



TECH M&A MONTHLY

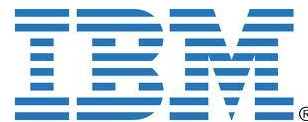
....starts in 2 minutes



www.corumgroup.com

CORUM

Past Attendees Include:



CORUM

Past Conferences & Reports

- Private Equity Panel
- 10 Key Terms in an M&A Contract
- Google Acquisition Strategy
- Deal Structures Today
- Disruptive Tech Trend Reports: IoT Software, Majority Mobilization, Sports & Gaming, etc.
- Special Reports: Patents, New Buyers, M&A Process, Increasing Deal Value...



TECH M&A MONTHLY

....starts in 1 minute

Merge Briefing

- 90 Minutes
- Industry Update
- Overview of the M&A Process
- Upcoming events in:
 - Seattle
 - Sacramento
 - San Jose
 - Portland
 - Cologne
 - Manchester



MERGE BRIEFING

Selling Up, Selling Out

- Half-Day
- Tech M&A Bootcamp
- The most attended tech executive conference in history
- Upcoming events in:
 - Detroit
 - Dresden
 - Cork
 - Boise



8 Stages for an Optimal Outcome

1



Typical Negotiation Flow





AVOIDING THE
DEAL DISASTERS

Upcoming Conference Schedule

Dec. 19: **Market Spotlight: Marketing Technology**

Dec. 21: **Market Spotlight: Data Security**

Jan. 11: **Bothell** – MB

Jan. 25: **Sacramento** – MB

Jan. 29: **RSPA Inspire 2018**

Feb. 8: **Tech M&A Monthly: Private Equity Roundtable**

Feb. 22: **San Francisco** – Growth & Exit Strategies

Mar. 8: **Tech M&A Monthly: Seller's Panel**

...With more events in:

San Jose

Manchester

Boise

Detroit

Portland

www.CorumGroup.com/Events

CORUM

Logistics

- Ask questions any time
 - Use Q&A box to the right of screen
 - Click “Refresh Now” to view responses
- This event is being recorded
 - European broadcast December 15, 1 PM Berlin Time
 - On demand webcast will be available at www.corumgroup.com



Tech M&A Monthly

10 Keys to a Valuable Valuation

December 14, 2017

Welcome



Bruce Milne
CEO
Corum Group Ltd.

A leader in the software industry, Bruce has founded or owned four software companies, including the largest vertical market software company, AMI, an Inc. 500 firm rated by IDC as the fastest growing computer-related company in the world.

He has served on advisory boards for Microsoft, IBM, DEC, Comdex and Apple, and as board member/founding investor in some of the most innovative firms in their field, including Blue Coat, Bright Star and Sabaki. Past advisor to two governors and a senator, a board member of the Washington Technology Center, and founder of the WTIA, the nation's most active regional technology trade association.

He worked with the Canadian government to found SoftWorld, and he was recently chosen as one of the 200 most influential individuals in the IT community in Europe. He was also the only American juror for the recent Tornado 100 Awards given to Europe's top technology firms

A graduate with Distinction from Harvard Business School, Bruce has written three books on business models for success, including *Power Planning*. He is a frequent lecturer and author.

Moderator



Timothy Goddard
EVP, Marketing
Corum Group Ltd.

Timothy joined Corum in 2011, and oversees the company's marketing efforts globally from the headquarters near Seattle. Chief among these is Corum's extensive conference schedule, "Selling Up, Selling Out," the Merge Briefing, the Tech M&A Monthly webcast and Corum's platinum sponsorship of the World Financial Symposiums' live events and Market Spotlight series. Through these events, Corum Group serves as the world's leading educator in technology mergers and acquisitions.

Prior to joining Corum, Timothy served as marketing and product manager for GIS software startup Depiction, Inc., and previously worked in marketing for VizX Labs, a pioneering SaaS startup delivering DNA analysis tools. In addition to marketing for software startups, Tim has worked for a US Senate campaign and taught science in Rio de Janeiro.

Timothy graduated Magna Cum Laude from Bethel University in St. Paul, Minnesota, with degrees in History and Biology.

Agenda

- Welcome
- AI Market Spotlight Report
- Upcoming Events
- December 2017 Research Report
- 10 Keys to a Valuable Valuation
- Special Report: Quality of Revenue
- Q&A



