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Higher Ed – Market Update

Q4 2023

End-User Market Canvas

The higher education technology landscape can be defined by outcomes of the product's end-user:

Back Office

Administrative

- Provide ERPs to facilitate administrative obligations
- Streamline management of financial processes and general workflows

Recruiting / Student Lifecycle Mgmt.

- Identify and engage with students to cultivate genuine interest in applicants who are the right fit for the institution
- Provide predictive analytics and forecasting to assist in reaching enrollment goals
- Provide CRMs to amplify and automate outreach and marketing
- Analyze factors leading to student churn and success to increase student retention and graduation rate

Student Information Systems

- Collect and analyze data from students to provide insights to the institution faculty
- Integration and interoperability with the learning management system and administrative tasks

Classroom

Digital Content / Resources

- Enable institutions to create class recordings, collect and organize curriculum content, and use tools to distribute content to students
- Provide entire online courses, certifications, and degrees

Engagement / Productivity

- Improve student engagement during online learning with techniques such as gamification and periodic assessments
- Provide engaging channels for peer-to-peer collaboration
- Provide support and tools to increase student productivity and solve the pain points of an analogue classroom

Online Program Mgmt. / LMS

- Enable instructors to plan, deliver, and assess the student learning process through the cloud
- Provide scalability to the learning environment by allowing students and faculty to be location-independent and asynchronous
- Authenticate test-taker identity and enable institutions to securely administer exams

Student Success

Career Planning

- Provide marketplaces for students to research their interests and identify the best fitting internships and post-grad full-time opportunities
- Enable institutions to provide students with connections and career advice
- Strengthen and facilitate relationships with university alumni

Student Support Systems

- Provide students with problem-solving and tutoring solutions
- Facilitate student test preparation & provide study tools
- Enable more fluid communication and interaction between students and faculty
- Provide a myriad of online resources such as e-textbooks, study resources for students, and instructional tools for professors to augment the learning experience
- Provide financial aid and help with the enrollment process
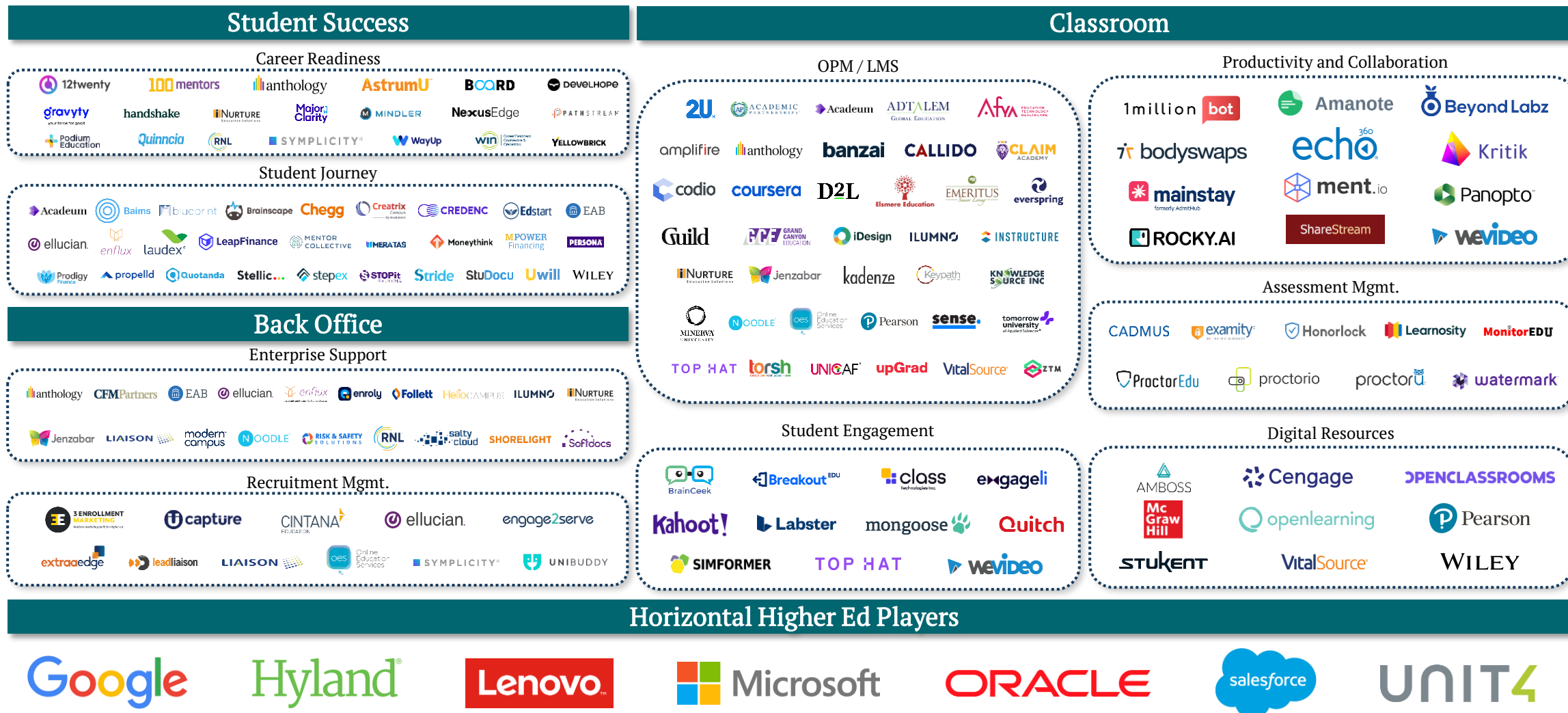
Recent Notable Transactions

Higher ed technology businesses are often differentiated by platform completeness. While some of the largest players add products by internal development, many opt to add products via M&A bolt-on

Growth / Private Equity

Kahoot! | Goldman Sachs
- Q4 2023 (Pending)
- Engagement SaaS
- EV: TBD
- Implied Revenue Multiple: TBD

amplifire | polarispartners
- 7/21/22
- eLearning platform
- EV: N/A
- Implied Revenue Multiple: N/A

