SaaS CFOs:

SHOULD YOU CAPITALIZE DEVELOPMENT COSTS AND SALES COMMISSIONS?

AN ARMANINO WHITE PAPER

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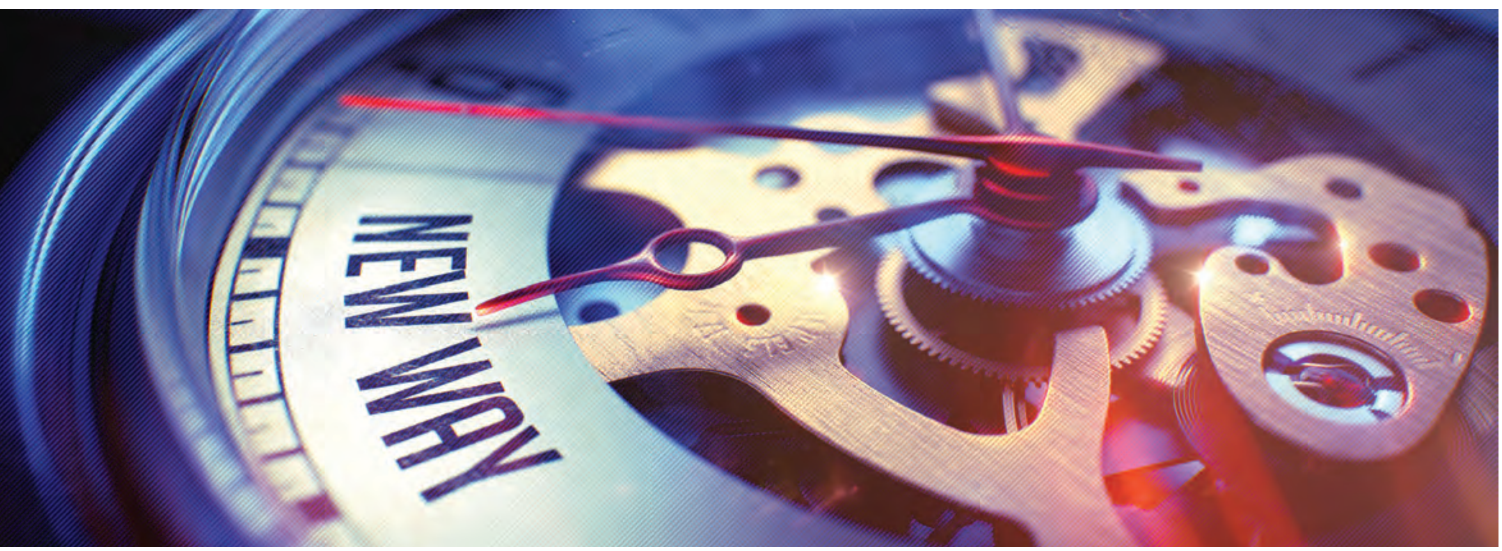


SAAS CFOS: SHOULD YOU CAPITALIZE DEVELOPMENT COSTS AND SALES COMMISSIONS?

Given that software/app/website development and sales commissions are often the top two expenditures for SaaS companies, CFOs need to continually evaluate these costs and their related accounting treatment. Our annual SaaS survey provides a useful tool to gauge how your organization stacks up against its peers in these important areas.

The 2017 survey is our largest ever and includes 100 publicly traded SaaS companies, up from last year's figure of 89. There were 31 companies added to this year's survey, while 20 dropped off because of going private or being acquired. Survey information was collected from participants' most recent 10-Ks, reflecting data for fiscal years ending in calendar year 2016.

At a high level, the 2017 survey results show that the percentage of companies capitalizing development costs edged up slightly (62% in 2017 versus 60% in 2016), while the percentage of companies capitalizing commissions paid to sales professionals declined slightly (22% in 2017 versus 24% in 2016).

All that said, you may need some clarification on what the GAAP rules state. We review the rules specific to development cost capitalization and commissions capitalization in the side bar.