MARKET SPOTLIGHT
Artificial Intelligence



Tim Casio
Samsung NEXT



Jiren Parikh
Ghost Robotics



Elon Gasper
Corum Group



Ivan Ruzic
Corum Group

On Demand at
<https://www.wfs.com/ai-2017>

Upcoming Events

- December 19
<https://www.wfs.com/marketingtech-2017>



- December 21
<https://www.wfs.com/datasecurity-2017>



Upcoming Events



Growth & Exit Strategies San Francisco

February 22, 2018

<https://www.wfs.com/SF-2018>

Corum Research Report



Elon Gasper
EVP, Research



Yasmin Khodamoradi
Director, Valuation Services



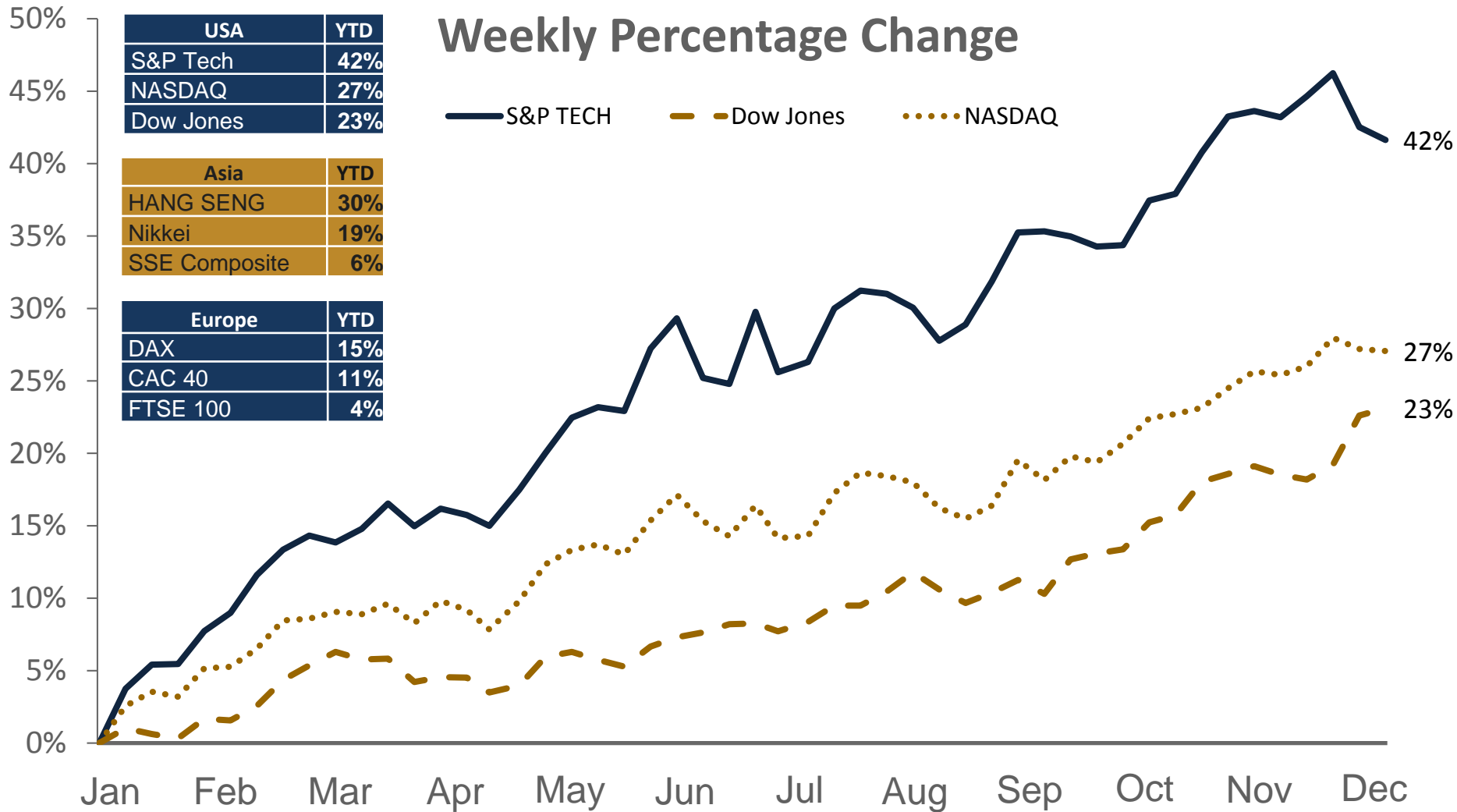
Becky Hill
Analyst



Patrick Cunningham
Analyst

Public Markets 2017

Weekly Percentage Change



Macro view: 4 Longest Bull Market Runs

		Start	End	Years
1	Dotcom Bubble	Oct. 11, 1990	Mar. 24, 2000	9.5
2	Current	Mar. 9, 2009	?	8.8
3	Postwar Boom	Jun. 13, 1949	Aug. 2, 1956	7.1
4	That 70s Inflation	Oct. 3, 1974	Nov. 28, 1980	6.2



*Since the Great Depression. Source: S&P Capital IQ, The Associated Press

Corum Index

Market

Transactions

Nov. 2016

246

Nov. 2017

246

Mega Deals

8

5

38%

Largest Deal

\$8.0B

\$6.0B

25%

Pipeline

Private Equity Deals

Nov. 2016

23

Nov. 2017

30

30%

VC Backed Exits

61

46

25%

Attributes

Cross Border Transactions

Nov. 2016

37%

Nov. 2017

37%

Start-Up Acquisitions

13%

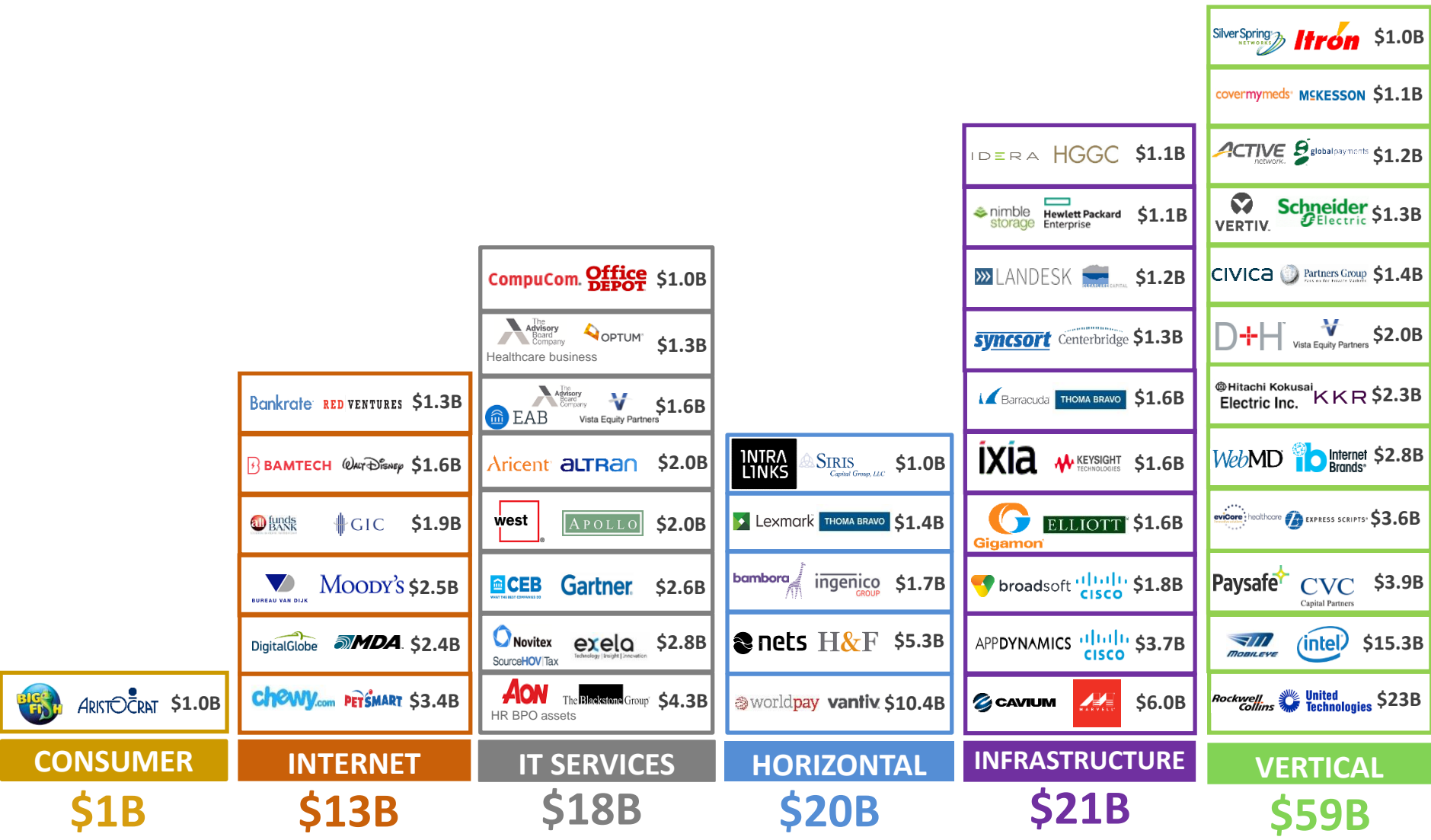
13%

Average Life of Target

16 yrs

15 yrs

2017 Mega Deals – YTD



2017 Mega Deals – YTD



Sold to

THOMA BRAVO

Target: Barracuda Networks [USA]

Acquirer: Thoma Bravo [USA]

Transaction Value: \$1.6B (4x EV/Sales)

- Data storage, disaster recovery, content and network security

IDERA	HGGC	\$1.1B
nimble storage	Hewlett Packard Enterprise	\$1.1B
LANDESK	DELL EMC	\$1.2B
syncsort	Centerbridge	\$1.3B
Barracuda	THOMA BRAVO	\$1.6B
ixia	KEYSIGHT TECHNOLOGIES	\$1.6B
Gigamon	ELLIOTT	\$1.6B
broadsoft	CISCO	\$1.8B
APPDYNAMICS	CISCO	\$3.7B
CAVIUM	ARM	\$6.0B

Silver Spring Networks	Itron	\$1.0B
covermy meds	MCKESSON	\$1.1B
ACTIVE NETWORKS	global payments	\$1.2B
VERTIV	Schneider Electric	\$1.3B
CIVICA	Partners Group	\$1.4B
D+H	Vista Equity Partners	\$2.0B
Hitachi Kokusai Electric Inc.	KKR	\$2.3B
WebMD	Internet Brands	\$2.8B
evicore healthcare	EXPRESS SCRIPTS	\$3.6B
Paysafe	CVC Capital Partners	\$3.9B
MOBILEVE	intel	\$15.3B
Rockwell Collins	United Technologies	\$23B