Follett | Jefferson River Capital
- 2/2/22
- Digital content provider
- EV: N/A
- Implied Revenue Multiple: N/A

ellucian | Blackstone / VISTA
- 9/15/21
- SIS, back-office support
- EV: N/A
- Implied Revenue Multiple: N/A

VitalSource | FP Francisco Partners
- 6/1/21
- Digital content creation
- EV: N/A
- Implied Revenue Multiple: N/A

UNIT4 | TA Associates / Partners Group
- 5/21/21
- ERP / back-office support
- EV: $2.2B
- Implied Revenue Multiple: N/A

EAB | BC Partners
- 5/10/21
- Resource and research provider
- EV: N/A
- Implied Revenue Multiple: N/A

Panopto | K1
- 12/31/20
- Hosting and sharing videos
- EV: N/A
- Implied Revenue Multiple: N/A

WeVideo | Thompson Street Capital Partners
- 12/14/20
- Video editing
- EV: N/A
- Implied Revenue Multiple: N/A

anthology | Veritas Capital
- 2/26/20
- SIS, CRM, ERP
- EV: N/A
- Implied Revenue Multiple: N/A

HelioCAMPUS | Pamlico Capital
- 12/1/19
- ERP / back-office support
- EV: N/A
- Implied Revenue Multiple: N/A

watermark | TCV
- 4/17/18
- Assessments and e-portfolios
- EV: N/A
- Implied Revenue Multiple: N/A

Strategic M&A

TRIBAL | ellucian
- Q4 2023 (Pending)
- SIS & Assessment mgmt
- EV: TBD
- Implied Revenue Multiple: TBD

Jobzology | PeopleGrove
- 8/9/23
- Career analytics
- EV: N/A
- Implied Revenue Multiple: N/A

LEARN PLATFORM | INSTRUCTURE
- 12/15/22
- Workflow & back-office support
- EV: N/A
- Implied Revenue Multiple: N/A

aktiv Learning | TOP HAT
- 12/5/22
- LMS for STEM coursework
- EV: N/A
- Implied Revenue Multiple: N/A

Concourse | EAB
- 9/21/22
- University program database
- EV: N/A
- Implied Revenue Multiple: N/A

playposit by WeVideo | WeVideo
- 8/16/22
- Interactive LMS
- EV: N/A
- Implied Revenue Multiple: N/A

gratavid from gravyty | Graduway
- 5/31/22
- Video and testimonial editing
- EV: N/A
- Implied Revenue Multiple: N/A

mondly | Pearson
- 4/29/22
- VR language LMS
- EV: $217M
- Implied Revenue Multiple: 15.9x

campuslogic | ellucian
- 4/19/22
- Student financial success
- EV: N/A
- Implied Revenue Multiple: N/A

CONCENTRIC SKY | INSTRUCTURE
- 4/13/22
- Credential verification
- EV: $21M
- Implied Revenue Multiple: N/A

talentspace | handshake
- 3/31/22
- Job recruiting
- EV: $22M
- Implied Revenue Multiple: N/A

CLUTCH | Pearson
- 3/2/22
- Tutoring & educational resources
- EV: N/A
- Implied Revenue Multiple: N/A

Target | Investor

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Evolving Landscape

The COVID-19 pandemic made higher ed institutions more inclined to adopt infrastructure-providing technology, and this has created greater opportunities for new and incumbent players

Student Success

Career Readiness

12twenty, 100 mentors, anthology, AstrumU, BCORD, DeveLHOPE, gravyty, handshake, iNURTURE, Major Clarity, MINDLER, NexusEdge, PATHSTREAM, Podium Education, Quinncia, RNL, SYMPLICITY, WayUp, WIN, Yellowbrick

Student Journey

Acadeum, Baims, blucornt, Brainscape, Chegg, Creatrix Campus, CREDENC, Edstart, EAB, ellucian, enflux, laudex, LeapFinance, MENTOR COLLECTIVE, MERATAS, Moneythink, MPOWER Financing, PERSONA, Prodigy Finance, propelld, Quotanda, Stellic..., stepex, STOPit, Stride, StuDocu, Uwill, WILEY

Back Office

Enterprise Support

anthology, CFM Partners, EAB, ellucian, enflux, enroly, Follett, HelloCAMPUS, ILUMNO, iNURTURE, Jenzabar, LIAISON, modern campus, NOODLE, RISK & SAFETY SOLUTIONS, RNL, salty cloud, SHORELIGHT, Softdocs

Recruitment Mgmt.

3 ENROLLMENT MARKETING, capture, CINTANA EDUCATION, ellucian, engage2serve, extraaedge, leadliaison, LIAISON, Online Educator Services, SYMPLICITY, UNIBUDDY

Classroom

OPM / LMS

2U, AP ACADEMIC PARTNERSHIPS, Acadeum, ADTALEM GLOBAL EDUCATION, Afya EDUCATION TECHNOLOGY HEALTHCARE, amplifire, anthology, banzai, CALLIDO, CLAIM ACADEMY, codio, coursera, D2L, Elsmere Education, EMERITUS, everspring, Guild, GCE GRAND CANYON EDUCATION, iDesign, ILUMNO, INSTRUCTURE, iNURTURE, Jenzabar, kadenze, Keypath, KNOWLEDGE SOURCE INC, MINERVA UNIVERSITY, NOODLE, OES Online Educator Services, Pearson, sense., tomorrow university of Applied Sciences, TOP HAT, torsh, UNICAF, upGrad, VitalSource, ZTM

Productivity and Collaboration

1million bot, Amanote, Beyond Labz, bodyswaps, echo 360, Kritik, mainstay formerly AdmitHub, ment.io, Panopto, ROCKY.AI, ShareStream, weVIDEO

Assessment Mgmt.