GAAP RULES

Development Cost Capitalization

SaaS development costs are subject to "internal use" software capitalization rules, which typically have a longer window of time for eligible costs to be capitalized, versus the "external use" rules for software licensing companies. Brief summaries of the applicable FASB rules are shown in the table below:

SaaS		
Internal Use Software	*Subtopic 350-40*	Capitalization of costs begins when the preliminary project stage is completed, management has committed to funding the project, and it is probable that the project will be completed and the software will be used to perform the function intended. Capitalization ceases at the point in which the project is substantially complete and is ready for its intended purpose.
Website Development Costs	*Subtopic 350-50*	Costs incurred to purchase software tools, or costs incurred during the application development stage for internally developed tools, shall be capitalize

Traditional Software License		
Costs of Software to Be Sold, Leased, or Marketed	*Subtopic 985-20*	Development costs of software to be sold, leased, or otherwise marketed are subject to capitalization beginning when technological feasibility has been established and ending when the product is available for general release.

Commissions Capitalization

The GAAP rules applicable to SaaS companies state that: …incremental direct costs incurred related to the acquisition or origination of a customer contract in a transaction that results in the deferral of revenue, may be either expensed as incurred or deferred and charged to expense in proportion to the revenue recognized (ASC 605-20-25-4). The SEC believes the accounting policy chosen for these costs should be disclosed and applied consistently (ASC 605-10-S99, SAB Topic 13.A.3(f), Question 3).

The new revenue recognition standard (ASC 606) mandates that companies capitalize sales commissions if such costs are expected to be recovered through future revenues, unless the amortization period is one year or less. The capitalization of costs incremental to obtaining a contract and determining the period of amortization will be one of the most significant areas affected by the new revenue recognition standard, as companies will no longer have the option to immediately "expense as you go."

The new standard does provide a practical expedient that applies principally to SaaS contracts of less than one year, but with the majority of SaaS sales teams focused on multi-year deals, we expect that most companies will move to capitalizing commissions when they adopt ASC 606, which goes into effect on January 1, 2018, for public companies.

2017 SURVEY RESULTS

Development Cost Capitalization

The rules clearly state that capitalization is mandatory, but in practice, 38 of the 100 companies surveyed (38%) continue to expense all software development costs. So how does a company like Oracle, which spent $5.8 billion on research and development (R&D) in fiscal 2016, determine that they don't need to capitalize such costs, when presumably most of the spending is on software development?

Oracle's footnote simply says: "Software development costs required to be capitalized under ASC 985-20, Costs of Software to be Sold, Leased or Marketed, and under ASC 350-40, Internal-Use Software, were not material to our consolidated financial statements in fiscal 2016, 2015 and 2014."

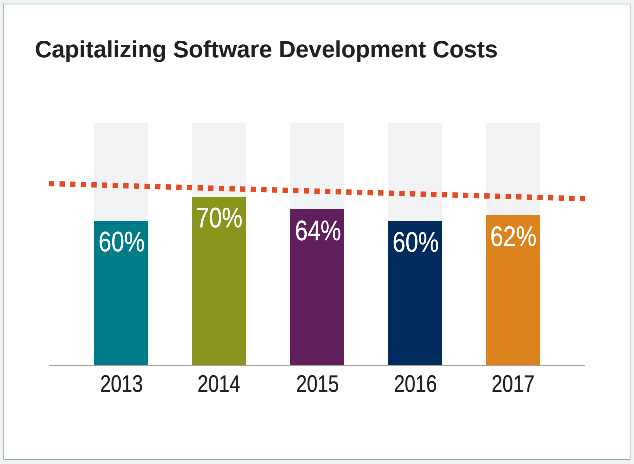
VMware ($975 million spent on R&D) and Intuit ($881 million spent on R&D) both state that their policy is to capitalize internal-use software costs, but the footnotes don't disclose that any such amounts were actually capitalized.