Bankrate	RED VENTURES	\$1.3B
BAMTECH	Walt Disney	\$1.6B
Funds Bank	GIC	\$1.9B
Bureau Van Dijk	Moody's	\$2.5B
DigitalGlobe	MDA	\$2.4B
chewy.com	PETSMART	\$3.4B
Healthcare business		\$1.3B
EAB	Vista Equity Partners	\$1.6B
Aricent	ALTRAN	\$2.0B
west	APOLLO	\$2.0B
CEB	Gartner	\$2.6B
Novitex	exela	\$2.8B
AON	The Blackstone Group	\$4.3B

INTRALINKS	SIRIS Capital Group, LLC	\$1.0B
Lexmark	THOMA BRAVO	\$1.4B
bambora	ingenico GROUP	\$1.7B
nets	H&F	\$5.3B
worldpay	vantiv	\$10.4B

BIG FISH	ARISTOCRAT	\$1.0B
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CONSUMER

\$1B

INTERNET

\$13B

IT SERVICES

\$18B

HORIZONTAL

\$20B

INFRASTRUCTURE

\$21B

VERTICAL

\$59B

2017 Mega Deals – YTD



Sold to

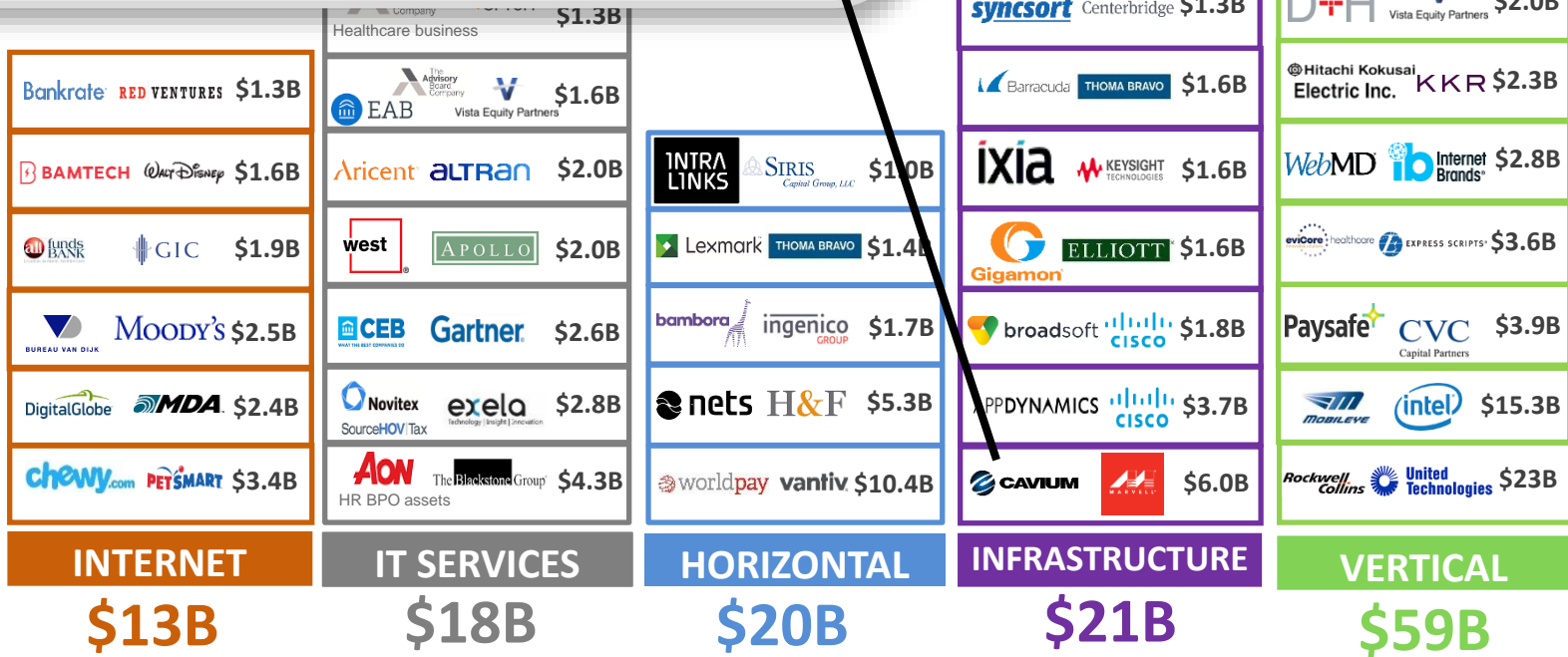


Target: Cavium [USA]

Acquirer: Marvell Technology Group [USA]

Transaction Value: \$6B (6.8x EV/Sales)

- Semiconductor processors for intelligent and secure networks





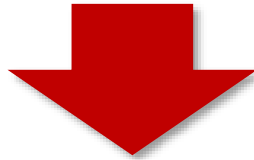
Internet Application Software Market

Public Valuation Multiples

Since Q3

Nov. 2017

Corum Analysis



A quick drop back from its high in October...



...as the market returns to its basic preference for profits



Internet Application Software Market

Deal Spotlights: European Travel Sites



Target: Accomable [United Kingdom]

Acquirer: Airbnb [USA]

- Solutions and services to help people with disabilities find accessible properties around the world

Sold to



EV



Target: Bravometa CH [dba hotelscan] [Switzerland]

Acquirer: lastminute.com [Bravofly Rumbo] [United Kingdom]

- Search engine to compare and book all types of accommodations

Sold to

lastminute.com

EV



Target: Atcore Technology Group [MBO] [United Kingdom]

Acquirer: Inflexion Private Equity [United Kingdom]

- Reservation and e-commerce software solutions

Sold to



EV



Target: e-Travel [Greece]

Acquirer: eTRAVELi Holding [CVC Capital Partners] [Sweden]

- E-commerce company specialized on online travel

Sold to





Internet Application Software Market

Deal Spotlights: Ctrip Acquisitions



Target: Gogobot [dba Trip.com] [United Kingdom]

Acquirer: Ctrip.com International [China]

- Travel services including accommodation reservation, transportation ticketing etc.



Target: Twizoo [United Kingdom]

Acquirer: Skyscanner Holdings [Ctrip.com International] [Scotland]

- Restaurant recommendation application that uses Tweets as customer reviews



Internet Application Software Market

Deal Spotlights: Social Networks



EV

Target: Musical.ly [USA]

Acquirer: Toutiao [Beijing Bytedance Technology] [China]

Transaction Value: \$800M

- Mobile app enabling personal lip-syncing videos



EV

Target: Meetup [USA]

Acquirer: WeWork [USA]

Transaction Value: \$200M

- Online social networking service to organize and/or join offline group meetings
- Facilitates WeWork's transformation into a "physical social network"



IT Services Software Market

Public Valuation Multiples

Since Q3

Nov. 2017

Corum Analysis



*Holding just below
midyear's all-time
records...*



*...both metrics may
have reached the
services ceiling*

2017 Mega Deals – YTD

Aricent[®]