CADMUS, examity, Honorlock, Learnosity, MonitorEDU, ProctorEdu, proctorio, proctorU, watermark

Student Engagement

BrainCeek, Breakout EDU, class technologies inc., engageli, Kahoot!, Labster, mongoose, Quitch, SIMFORMER, TOP HAT, weVIDEO

Digital Resources

AMBOSS, Cengage, OPENCLASSROOMS, McGraw Hill, openlearning, Pearson, STUKENT, VitalSource, WILEY

Horizontal Higher Ed Players

Google, Hyland, Lenovo, Microsoft, ORACLE, salesforce, UNIT4

Expectations for Higher Ed Technology

The higher ed software industry is poised for rapid development in key areas, with massive M&A potential on the horizon

Immediate — Innovation at Scale

- Digital content is more convenient and lower cost to generate than its printed counterpart
- Online program management providers are developing platforms capable of delivering quality education courses with a focus on career progression in rapidly growing audiences
- Lower-cost simulators and VR offerings are making their way into higher ed curriculums as gamification / engagement solutions for life sciences and engineering fields
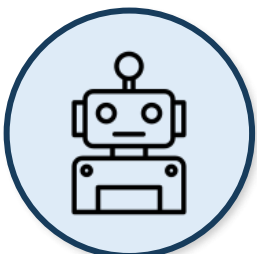
1 – 5 Years — AI transforms classrooms and administrative tasks

- Chatbots will be integrated into dorm rooms to provide personalized information and into classrooms as teaching assistants
- Professors will use AI algorithms to help grade assessments and provide individualized feedback to students
- Admissions committees can use AI to quickly comb through numerous prospective students' applications and categorize them based on certain qualities

5 – 10+ Years — Expanding digital education ecosystem

- Innovation and cost-optimization will drive a shift from analogue to online and hybrid education programs and it will be critical to improve the technology's accessibility in order to avoid exacerbating the digital divide
- Demand for higher education will increase from developing markets and internationally. Campuses cannot be built fast enough for all the new students, so the solution will be scalable, quality online education
- Education platforms add micro credentialling and career readiness to enable further specialization and upskilling of the workforce

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Top Acquirers

The top strategic buyers in the industry are scouring the market for synergistic point-solutions to add to their platforms. Acquisitions of smaller solutions consistently trade at high multiples with significant liquidity for shareholders

Cengage

EV: $2.6B	EBITDA: $383M
Public: CNGO	FTEs: ~4,500

Focus Areas: Digital coursework & resources, e-learning

INFOSEC · Pathbrite · WebAssign

Provide quality digital products and services to students, equipping them with competencies needed to advance their careers

Chegg

EV: $1.4B	EBITDA: $248M
Public: CHGG	FTEs: ~2,100

Focus Areas: Digital coursework, mentorship & training

Busuu · Mathway · THINKFUL

Provides homework help, digital and physical textbooks, online tutoring, and other student services

EAB | BC PARTNERS

EV: ND	EBITDA: ND
Private	FTEs: ~2,100

Focus Areas: Analytics, student success, educational services

Concourse · Rapid Insight · wisr

Drive change through data-driven insights in five major areas: enrollment, student success, data & analytics, institutional strategy, and inclusion

ellucian | VISTA · Blackstone

EV: ND	Raised: $909M
Private	FTEs: ~3,900

Focus Areas: SIS, enrollment, financial aid

campuslogic · helix EDUCATION · CampusIT

Provides universities with solutions that result in organizational growth and student success

INSTRUCTURE

EV: $4.2B	EBITDA: $195M
Public: INST	FTEs: ~1,200

Focus Areas: Productivity, enterprise support, SIS

LEARN PLATFORM · CONCENTRIC SKY · KIMONO

Provider of LMS and digital education support and communication solutions

Pearson

EV: $9.2B	EBITDA: $1.4B
Public: PSON	FTEs: ~20,200

Focus Areas: LMS, OPM, education data analytics

mondly languages · CLUTCH · Credly

Provides digital content, assessments, qualifications, and data

RNL

EV: ND	Raised: ND
Private	FTEs: ~5,700

Focus Areas: Recruiting, student engagement, fundraising

helix EDUCATION · QuadWrangle · Funderful

Enables higher education institutions to scale, optimize, and diversify enrollment and fundraising

WILEY

EV: $2.7B	EBITDA: $419M
Public: WLY	FTEs: ~8,800

Focus Areas: Digital educational content, recruitment management
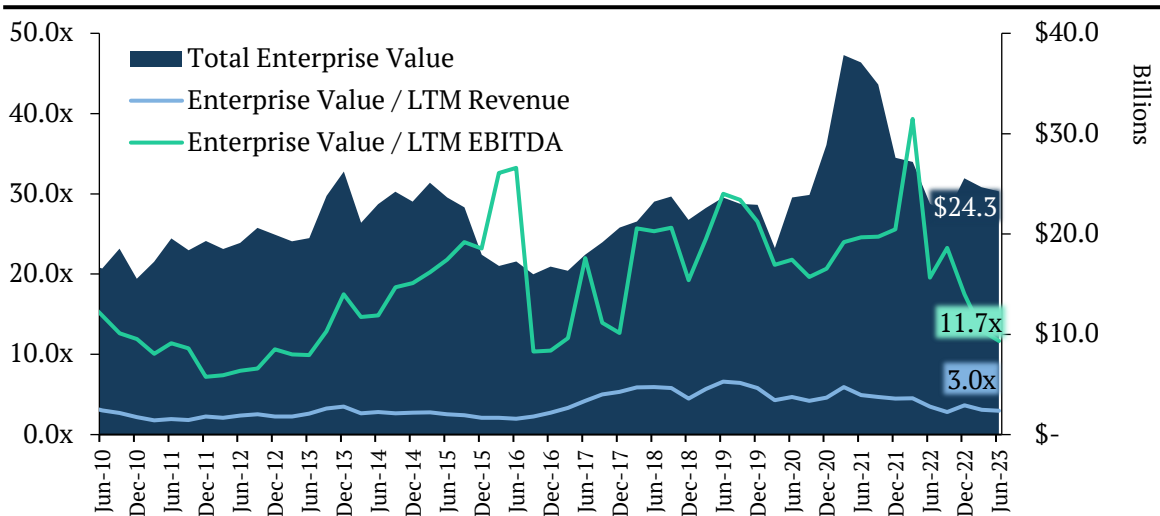
XYZ media · Knowledge Unlatched · eJournalPress