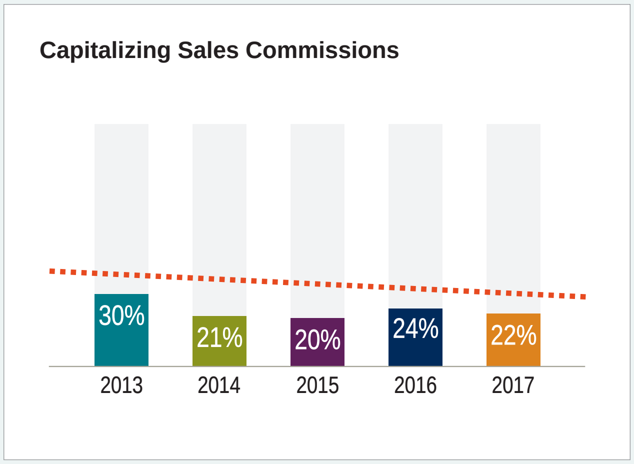
Although this practice appears to skirt the requirement to capitalize development expenses, it seems that the companies, their auditors and the SEC are content with this answer, because it results in immediate expense recognition—a more conservative solution than deferring costs on the balance sheet.

Commissions Capitalization

The year-over-year decline in capitalized commissions (from 24% in 2016 to 22% in 2017) was surprising given that upon adoption of ASC 606 on January 1, 2018, we expect virtually all public SaaS companies will capitalize commissions, and ASC 606 mandates retrospective adjustment—meaning companies will have to calculate the effect of having adopted these practices for all prior periods shown. The two-percentage point decline in 2016 can largely be explained by the mix of companies in the survey versus the prior year, while others may be reliant on a practical expedient, which allows the companies to elect to expense incremental costs if the amortization is one year or less.

Of the 31 new companies added in 2016, just 13% elected to capitalize commissions. Ironically, survey newcomer Xactly, which provides a commissions calculation and tracking solution, stated in its footnotes: "We are continuing to evaluate potential impacts on other aspects of this ASU (606), notably the timing of recognition of certain expenses such as sales commissions," signaling that they expect to defer commissions in the future but are not doing so now.





Do auditors influence capitalization practices?

It appears there is some disparity in capitalization practices based on the company's audit firm, as illustrated in the tables below. Companies audited by regional firms capitalized software development costs at a rate of 38% (six of the 16 companies), about half of the rate of those audited by national and Big 4 firms.

Companies Capitalizing Development Costs	2016	2017
Big 4	63%	65%
National	67%	78%
Regional	25%	38%
Total	**60%**	**62%**

Similarly, those SaaS companies audited by national and regional firms capitalized commissions at a much lower rate than those companies audited by the Big 4.

Companies Capitalizing Commissions	2016	2017
Big 4	26%	25%
National	22%	11%
Regional	13%	14%
Total	**24%**	**22%**

FINAL THOUGHTS

ASC 606 won't change the way SaaS companies treat software development costs. However, the new revenue standard does cite sales commissions as an example of a cost that may require capitalization. Under the new guidance, entities will capitalize costs that relate directly to the contract and are expected to be recovered. In order for costs to meet the "expected to be recovered" criterion, costs should be reflected in the pricing on the contract and recoverable through margin.

Given that this new standard mandates a full or modified retrospective adoption, we had anticipated that more SaaS companies would begin deferring commissions, avoiding a complex "what if we had deferred?" calculation upon adoption. Given the minimal change in adoption rate from the prior year, we recommend that companies with multi-year contracts begin making these calculations now.

In light of the survey findings and the new standard, SaaS companies should continuously evaluate their decisions on capitalizing software development and commission costs, as there are several short- and long-term implications. They should also consult with their auditors and, ultimately, adopt the method they believe most closely aligns with the intent of the rules.


Start Evaluting Now

STRATEGIC INSIGHTS PRACTICAL ACTION

Armanino provides an integrated set of accounting services — audit, tax, consulting and technology solutions — to a wide range of organizations operating both in the U.S. and globally.

You can count on Armanino to think strategically and provide the sound insights that lead to positive action. We address not just your compliance issues, but your underlying business challenges, as well —assessing opportunities, weighing risks, and exploring the practical implications of both your short- and long-term decisions.