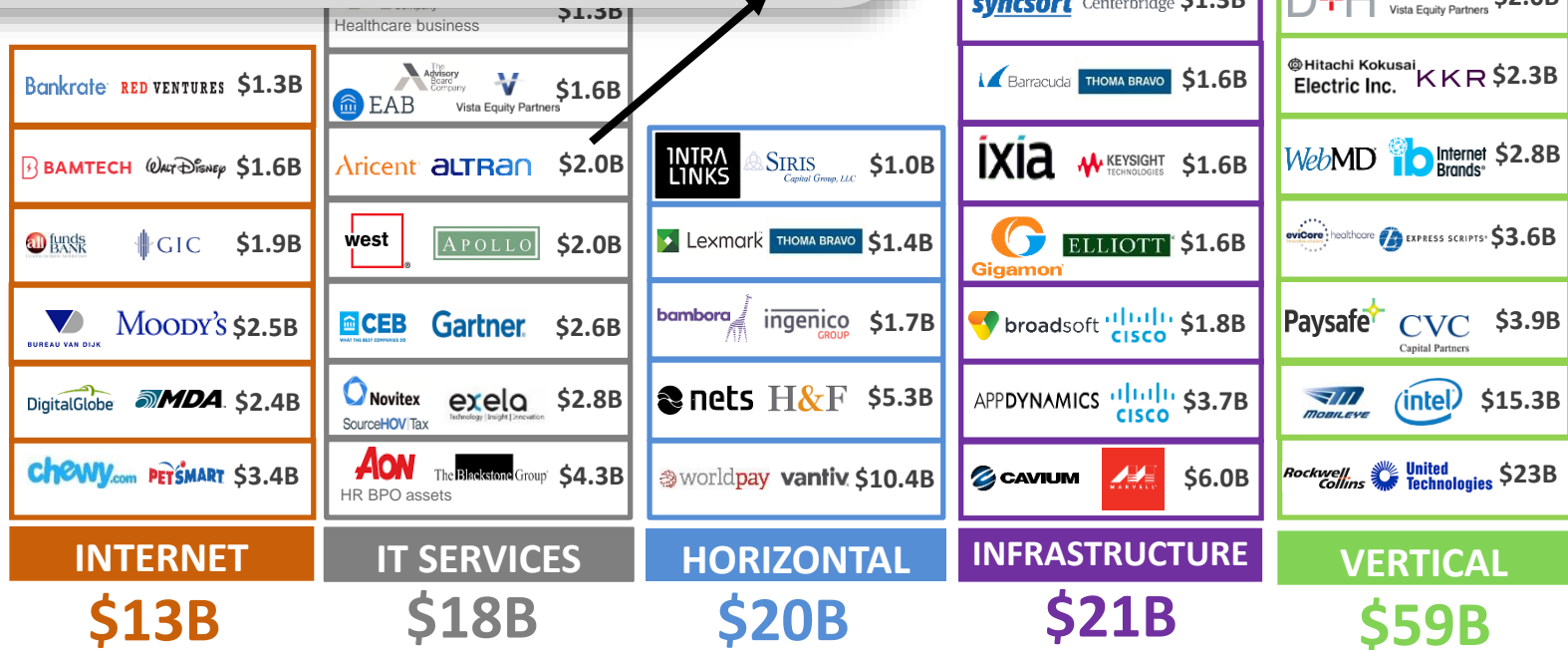


alTran

Target: Aricent [KKR] [USA]
Acquirer: Altran Technologies [France]
Transaction Value: \$2B (2.9x EV/Sales)



- System integration, software development and engineering services





IT Services Software Market

Deal Spotlights: Security Integration



Decision Lab

Sold to



Target: Decision Lab [USA]

Acquirer: Optiv Security [KKR] [USA]

- Big data, automation and orchestration services



IT Solutions To Enhance & Secure Your Business

Sold to



Target: Conexsys [Canada]

Acquirer: Optiv Security [KKR] [USA]

- Security integration and managed solutions



IT Services Software Market

Deal Spotlight: Systems Integration for Financial Services

Since Q3

Nov. 2017

Corum Analysis

syncordis

Sold to



L&T Infotech

Target: Syncordis [Luxembourg]

Acquirer: Larsen & Toubro Infotech [India]

Transaction Value: \$33.13M

- IT consulting services for the banking and financial industry
- Expands LTI's banking implementation capabilities



IT Services Software Market

Deal Spotlights: ERP System Integration



NOVUME™

Target: NeoSystems [USA]
Acquirer: Novume Solutions [USA]
Transaction Value: \$22.2M

- ERP and BI integration services for businesses, government and non-profits



Target: Anisa Consolidated Holdings [United Kingdom]
Acquirer: Sanderson Group [United Kingdom]
Transaction Value: \$17.2M

- SCM and ERP for manufacturing, logistics, retail and wholesale distribution



IT Services Software Market

Deal Spotlights: Digital Marketing Services



Target: Moku Collective [USA]
Acquirer: DEG [USA]

- Digital marketing and IT consulting for retail and consumer goods industries



Target: Oxyma Group [Netherlands]
Acquirer: Dentsu Aegis Network [Dentsu] [UK]

- Omni-channel and loyalty-based marketing services in the Netherlands & Dubai



IT Services Software Market

Deal Spotlights: Digital Marketing Services



Cheil

EV

Target: Atom42 [United Kingdom]
Acquirer: Cheil Worldwide [South Korea]

- Digital marketing, web design, and consulting services

OBSCURA



EV

Target: Obscura Digital [USA]
Acquirer: The Madison Square Garden Company [USA]

- Designs and develops custom video content and large-scale interactive projections



Consumer Software Market

Public Valuation Multiples

Since Q3

Nov. 2017

Corum Analysis



Relatively consistent since the summer, for such a volatile market



Also back to summer levels, though by a more circuitous route

2017 Mega Deals – YTD



Target: Big Fish Games [USA]
Acquirer: Aristocrat Leisure [Australia]
Transaction Value: \$990M (2.2x EV/Sales and 11.9x EBITDA)

- Developer and distributor of casual games

Aristocrat \$1.0B CONSUMER \$1B	Bankrate RED VENTURES \$1.3B BAMTECH Walt Disney \$1.6B Funds BANK GIC \$1.9B Bureau Van Dijk Moody's \$2.5B DigitalGlobe MDA \$2.4B chevy.com PETS MART \$3.4B INTERNET \$13B	Healthcare business \$1.3B EAB Vista Equity Partners \$1.6B Aricent ALTRAN \$2.0B west APOLLO \$2.0B CEB Gartner \$2.6B Novitex SourceHOV Tax exela \$2.8B AON The Blackstone Group \$4.3B HR BPO assets IT SERVICES \$18B	INTRA LINKS SIRIS Capital Group, LLC \$1.0B Lexmark THOMA BRAVO \$1.4B bambora ingenico GROUP \$1.7B nets H&F \$5.3B worldpay vantiv \$10.4B HORIZONTAL \$20B	IDERA HGGC \$1.1B nimble storage Hewlett Packard Enterprise \$1.1B LANDESK \$1.2B syncsort Centerbridge \$1.3B Barracuda THOMA BRAVO \$1.6B ixia KEYSIGHT TECHNOLOGIES \$1.6B Gigamon ELLIOTT \$1.6B broadsoft CISCO \$1.8B APPDYNAMICS CISCO \$3.7B CAVIUM \$6.0B INFRASTRUCTURE \$21B	Silver Spring NETWORKS Itron \$1.0B covermy meds MCKESSON \$1.1B ACTIVE NETWORKS global payments \$1.2B VERTIV Schneider Electric \$1.3B CIVICA Partners Group \$1.4B D+H Vista Equity Partners \$2.0B Hitachi Kokusai Electric Inc. KKR \$2.3B WebMD Internet Brands \$2.8B evicore healthcare EXPRESS SCRIPTS \$3.6B Paysafe CVC \$3.9B Mobileye intel \$15.3B Rockwell Collins United Technologies \$23B VERTICAL \$59B
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Consumer Software Market

Deal Spotlights: Core Gaming



Sold to



Target: Experiment 101 [Sweden]

Acquirer: THQ Nordic [USA]

Transaction Value: \$9M

- Maker of post-apocalyptic kung-fu fable action RPG, Biomutant

EV

S



Sold to



Target: Eden Games [Infogrames Entertainment S.A.] [France]

Acquirer: Millennial Esports Corporation [Canada]