Develops and provides digital education, learning, assessment, and certification solutions
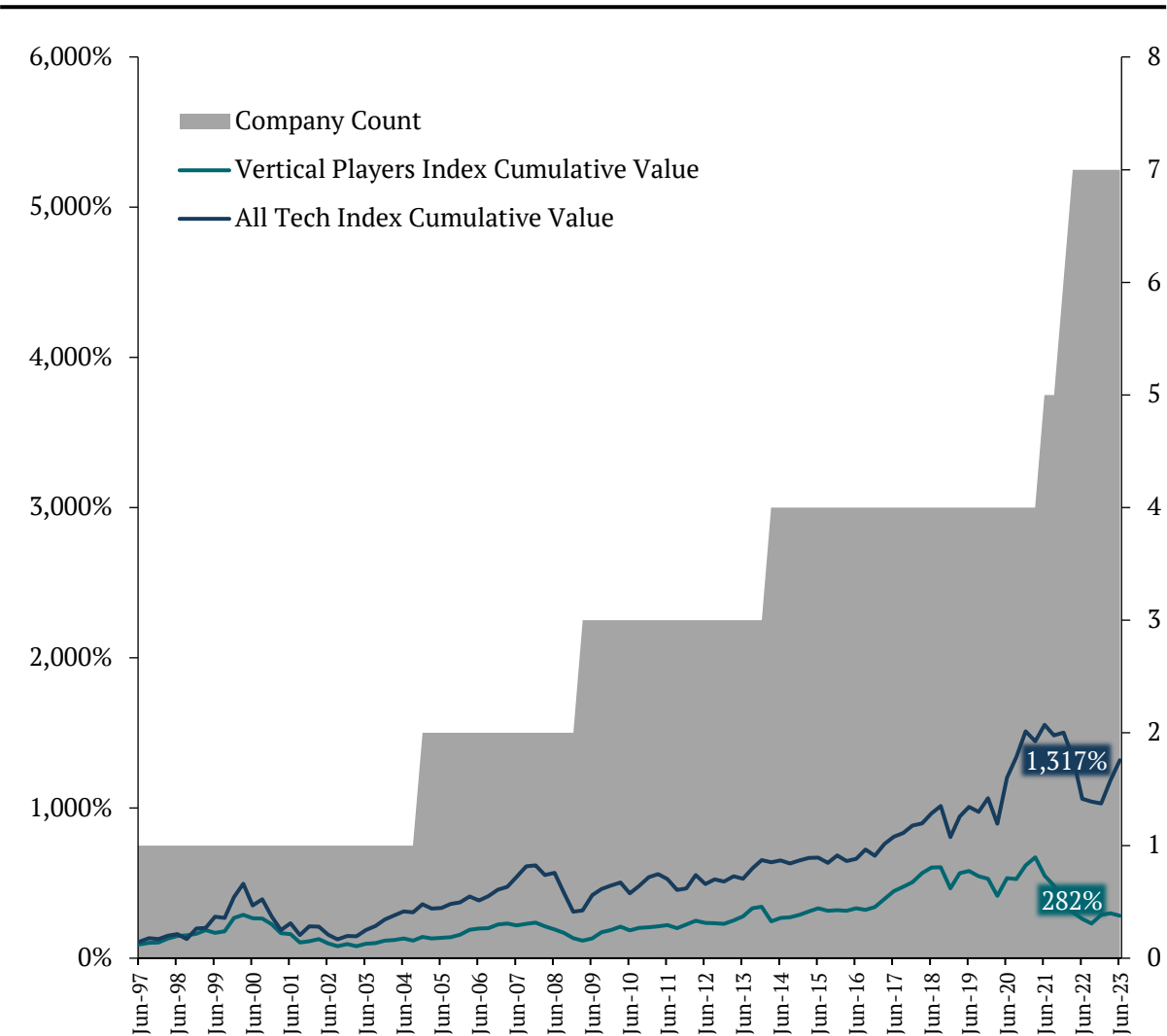
Appendix I – Higher Ed Tech Trading Comps

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Trading Comps: Vertical Players

Median Subsector Trading Multiples

Legend: Total Enterprise Value, Enterprise Value / LTM Revenue, Enterprise Value / LTM EBITDA

$24.3
11.7x
3.0x

Subsector Growth + Margin

Legend: EBITDA Margin, Revenue Growth, Growth Plus Margin

18%
5%
16%

Company Count and Subsector Index vs. All Tech Index

Legend: Company Count, Vertical Players Index Cumulative Value, All Tech Index Cumulative Value