When you work with us, we give you options that are fully aligned with your business strategy. If you need to do more with less, we will implement the technology to automate your business processes. If the issue is financial, we can show you proven benchmarks and best practices that can add value companywide. If it's operational, we'll consult with your people about workflow efficiencies. If it is compliance, we'll ensure that you meet the requirements and proactively plan to take full advantage of the changes at hand. At every stage in your company's lifecycle, we'll help you find the right balance of people, processes and technology.

For further information regarding cost capitalization, contact one of our SaaS experts:

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Dollars in Thousands

#	Company Name	Ticker Symbol	Auditor	Capitalize Software or Website Development Costs ?	Capitalize Commissions?	YE Date	Revenues, Current Year (CY)	Software Dev.Costs Capitalized on Balance Sheet (BS)	Software Dev. Costs Capitalized (CY)	Amortization Expense of Software Development Costs (CY)	NET Commissions Capitalized (BS)	Commissions Deferred/Capitalized (CY)	Commissions Amortized (CY)
1	**ADOBE SYSTEMS INCORPORATED**	ADBE	Big 4	Yes	No	12/2/2016	$ 5,854,430	N/A	N/A	N/A	N/A	N/A	N/A
2	**ACTIVISION BLIZZARD, INC.**	ATVI	Big 4	Yes	No	12/31/2016	$ 6,608,000	$ 412,000	$ 277,000	$ 335,000	N/A	N/A	N/A
3	**APPFOLIO INC**	APPF	Big 4	Yes	No	12/31/2016	$ 105,586	$ 15,539	$ 11,800	$ 6,200	N/A	N/A	N/A
4	**ARI NETWORK SERVICES INC**	ARIS	National	Yes	No	7/31/2016	$ 47,693	$ 5,031	$ 1,779	$ 2,108	N/A	N/A	N/A
5	**ARISTA NETWORKS, INC.**	ANET	Big 4	No	No	12/31/2016	$ 1,129,167	N/A	N/A	N/A	N/A	N/A	N/A
6	**ASPEN TECHNOLOGY, INC.**	AZPN	Big 4	Yes	No	6/30/2016	$ 472,344	$ 720	$ 300	$ 600	N/A	N/A	N/A
7	**ASTEA INTERNATIONAL INC**	ATEA	National	Yes	No	12/31/2016	$ 25,789	$ 4,021	$ 29,228	$ 2,299	N/A	N/A	N/A
8	**ATHENAHEALTH, INC.**	ATHN	Big 4	Yes	No	12/31/2016	$ 1,082,900	$ 125,800	$ 122,700	$ 73,500	N/A	N/A	N/A
9	**AUTODESK INC**	AUTO	Big 4	No	Yes	1/31/2017	$ 2,031,000	N/A	N/A	N/A	N/A	N/A	N/A
10	**AUTOMATIC DATA PROCESSING, INC.**	ADP	Big 4	Yes	No	6/30/2016	$ 11,667,800	$ 1,812	N/A	N/A	N/A	N/A	N/A