Transaction Value: \$12M

- Racing game development studio

EV

EE



Consumer Software Market

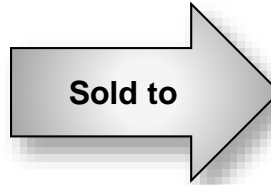
Deal Spotlight: Core Gaming

Since Q3

Nov. 2017

Corum Analysis

EV



Target: Respawn Entertainment [USA]

Acquirer: Electronic Arts [USA]

Transaction Value: \$315M

- Developer of fast-paced blockbuster FPS Titanfall
- EA outbid Nexon, co-publisher of Titanfall

EV

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Consumer Software Market

Deal Spotlights: Casual Gaming



Target: Pixelberry Studios [USA]
Acquirer: Nexon Co [Japan]

- Mobile game development studio aiming to educate players about the effects of cyberbullying and eating disorders

EV
Sa



Target: Peak Games (mobile card game assets) [Turkey]
Acquirer: Zynga [USA]
Transaction Value: \$100M

- Community-based multiplayer synchronous mobile games
- Enhances Zynga's card-based audience

EV
EB



Consumer Software Market

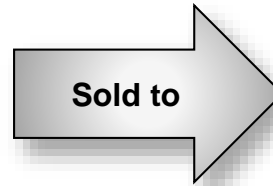
Deal Spotlight: Entertainment

Since Q3

Nov. 2017

Corum Analysis

EV



Target: Shazam Entertainment [United Kingdom]

Acquirer: Apple [USA]

Transaction value: \$400M (reported)

- Music recognition service
- Shazam tech fits into “For You” section of Apple Music
- One of the largest Apple’s acquisitions, after buying Beats for \$3B in 2014

EV

E

Corum Research Report



Elon Gasper
EVP, Research



Yasmin Khodamoradi
Director, Valuation Services



Becky Hill
Analyst



Patrick Cunningham
Analyst

10 Keys to a Valuable Valuation



10 Keys to a Valuable Valuation



Bruce Milne
CEO
Corum Group Ltd.

A leader in the software industry, Bruce has founded or owned four software companies, including the largest vertical market software company, AMI, an Inc. 500 firm rated by IDC as the fastest growing computer-related company in the world.

He has served on advisory boards for Microsoft, IBM, DEC, Comdex and Apple, and as board member/founding investor in some of the most innovative firms in their field, including Blue Coat, Bright Star and Sabaki. Past advisor to two governors and a senator, a board member of the Washington Technology Center, and founder of the WTIA, the nation's most active regional technology trade association.

He worked with the Canadian government to found SoftWorld, and he was recently chosen as one of the 200 most influential individuals in the IT community in Europe. He was also the only American juror for the recent Tornado 100 Awards given to Europe's top technology firms

A graduate with Distinction from Harvard Business School, Bruce has written three books on business models for success, including *Power Planning*. He is a frequent lecturer and author.

10 Keys to a Valuable Valuation: Software Company Difference



Libby Chick
Marketing Assistant
Corum Group Ltd.

Libby joined Corum in late 2017 as a Marketing Assistant. Her responsibilities cover event coordination and follow-up marketing, social media, market spotlights, and as-needed website maintenance. Prior to joining Corum, Libby was in Shanghai, where she held several analysis and strategy roles in advertising agencies.

Libby speaks English, French, Mandarin, and Arabic. She earned her BSBA in Marketing from the University of Pittsburgh, where she also completed certificates in Arabic Language & Linguistics and Global Studies: Changing Identities in the Middle East.

Software Companies Differences

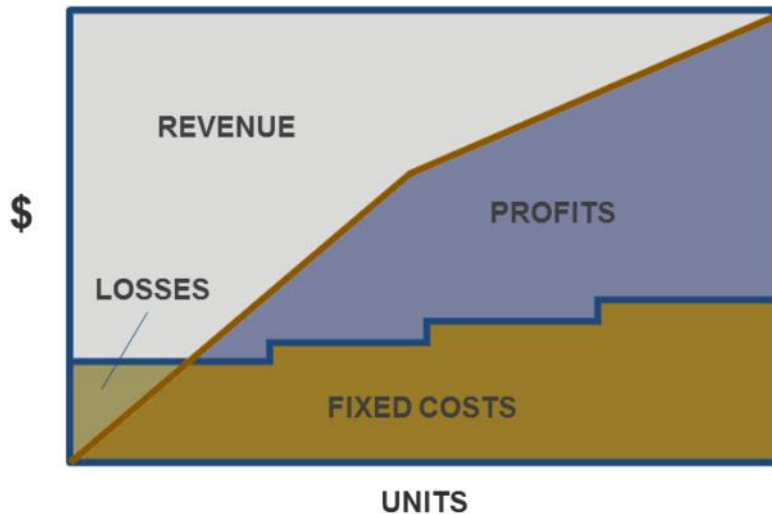
	Traditional Family Firm	Software Company
Avg. Age of Company	30+ years	8 years
Avg. Age of CEO	60+ years	38
Reasons for Selling	No Proper Heir, Retiring	Liquidity, Timing
Value	Tangible Assets	Intangible Assets
Margins	Low	High
Sales	Regional	Nat'l/Int'l
Technology Changes	Slow	Rapid
Competition	Well Known	Diverse
Entry Barriers	High	Low

Software Companies Differences

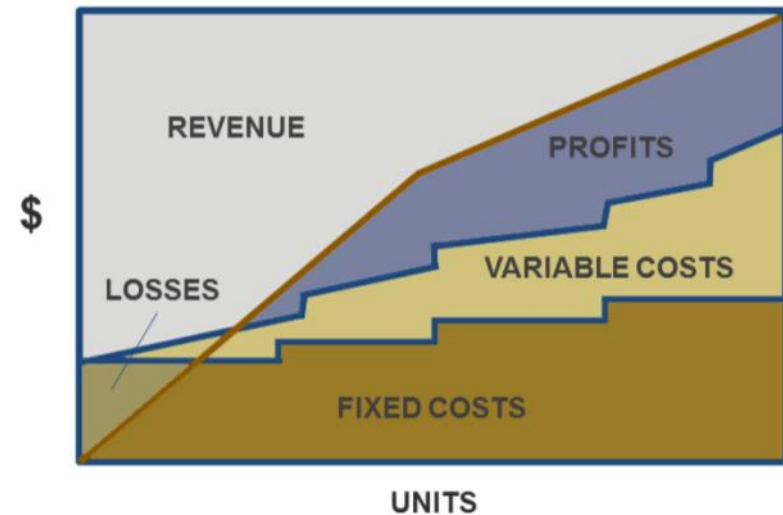
	Traditional Family Firm	Software Company
Avg. Employee Age	40+	30
Co. Growth Rate	Minimal	Rapid
Credit	Bank Lines on Assets, Invent., A/R	Credit Card
Mgmt. Experience	High	Minimal
Primary Advertising	Yellow Pages, Local Papers	Constantly Evolving
Revenue Stream	Predictable	Volatile
Valuation Methods	**Traditional	*Innovative

Traditional Enterprise Vs. Software

Typical Software Company-
No Variable Costs

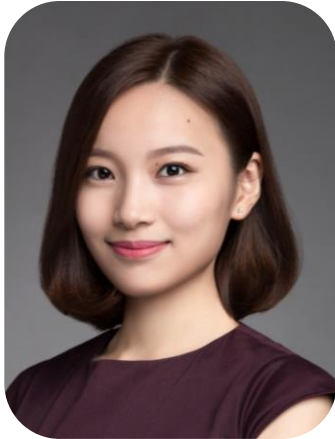


Typical Traditional Business-
Costs rise with revenue



Software companies are more valuable

10 Keys to a Valuable Valuation: Type of Valuation?



Evelyn Chen
Marketing Assistant
Corum Group Ltd.