1,317%
282%

Private & Confidential
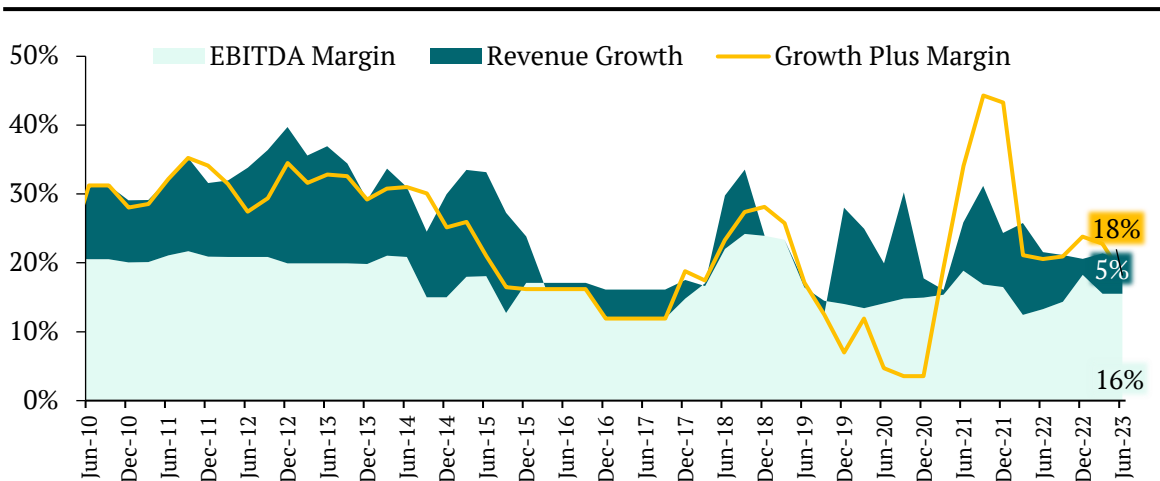
Trading Comps: Horizontal Players

Median Subsector Trading Multiples
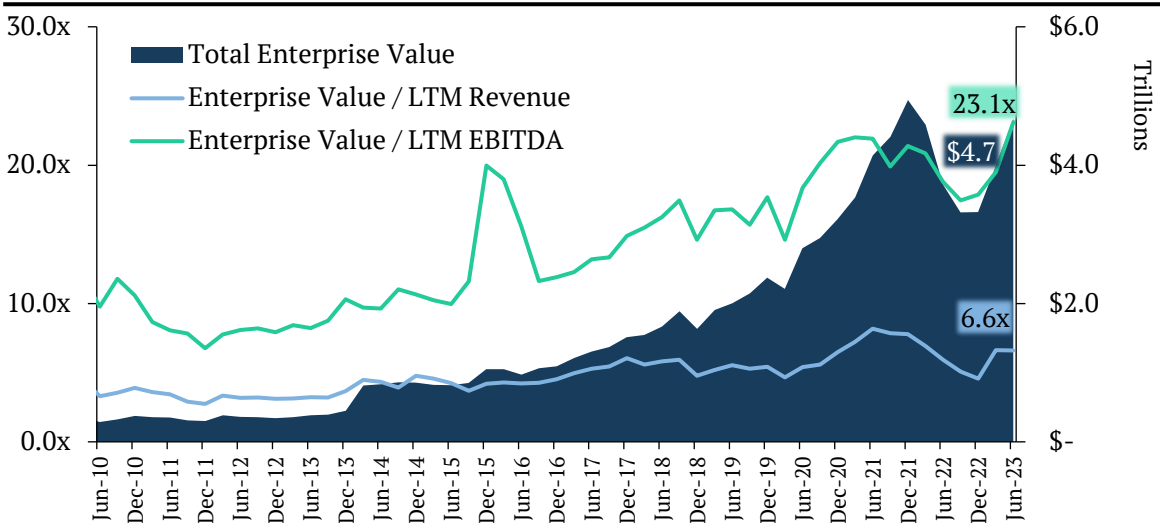
Legend:
- Total Enterprise Value
- Enterprise Value / LTM Revenue
- Enterprise Value / LTM EBITDA

Callouts: 23.1x, $4.7, 6.6x

Subsector Growth + Margin

Legend:
- EBITDA Margin
- Revenue Growth
- Growth Plus Margin

Callouts: 36%, 8%, 31%

Company Count and Subsector Index vs. All Tech Index

Legend:
- Company Count
- Horizontal Index Cumulative Value
- All Tech Index Cumulative Value