11	**BAZAARVOICE INC**	BV	Big 4	Yes	No	4/30/2017	$ 201,235	$ 28,358	$ 47,574	$ 8,700	N/A	N/A	N/A
12	**BENEFITFOCUS INC**	BNFT	Big 4	Yes	No	12/31/2016	$ 233,335	$ 26,142	$ 5,242	$ 2,857	N/A	N/A	N/A
13	**BLACKBAUD, INC.**	BLKB	Big 4	Yes	No	12/31/2016	$ 730,815	$ 37,582	$ 26,359	$ 8,300	N/A	N/A	N/A
14	**BLACKLINE, INC.**	BLACK	Big 4	Yes	Yes	12/31/2016	$ 123,123	$ 4,591	$ 3,270	$ 1,800	$ 9,667	$ 3,421	$ 13,200
15	**BOTTOMLINE TECHNOLOGIES (DE), INC.**	EPAY	Big 4	Yes	No	6/30/2016	$ 343,274	$ 24,600	$ 13,800	$ 1,248	N/A	N/A	N/A
16	**BOX**	BOX	Big 4	No	Yes	12/31/2016	$ 302,704	N/A	N/A	N/A	$ 12,603	$ 21,700	$ 15,816
17	**BRIGHTCOVE INC**	BCOV	Big 4	Yes	No	12/31/2016	$ 150,266	$ 14,648	$ 4,038	$ 690	N/A	N/A	N/A
18	**BROADRIDGE FINANCIAL SOLUTIONS, INC.**	BR	Big 4	No	No	6/30/2016	$ 2,897,000	N/A	N/A	N/A	N/A	N/A	N/A
19	**BROADSOFT**	BSFT	Big 4	Yes	No	12/31/2016	$ 340,962	$ 16,887	$ 3,500	$ 1,900	N/A	N/A	N/A
20	**BROADVISION INC**	BVSN	Big 4	No	No	12/31/2016	$ 7,940	N/A	N/A	N/A	N/A	N/A	N/A
21	**BSQUARE CORPORATION**	BSQR	Regional	No	No	12/31/2016	$ 97,441	N/A	N/A	N/A	N/A	N/A	N/A
22	**CADENCE DESIGN SYSTEMS INC**	CDNS	Big 4	Yes	No	12/31/2016	$ 1,816,083	N/A	$ 3,500	N/A	N/A	N/A	N/A
23	**CALLIDUS SOFTWARE**	CALD	Big 4	No	Yes	12/31/2016	$ 206,718	N/A	N/A	N/A	$ 11,500	$ 9,477	N/A
24	**CASTLIGHT HEALTH**	CSTH	Big 4	Yes	Yes	12/31/2016	$ 101,700	$ -	$ -	N/A	$ 13,268	$ 7,977	$ 5,070
25	**CHANNELADVISOR CORP**	ECOM	Big 4	Yes	No	12/31/2016	$ 113,200	$ 208	N/A	N/A	N/A	N/A	N/A
26	**CITRIX SYSTEMS, INC.**	CTXS	Big 4	Yes	Yes	12/31/2016	$ 3,418,265	$ 538,905	$ 84,800	N/A	N/A	N/A	N/A
27	**CORNERSTONE ONDEMAND, INC.**	CSOD	Big 4	Yes	Yes	12/31/2016	$ 423,124	$ 30,683	$ 20,900	$ 13,200	$ 36,298	$ 33,300	N/A
28	**COUPA SOFTWARE INC**	COUP	Big 4	Yes	Yes	1/31/2017	$ 133,775	$ 12,376	$ 4,300	$ 3,300	$ 5,986	$ 4,468	$ 4,004
29	**COVISINT CORPORATION**	COVS	Big 4	Yes	No	12/31/2017	$ 70,243	$ 9,673	$ 2,819	$ 4,274	N/A	N/A	N/A
30	**DATAWATCH CORPORATION**	DWCH	National	No	No	11/30/2016	$ 30,462	N/A	N/A	N/A	N/A	N/A	N/A
31	**DETERMINE, INC.**	DTRM	Regional	Yes	No	3/31/2017	$ 27,463	$ 2,341	$ 1,800	$ 1,200	N/A	N/A	N/A
32	**EGAIN CORP**	EGAN	Regional	No	Yes	6/30/2016	$ 69,375	N/A	N/A	N/A	$ 787	$ 1,049	$ 728