Evelyn Chen joined Corum in 2017 as a Marketing Assistant. Her primary role is to support a series of educational live conferences and monthly webcasts hosted by Corum.

Prior to joining Corum, Evelyn worked in the marketing departments at Firsttrade Securities in New York and at Huawei Technologies in China. She received a Master's degree in Education from the University of Edinburgh and a Bachelor's degree in Economics from Xiamen University.

10 Keys to a Valuable Valuation: Top 10 Valuation Methods



Yasmin Khodamoradi
Director, Valuation Services
Corum Group Ltd.

Yasmin Khodamoradi joined Corum Group in 2015, providing research on valuations and assisting with sell-side M&A transactions. As Director of Valuation Services, she has helped dozens of tech companies determine their value in the market, with a focus on enterprise software and SaaS, IT services, and vertical sector solutions. Previously, she worked for a fintech startup and a global angel investment firm.

Yasmin graduated from the Foster School of Business at the University of Washington, specializing in Finance and International Business.

10 Ways to Value a Company

- Sales multiple – Public peer group
- Earnings multiple – Public peer group
- Comparable M&A transaction analysis
- Discounted cash flow (DCF)
- Replacement cost analysis
- Dollars per R&D Developer
- Internal rate of return (IRR)
- Liquidation value
- Book value
- Internal Transaction Price

10 Keys to a Valuable Valuation: Valuation Presentation



Elizabeth Gotski
Marketing Assistant
Corum Group Ltd.

Elizabeth joined Corum in 2017 as a Marketing Assistant. Her current focus is written content, working on press releases and material for the website.

Before joining Corum, Elizabeth worked as a freelancer. She did a bit of travel while still providing writing, editing, and proofreading services to clients around the globe. Her projects ranged from helping create and improve websites to editing full-length novels.

Elizabeth graduated from Western Washington University in 2016 with a B.A. in English Creative Writing and a minor in Technical Writing.

10 Keys to a Valuable Valuation: Financials Required



Jeff Brown
Senior Vice President
Corum Group Ltd.

Jeff joined Corum in 2007 as Regional Director in Houston, Texas. He has over 25 years of entrepreneurial and consulting experience building software and business services companies. He specializes in information technology for engineering, scientific and business applications. He also understands the energy industry and multinational operations.

Jeff helped form and was President of Severn Trent Worksuite, a FTSE 100 subsidiary, which became the leading provider of enterprise and wireless workflow management software. Jeff was Vice President at IntelliGIS, a pioneer in geographic information systems and wireless computing. Additionally, he launched Western Hemisphere operations for Simon Petroleum Technology, a provider of petroleum reservoir management software, and was a member of the initial management team at GeoQuest Systems, which became the leader in petroleum decision support systems.

Jeff began his career on the research staff at Columbia University and is a published author. He holds a degree in Geology from the State University of NY.

Financial Statements

Past Financial Statements



Future Projections



10 Keys to a Valuable Valuation: Public Company Multiples



Amanda Tallman
Senior Analyst
Corum Group Ltd.

Amanda joined Corum in 2012 as a marketing assistant and transferred to the research department in 2016 after serving 2 years as the senior marketing coordinator. As Senior Analyst, she helps to develop exit strategies and identify potential acquirers for Corum's clients.

Prior to joining Corum, Amanda served as an intern at Calypso Medical Technologies (later acquired by Varian Medical Systems) in Seattle. Amanda graduated Cum Laude from Gonzaga University with degrees in marketing and finance.

Example Public Valuation Comparables

Ticker	Company	Trailing 12-Month Multiples		Forward Multiples	
		Sales	Earnings	Sales	Earnings
BMC	BMC	3.72 x	11.36 x	3.41 x	14.96
CA	CA Technologies	2.61 x	7.12 x	2.46 x	12.05
CVG	Convergys	0.66 x	12.18 x	0.78 x	11.59
EGAN	eGain Communications	0.95 x	5.86 x	N/A	N/A
ININ	Interactive Intelligence	2.89 x	18.90 x	2.30 x	29.23
NICE	NICE Systems	2.79 x	18.72 x	2.43 x	17.52
PEGA	Pegasystems	3.97 x	41.23 x	2.98 x	28.35
RNOW	RightNow Technologies	4.08 x	42.95 x	3.34 x	41.97
SPRT	Support.com	6.25 x	nm	3.56 x	nm
SYMC	Symantec	2.32 x	7.97 x	2.16 x	11.29
VRNT	Verint Systems Inc	2.40 x	20.38 x	2.21 x	13.43
	Median Multiple	2.79 x	15.45 x	2.44 x	14.96 x
	After 25% Liquidity Discount	2.10 x	11.59 x	1.83 x	11.22 x
	Applied Financial Metric	\$4,300,000	\$900,000	\$7,500,000	\$1,742,000
	Implied Value	\$9,000,000	\$10,400,000	\$13,725,000	\$19,550,000

(in \$millions)

*nm (not meaningful) for multiples over 50x or negative

10 Keys to a Valuable Valuation: Comparable Transactions



Patrick Cunningham
Junior Research Analyst
Corum Group Ltd.

Patrick Cunningham joined Corum in 2017 as a Junior Research Analyst. He supports the Director of Research and the rest of the Corum team through market research and potential buyer preparation.

Patrick received a Bachelor's degree in Mathematics with a minor in Music from the University of Washington.

Example Private M&A Comparables

Buyer	Seller	Date Announced	Purchase Price	Seller Revenue TTM	EV/S Multiple
Consona Corp. [fka Made2Manage Systems] SupportSoft's enterprise business, which provides enterprise technical support software and services to digital service providers, corporate IT departments and managed service providers globally.	SupportSoft Inc. (Enterprise business)	Apr-09	\$20.0	\$42.1	0.48 x
Alcatel-Lucent Provides Interent and IP-based cable television service management software to telecommunications service providers.	Motive Communications, Inc.	Jun-08	\$67.8	\$64.4	1.05 x
Oracle Corporation Provides a broad range of e-commerce software and software as a service (SaaS) for businesses globally. Software provides features for online payments, merchandising, email marketing, business analytics, content management and customer service automation.	Art Technology Group, Inc.	Nov-10	\$1,000.0	\$193.9	5.16 x
Pitney Bowes Inc. Provides customer interaction management, analytics and optimization software for businesses globally.	Portrait Software	Jun-10	\$64.1	\$23.3	2.75 x
Pegasystems Inc. Provides customer experience management (CEM) software for the telecom, healthcare, insurance and financial services sectors.	Chordiant Software, Inc.	Mar-10	\$161.5	\$76.3	2.12 x
Enghouse Systems Limited Provides, through its subsidiaries, call center management and customer care software and telecommunications expense management software as a service (SaaS) for businesses globally. Software is compatible with Cisco, Nortel and Avaya systems.	Mettoni Group Ltd	Apr-10	\$22.6	\$25.7	0.88 x
Support.com [fka SupportSoft Inc.] Provides technology support and repair services to customers in North America. Services are delivered remotely over the Internet.	YourTechOnline.com Inc.	May-08	\$2.7	\$2.3	1.17 x
Convergys Corporation Provides interactive voice response and call center automation software to enterprises and telecommunications markets.	Intervoice, Inc. [Intervoice-Brite, Inc.]	Jul-08	\$335.0	\$206.2	1.62 x
salesforce.com Provides contact center and sales content management software to businesses. Applications automate the dispersal of customer service-focused information. Customers include 3M, AXA, BNP Paribas, France Telecom, Orange, SFR Cegetel, Wanadoo and Zurich North	InStranet	Aug-08	\$31.5	\$15.0	2.10 x
Art Technology Group, Inc. Provides chat and email-based customer service automation and analytics software as a service (SaaS) for businesses.	InstantService, Inc.	Jan-10	\$17.0	\$5.5	3.09 x
OpSource, Inc. Provides customer metering, on-boarding and billing software for software as a service (SaaS) and web based applications software providers. Software records and reports software usage allowing providers to offer SaaS on a pay per use and metered basis.	LeCayla Technologies Limited	Feb-08	\$1.0	\$0.2	5.00 x
				Median Sales Multiple	2.10x
				Implied Value	\$9,000,000