Callouts: 2,888%, 1,317%
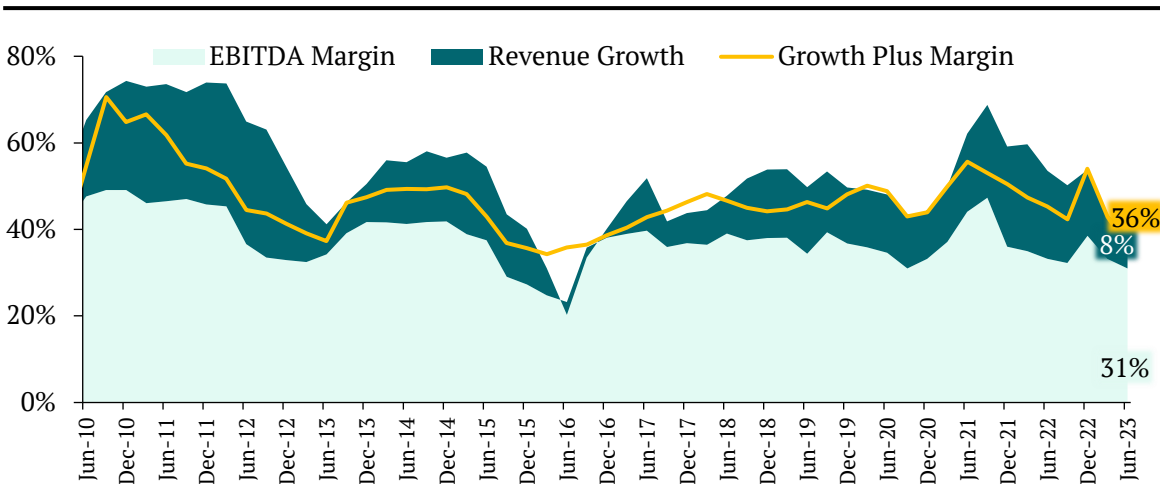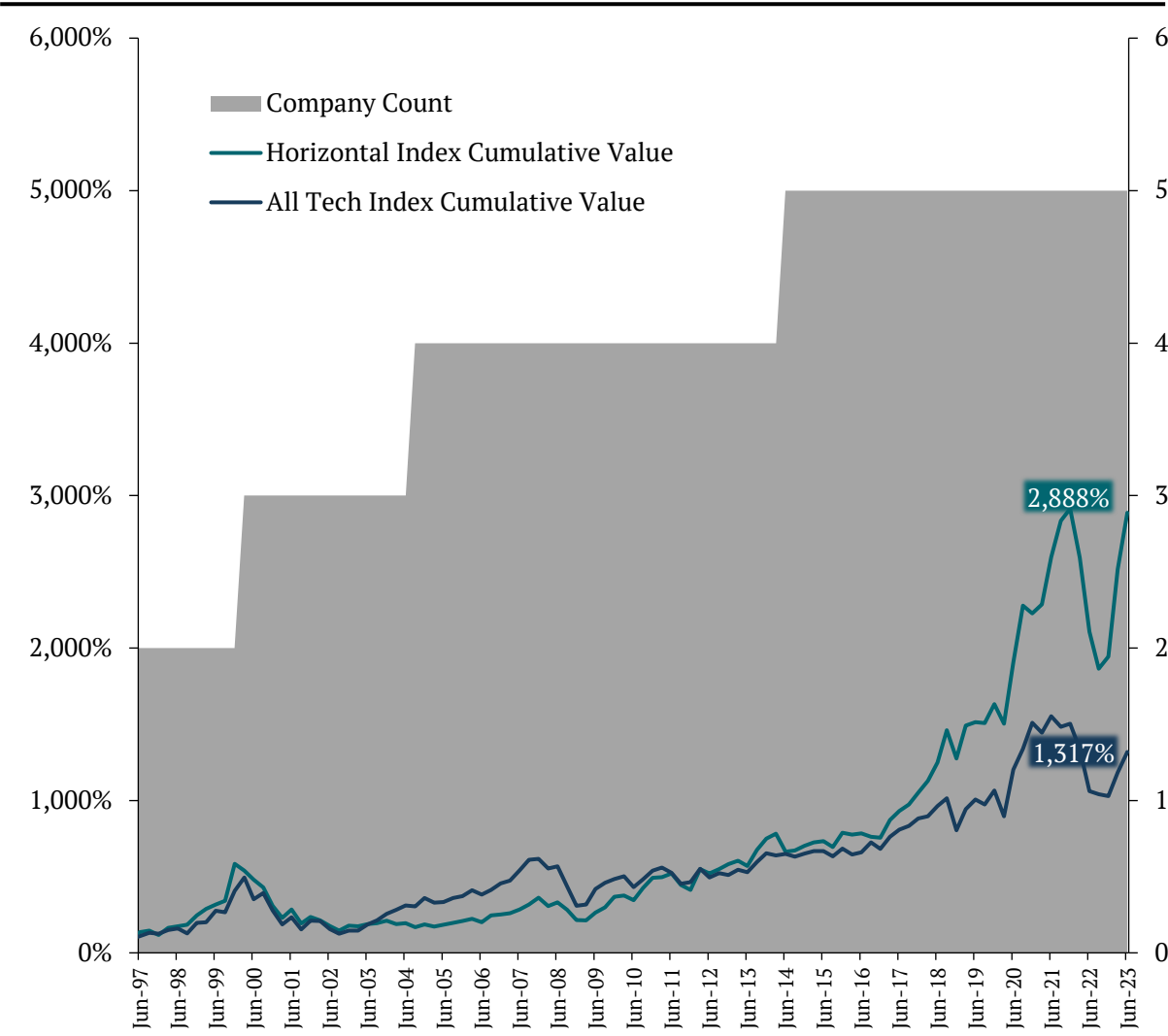
Trading Comps: All Higher Ed Tech

Median Subsector Trading Multiples
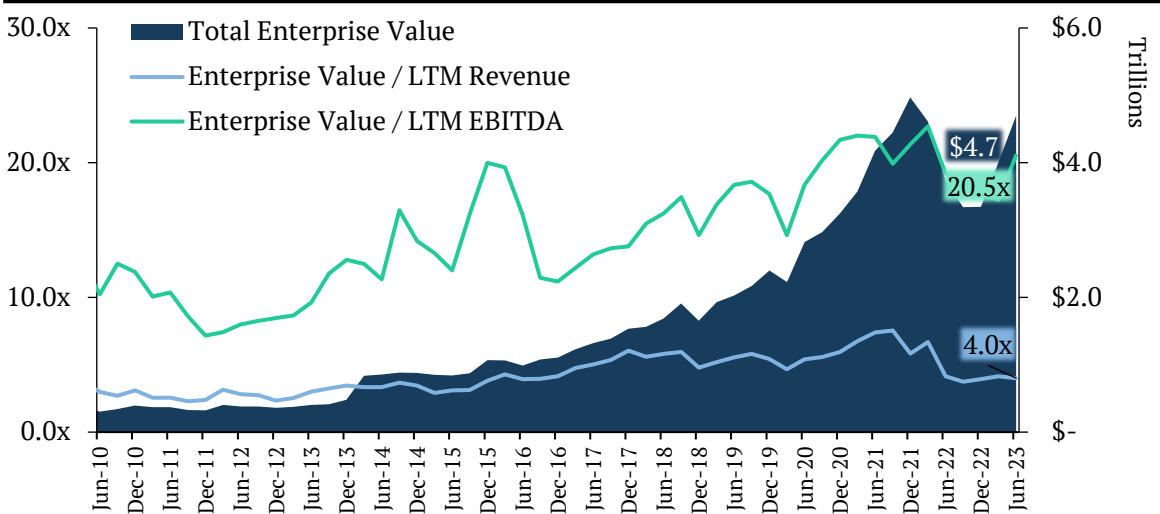
Legend:
- Total Enterprise Value
- Enterprise Value / LTM Revenue
- Enterprise Value / LTM EBITDA

$4.7 Trillions
20.5x
4.0x

Subsector Growth + Margin

Legend:
- EBITDA Margin
- Revenue Growth
- Growth Plus Margin

25%
7%
21%

Company Count and Subsector Index vs. All Tech Index

Legend:
- Company Count
- All Higher Ed Index Cumulative Value
- All Tech Index Cumulative Value

