24.8	17.7	500	531	290	58	41	20.1%	3.6%	1.8x	9.1x	12.2x
Unisys Corporation	5.0	22.8	4.0	338	525	1,980	67	(106)	3.4%	(3.8%)	0.3x	7.8x	NM
Average									14.4%	7.3%	1.8x	11.3x	21.0x
Europe													
Alten S.A.	157.1	161.8	102.0	5,335	5,144	4,043	433	489	10.7%	11.1%	1.3x	11.9x	10.9x
Atos SE	14.3	35.9	7.1	1,569	4,696	11,476	438	(3,487)	3.8%	(3.3%)	0.4x	10.7x	NM
Aubay Société Anonyme	51.6	66.7	39.4	685	635	518	54	38	10.4%	3.5%	1.2x	11.7x	18.1x
Cancom SE	35.2	63.7	22.9	1,241	1,048	1,278	93	39	7.3%	7.6%	0.8x	11.3x	32.2x
Capgemini SE	188.8	225.8	149.6	32,699	38,395	23,506	2,936	1,653	12.5%	14.0%	1.6x	13.1x	19.8x
Capita plc	0.3	0.4	0.3	585	1,494	3,743	(201)	(31)	NM	(9.2%)	0.4x	NM	NM
Endava plc	79.5	138.2	63.7	4,521	4,379	905	159	113	17.6%	29.0%	4.8x	27.6x	40.0x
Indra Sistemas, S.A.	12.7	12.7	7.5	2,226	2,290	4,172	428	184	10.3%	4.2%	0.5x	5.4x	12.1x
Knowit AB (publ)	20.2	34.4	18.1	553	660	656	73	37	11.1%	22.5%	1.0x	9.1x	15.0x
Sopra Steria Group SA	198.6	198.6	118.9	4,013	4,588	5,452	545	265	10.0%	3.1%	0.8x	8.4x	15.2x
TietoEVRY Oyj	31.9	32.0	21.9	3,768	4,497	3,129	354	202	11.3%	17.1%	1.4x	12.7x	18.7x
Average									10.5%	5.6%	1.3x	12.2x	20.2x

Company	Market data					LTM Performance				Growth	Valuation multiples		
	Price \$	52 week		Market cap \$m	EV \$m	Revenue \$m	EBITDA \$m	Net income \$m	EBITDA margin	CAGR 3 years	EV / Sales	EV / EBITDA	P/E
ITeS													
Conduent Incorporated	4.0	5.8	3.3	869	1,958	3,858	296	(182)	7.7%	(4.8%)	0.5x	6.6x	NM
ExiService Holdings, Inc.	164.5	189.1	119.4	5,478	5,494	1,412	250	143	17.7%	12.5%	3.9x	22.0x	38.3x
Firstsource Solutions Limited	1.4	1.8	1.2	932	1,079	726	97	61	13.3%	9.0%	1.5x	11.1x	15.3x
Genpact Limited	47.7	48.7	38.4	8,731	9,755	4,371	632	353	14.5%	7.5%	2.2x	15.4x	24.7x
Hinduja Global Solutions Limited	15.8	20.8	11.0	829	734	427	(3)	737	NM	(16.8%)	1.7x	NM	1.1x
Startek, Inc.	3.8	4.7	2.6	154	383	677	56	8	8.3%	1.6%	0.6x	6.8x	20.4x
TTEC Holdings, Inc.	40.3	87.1	40.1	1,901	2,886	2,444	300	103	12.3%	14.1%	1.2x	9.6x	18.4x
WNS (Holdings) Limited	86.9	88.9	68.5	4,184	4,372	1,208	182	140	15.1%	10.7%	3.6x	24.0x	29.9x
Average									12.7%	7.8%	1.9x	13.7x	21.2x

Contact us

ABOUT US

Founded in 1987, The Chesapeake Group is an independent financial advisory company with over 30 years of history in helping clients – from venture stage to large corporations – achieve their corporate development goals. We are focused on the Technology and Software services sector with significant experience in cross – border transactions. Since our inception, we have advised numerous companies on mergers and acquisitions, capital raising, recapitalization, and strategic alliances. Headquartered in New York, with an additional office in Bangalore. Team of 10 professionals with an average experience of more than 30 years.

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