10 Keys to a Valuable Valuation: Discounted Cash Flow (DCF)

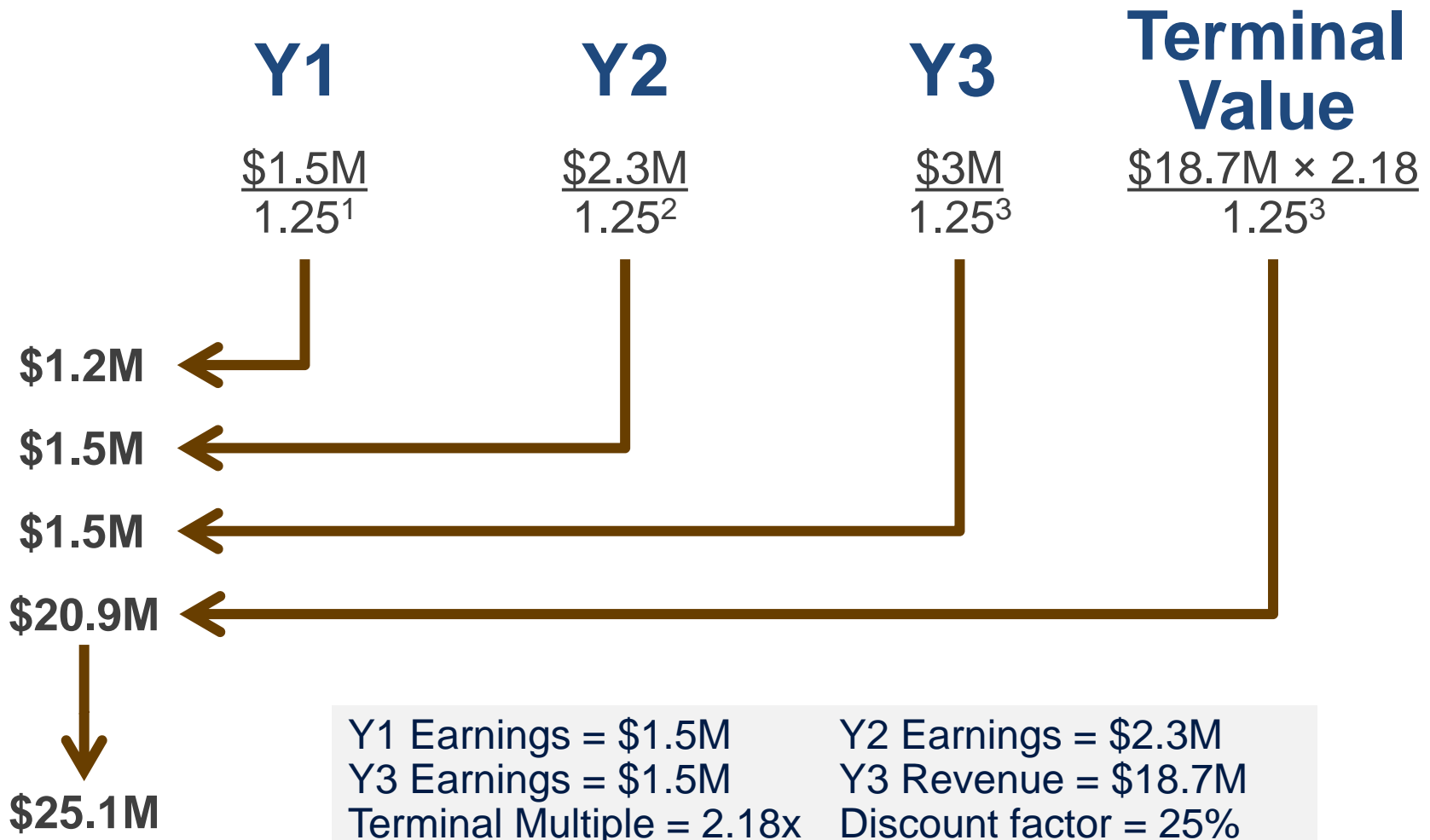


Becky Hill
Junior Research Analyst
Corum Group Ltd.

Becky joined Corum in 2017 as a Research Analyst. Her primary role is to support the research department by building buyer's lists for clients, as well as assist in writing executive summaries and synergy statements.

Prior to joining Corum, Becky conducted international market research for Darigold, focusing on growth opportunities in Southeast Asia. She also taught French at Western Washington University, where she earned Bachelor's degrees in French and International Business.

Calculating Discounted Cash Flow (DCF)



10 Keys to a Valuable Valuation: Replacement Value



Bruce Lazenby
Vice President
Corum Group Ltd.

Prior to rejoining Corum, Bruce was the Founding President and CEO of Invest Ottawa for 5 years. During that time he worked with over 1000 technology start-ups, raising over \$300m in venture capital and debt, and created over 4,700 jobs. Prior to joining Invest Ottawa, he was Chairman of the Ottawa Software Cluster for six years and Vice President in Canada for Corum Group.

Before that he held senior technology executive positions including six years as CEO with FreeBalance Inc. an enterprise software company where he raised millions of dollars in venture capital and debt financing, and helped grow the company by 300 per cent while moving into new international markets.

Bruce also had an extensive military career spanning 20 years' service in the Royal Canadian Navy and Air Force. He graduated from the Royal Military College and the Canadian Forces Command and Staff College. During his service Bruce managed the financial management and accounting systems for the Department of National Defense worldwide. Before that, he was a Navy Diver and underwent jet pilot training before retiring as a Commander in the Logistics Corp. Amongst other locations, he served at sea, in United Nations peacekeeping missions and the Canadian Arctic.

In 2005, he was voted Canada's Private Sector Technology Leader by the Canadian Advanced Technology Alliance and in 2016 he received Canadian Community Innovation Leadership Award by the same organization.

10 Keys to a Valuable Valuation: Weighted Averages



Jaber Tannay
Vice President
Corum Group Intl.

Jaber has over 25 years of experience in the technology sector. He recently was CEO of an IT services firm that he acquired, restructured and sold. Jaber has also an M&A advisory experience in the Software and IT Services sectors.

He has also invested time and funds into start-ups and young companies over the recent years in a diverse range of sectors. Earlier in his career, he worked as equity analyst covering Software stocks for ABN-AMRO, and held senior positions in global accounts management within SAP. Jaber started his career as management consultant with KPMG Peat Marwick.

Jaber holds an MSc in Computer Sciences from ENSEEIHT and an MBA from INSEAD. He has broad international experience and is fluent in English, French and Spanish."