1,368%
1,317%
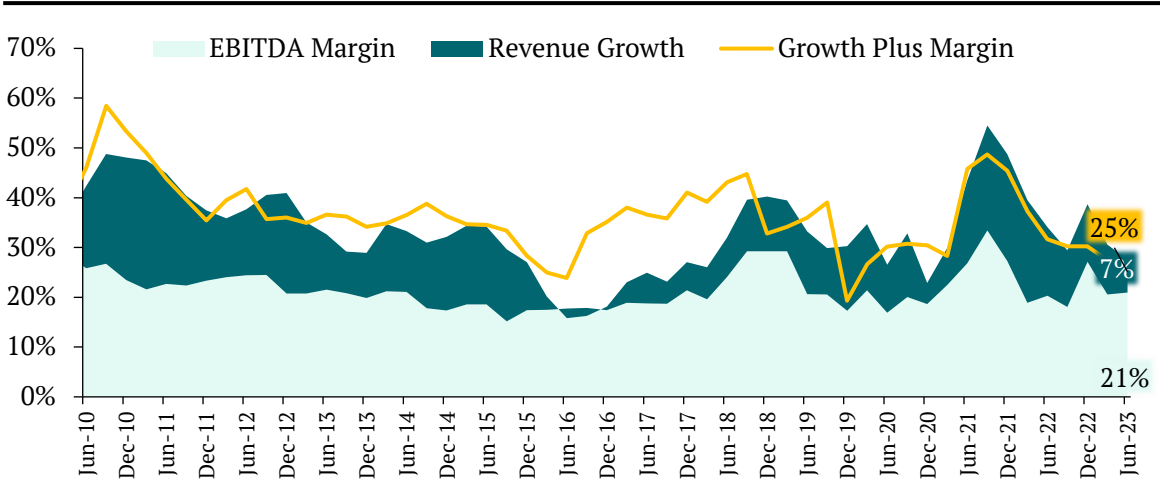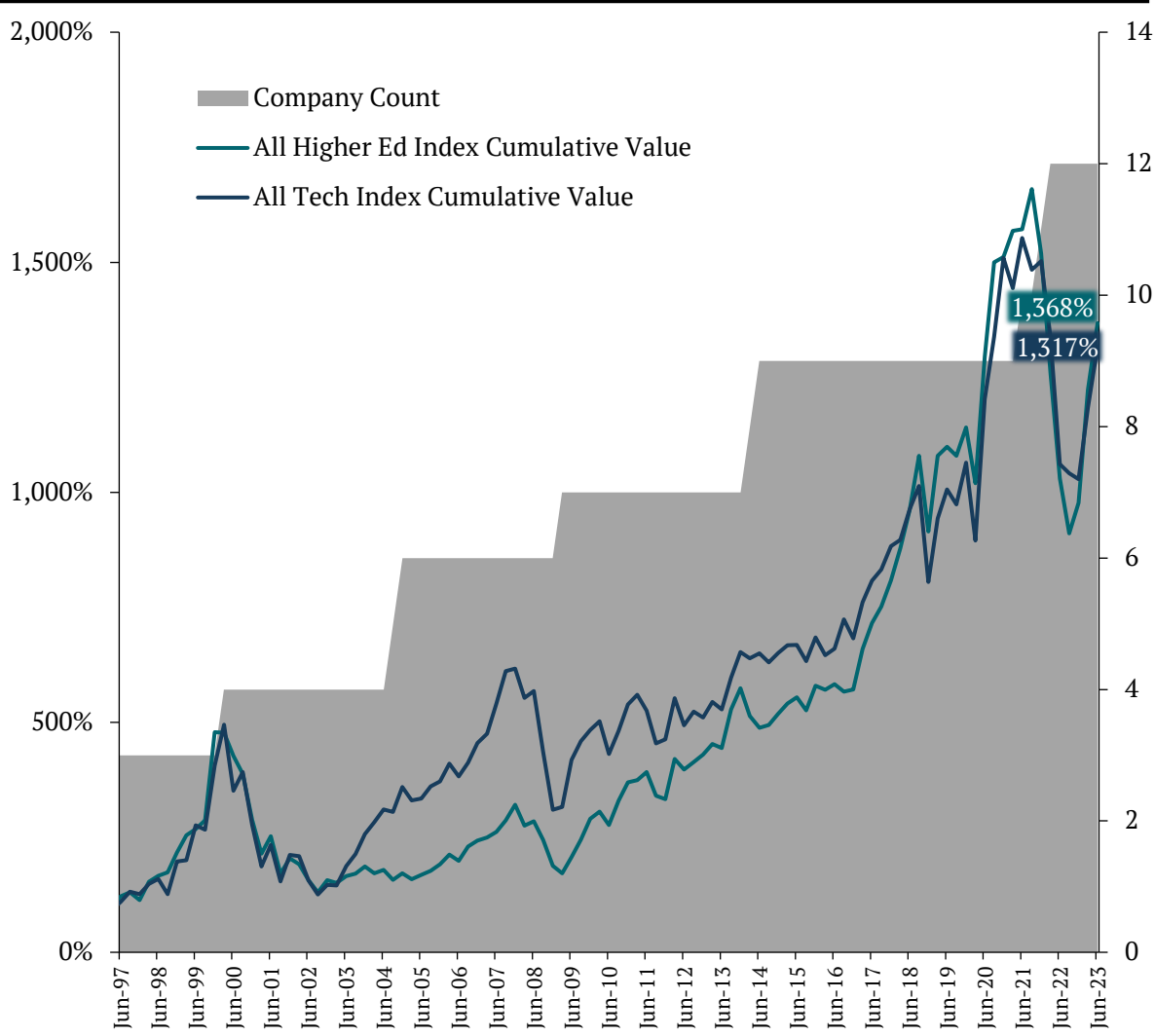
Higher Ed Tech Trading Details