Weighted Valuations

Comparable Public Company Analysis	Financial Metric	Applied Multiple	Implied Value	Weight	Weighted Value
Trailing Multiples					
Enterprise Value/TTM Revenue	4,300,000	2.10 x	9,000,000	8.3%	750,000
Trailing P/E	900,000	11.59 x	10,400,000	8.3%	870,000
Forward Multiples					
Enterprise Value/FY Revenue	7,500,000	1.83 x	13,725,000	8.3%	1,100,000
Forward P/E - FY Earnings	1,742,000	11.22 x	19,550,000	8.3%	1,600,000
			<i>Total Weighting of Method</i>	33.3%	4,320,000

Comparable Transaction Analysis	4,300,000	2.1 x	9,000,000	33.3%	3,000,000
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Discounted Cash Flow Analysis			21,750,000	33.3%	7,200,000
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Total Weighted Fair Market Value \$14,500,000

Assumptions/Definitions:

EV = Enterprise Value (Market Capitalization + Debt - Cash)

10 Keys to a Valuable Valuation: Timing of Valuation Presentation



Joel Espelien
Vice President, Client Services
Corum Group Ltd.

Joel Espelien has worked in a number of roles over a twenty year career in the technology industry. Most recently Joel served as Senior Advisor to Karmel Capital, where he advised on corporate spin-offs and M&A transactions, including the private-equity backed purchase of DivX LLC from Rovi Corporation and subsequent sale to Neulion, Inc, as well as the successful spin-off of Snaptracs, Inc. and its Tagg wireless pet tracking product from Qualcomm and the eventual two-stage sale to Whistle Labs and Mars Petcare. Joel has also served on the boards of multiple venture-backed companies resulting in successful exits, including AI startup IQ Engines (acquired by Yahoo) and IoT-for-AgTech pioneer 640 Labs (acquired by Monsanto/Climate Corporation). He has also written extensively for the Diffusion Group where he published 14 industry research reports as well as a widely recognized weekly blog.

Previously, Joel was the Chief Business Officer, SVP of Strategy and General Counsel of PacketVideo. While at PacketVideo, Joel led multiple buy-side acquisitions in the US and Europe, a groundbreaking technology partnership with Google that helped launch Android, a private-equity backed MBO and ultimately the sale of the company to NTT DoCoMo.

Prior to PacketVideo, Joel was a corporate attorney at Cooley LLP in Palo Alto and San Diego, California. Joel is a member of the Bar in both Washington and California. He holds a JD/LLM (International and Comparative Law) from Duke University and a BA from St. Olaf College. Joel is fluent in Spanish and has done business throughout Spain and Latin America.

10 Keys to a Valuable Valuation



Special Report: Quality of Revenue



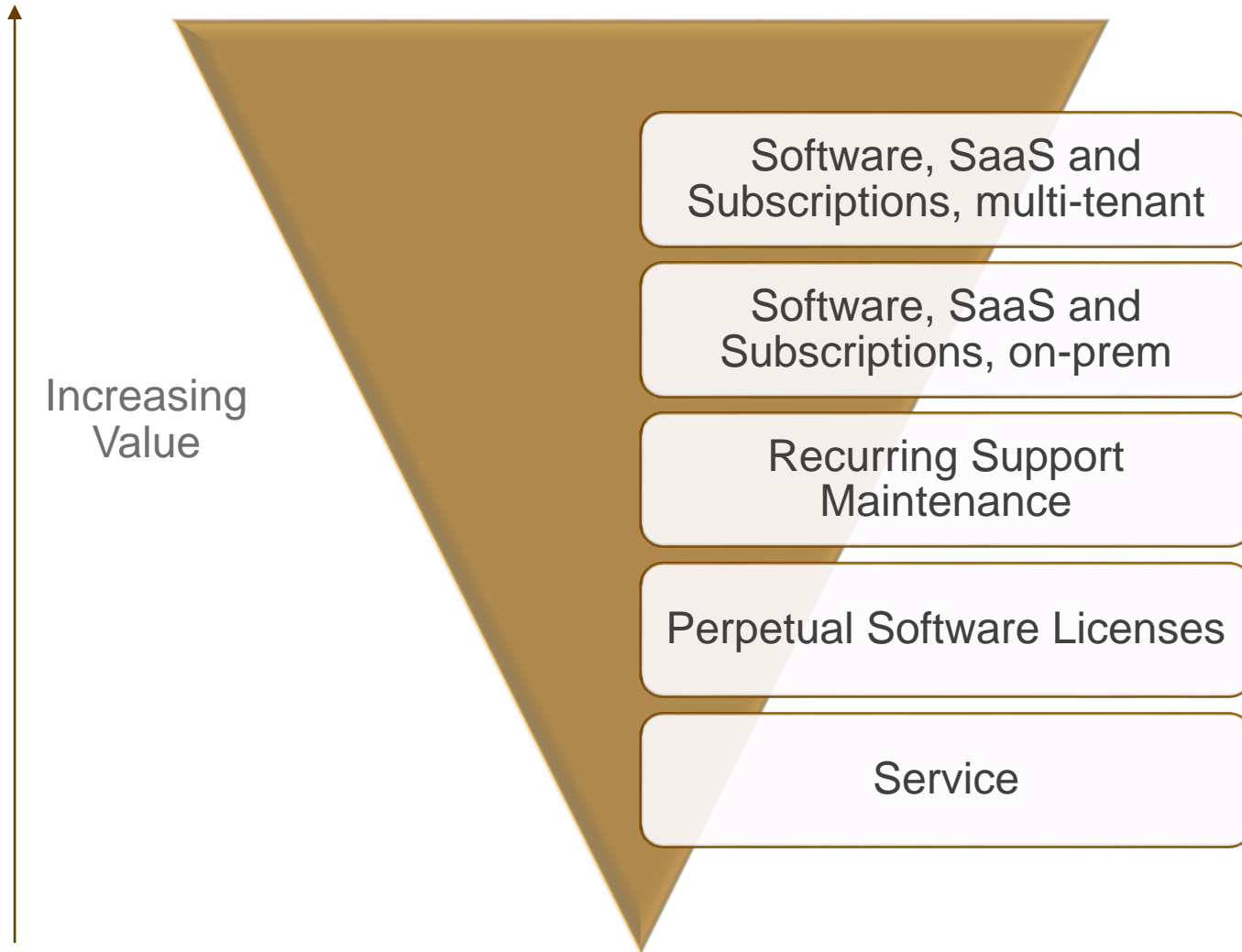
Daniel Bernstein
Senior Vice President
Corum Group Ltd.

Daniel Bernstein has worked in a number of roles over a twenty year career in high technology, most recently as the founder and CEO of Sandlot Games Corporation, a leading casual games publisher and developer. Having sold Sandlot Games to Digital Chocolate in 2011, Daniel started a small games studio and a consulting practice where he advises larger companies such as RealNetworks and smaller high growth businesses on product development, strategic initiatives, and M&A opportunities.

Prior to Sandlot Games, Daniel Bernstein held director level positions in companies such as Wild Tangent and Monolith. An accomplished composer, Daniel also writes music for most of the games he works on.

Daniel holds a BS in Computer Science and an MA in Music Composition from the University of Virginia.

The Quality of Revenue Value Pyramid



Churn Analysis

- Analyze churn by:
 - Revenue
 - Customer
- Revenue churn analysis:
 - Customers shrinking revenue
 - Customers terminating
 - Customers increasing revenue

Q&A

- We welcome your questions!
 - Use Q&A tab at the bottom of screen
 - Submit to queue at any time

Upcoming Conference Schedule

Dec. 19: **Market Spotlight: Marketing Technology**

Dec. 21: **Market Spotlight: Data Security**

Jan. 11: **Bothell** – MB

Jan. 25: **Sacramento** – MB

Jan. 29: **RSPA Inspire 2018**

Feb. 8: **Tech M&A Monthly: Private Equity Roundtable**

Feb. 22: **San Francisco** – Growth & Exit Strategies

Mar. 8: **Tech M&A Monthly: Seller's Panel**

...With more events in:

San Jose

Manchester

Boise

Detroit

Portland

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After the Deal – Celebration





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