Comparable Public Companies

(USD, in millions, except stock price) Company	Stock Price 10/12/2023	Market Cap	Cash	Enterprise Value	Revenue NTM	Revenue LTM	Revenue Last FY	EBITDA NTM	EBITDA LTM	EBITDA Last FY	EV/Revenue NTM	EV/Revenue LTM	EV/Revenue Last FY	EV/EBITDA NTM	EV/EBITDA LTM	EV/EBITDA Last FY	Revenue Growth NTM	EBITDA Margin NTM	Growth + Margin NTM	Gross Margin LTM
Higher Education Technology																				
Microsoft	$ 331.16	$ 2,469,802	$ 111,256	$ 2,418,511	$ 241,193	$ 211,915	$ 211,915	$ 122,468	$ 101,785	$ 101,785	10.0x	11.4x	11.4x	19.7x	23.8x	23.8x	14%	51%	65%	69%
Alphabet	140.29	1,778,866	118,332	1,689,648	329,460	289,531	282,836	134,812	85,669	85,439	5.1x	5.8x	6.0x	12.5x	19.7x	19.8x	14%	41%	55%	55%
Oracle	109.11	300,345	12,083	377,674	54,695	50,962	49,954	27,647	19,171	18,454	6.9x	7.4x	7.6x	13.7x	19.7x	20.5x	7%	51%	58%	72%
Salesforce	205.68	201,265	12,397	201,668	36,593	33,071	31,352	14,284	6,662	4,446	5.5x	6.1x	6.4x	14.1x	30.3x	45.4x	11%	39%	50%	75%
Lenovo	22.19	13,214	4,423	13,610	60,666	57,891	61,947	NM	3,218	3,686	0.2x	0.2x	0.2x	NM	4.2x	3.7x	5%	NM	5%	17%
Pearson	10.75	7,839	448	9,152	4,581	4,729	4,734	1,018	1,211	732	2.0x	1.9x	1.9x	9.0x	7.6x	12.5x	(3%)	22%	19%	48%
Blackbaud	69.16	3,766	29	4,634	1,176	1,069	1,058	384	77	81	3.9x	4.3x	4.4x	12.1x	60.4x	57.3x	10%	33%	43%	53%
Instructure	26.64	3,850	126	4,233	563	507	475	222	131	122	7.5x	8.3x	8.9x	19.1x	32.2x	34.8x	11%	39%	50%	65%
Grand Canyon Education	115.32	3,502	233	3,350	990	928	911	302	267	269	3.4x	3.6x	3.7x	11.1x	12.6x	12.5x	7%	31%	37%	53%
Coursera	18.81	2,844	717	2,138	690	580	524	4	(150)	(161)	3.1x	3.7x	4.1x	NM	NM	NM	19%	1%	20%	57%
Chegg	8.20	974	385	1,378	708	740	767	216	213	189	1.9x	1.9x	1.8x	6.4x	6.5x	7.3x	(4%)	31%	26%	74%
D2L	5.20	274	118	177	191	167	NM	12	(12)	NM	0.9x	1.1x	-	14.5x	NM	NM	14%	6%	20%	64%
25th Percentile											2.0x	1.9x	2.8x	11.3x	8.8x	12.5x	6.2%	26.4%	20.2%	53.0%
Median											3.7x	4.0x	4.4x	13.1x	19.7x	20.1x	10.4%	32.6%	39.9%	60.7%
75th Percentile											5.9x	6.4x	7.0x	14.4x	28.6x	32.0x	13.8%	40.2%	51.5%	69.8%
Mean											4.2x	4.7x	5.1x	13.2x	21.7x	23.7x	8.6%	31.2%	37.3%	58.5%

LTM = Last Twelve Months   NM = Not Material   FY = Calendar Year
Sources: PitchBook, Company Filings, and IP Estimates
Sorted by Enterprise Value

Appendix II – IKONA Partners Overview

IKONA At-a-Glance and Key Statistics

At IKONA, we're transparent about our focus areas and excel at partnering with companies that fit our specialized parameters

Sector Expertise

Vertical Software

- K-12, Higher-Ed, and Corporate Learning
- Industrial and Manufacturing
- Legal, Tax, and Professional Services
- Real Estate and Hospitality
- Entertainment, Media, Sports
- Clean, Food, and ESG Tech
- Health IT & Life Sci

Application Software

- GRC & Cybersecurity
- Supply Chain & Logistics
- HCM & Workforce
- Asset Management
- Sales Enablement
- Marketing Tech

SMB, B2C, and Tech-Enabled Services

- Field Services & Payments
- Digital Marketing
- eLearning & EdTech
- Internet Marketplaces
- Mobile Apps
- Digital Commerce
- Data-as-a-Service
- Managed Services

Transaction Types

Mergers & Acquisitions

- Sell/Buy-Side Advisory
- Divestitures and Spinoffs
- Merger-of-Equals
- LBOs

Recaps & Capital Raises

- Minority, 50/50, Majority
- Growth Capital
- Bridge Financing
- MBOs

Secondaries

- Full and Partial Liquidity
- Direct VC Secondaries
- Tender Processes

Historical Client Profile

Prior Funding	EBITDA
$0M – $180M	>$0M – $50M
Revenue	**Enterprise Value**
$5M – $150M	$30M – $550M

IKONA Founders: Passionate Deal-Makers, Strong Track Record

We are **active shareholders that own 100% of the firm**. Every transaction matters to us, and every client is served by multiple experienced decision-makers. We are not a "volume shop," but rather a true boutique, where we are **highly selective and dedicated to a few choice engagements**

David Cho

Managing Partner

IB Experience: 12 years

San Francisco, CA

Chet Kristy

Partner & Vice President

IB Experience: 7 years

Charlotte, NC

Charlie Penner

Partner & Vice President

IB Experience: 7 years

San Francisco, CA

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