Dollars in Thousands

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33	**ELECTRONIC ARTS INC.**	EA	Big 4	No	No	3/31/2017	$ 4,845,000	N/A	N/A	N/A	N/A	N/A	N/A
34	**ELLIE MAE, INC.**	ELLI	National	Yes	Yes	12/31/2016	$ 360,285	N/A	$ 38,500	$ 8,300	$ 2,761	$ 4,900	N/A
35	**FALCONSTOR SOFTWARE INC**	FALC	Big 4	Yes	No	12/31/2016	$ 30,263	$ 548	$ 2,917	$ 449	N/A	NN	N/A
36	**FINANCIAL ENGINES, INC.**	FNGN	Big 4	Yes	No	12/31/2016	$ 281,920	$ 205,751	$ 6,904	$ 15,408	N/A	N/A	N/A
37	**FIVE 9**	FIVN	Big 4	Yes	No	12/31/2016	$ 162,090	$ 475	$ 500	N/A	N/A	N/A	N/A
38	**FRIENDABLE, INC.**	FIND	Regional	No	No	12/31/2016	$ 29	N/A	N/A	N/A	N/A	N/A	N/A
39	**GIGAMON INC.**	GGMO	Big 4	No	No	12/31/2016	$ 301,855	N/A	N/A	N/A	N/A	N/A	N/A
40	**GUIDANCE SOFTWARE INC**	GUID	Big 4	No	No	12/31/2016	$ 110,518	N/A	N/A	N/A	N/A	N/A	N/A
41	**GUIDEWIRE SOFTWARE INC**	GWRE	Big 4	No	No	7/31/2016	$ 424,446	N/A	N/A	N/A	N/A	N/A	N/A
42	**HEALTHSTREAM, INC.**	HSTM	Big 4	Yes	No	12/31/2016	$ 225,974	$ 16,310	$ 10,000	$ 7,700	N/A	N/A	N/A
43	**HORTONWORKS, INC.**	HRON	Big 4	No	No	12/31/2016	$ 184,461	N/A	N/A	N/A	N/A	N/A	N/A
44	**HUBSPOT**	HUBS	Big 4	Yes	Yes	12/31/2016	$ 270,967	$ 6,523	$ 5,749	$ 5,100	$ 9,025	$ 453	N/A
45	**IMPERVA**	IMPV	Big 4	No	No	12/31/2016	$ 264,455	N/A	N/A	N/A	N/A	N/A	N/A
46	**INTELLIGENT CLOUD RESOURCES INC.**	ITLL	Regional	No	No	12/31/2016	$ 1	N/A	N/A	N/A	N/A	N/A	N/A
47	**INTUIT INC.**	INTU	Big 4	No	No	7/31/2016	$ 4,694,000	N/A	N/A	N/A	N/A	N/A	N/A
48	**J2 GLOBAL COMMUNICATIONS, INC.**	JCOM	National	Yes	No	12/31/2016	$ 874,225	$ 68,094	N/A	N/A	N/A	N/A	N/A
49	**JIVE SOFTWARE INC**	JIVE	Big 4	Yes	No	12/31/2016	$ 204,094	$ 8,981	$ -	$ 3,228	N/A	N	N/A
50	**KLEVER MARKETING INC**	KLMK	Regional	Yes	No	12/31/2016	$ -	$ 552,503	N/A	$ -	N/A	N/A	N/A
51	**LIVEPERSON, INC.**	LPSN	National	Yes	No	12/31/2017	$ 222,779	N/A	$ 3,700	N/A	N/A	N/A	N/A
52	**LOGMEIN, INC.**	LOGM	Big 4	Yes	No	12/31/2016	$ 221,956	$ 3,288	N/A	$ 5,025	N/A	N/A	N/A
53	**MANHATTAN ASSOCIATES, INC.**	MANH	Big 4	No	No	12/31/2016	$ 604,557	N/A	N/A	N/A	N/A	N/A	N/A
54	**MARIN SOFTWARE INC**	MRIN	Big 4	Yes	No	12/31/2016	$ 99,878	$ 10,218	$ 4,712	$ 2,988	N/A	N/A	N/A
55	**MCORPCX, INC.**	MCCX	Regional	Yes	No	12/31/2016	$ 1,638	$ 399	$ 444	$ 106	N/A	N/A	N/A
56	**MEDIDATA SOLUTIONS INC**	h	Big 4	Yes	Yes	12/31/2016	$ 463,381	$ 8,525	$ 3,300	N/A	$ 1,842	2108	N/A
57	**MINDBODY, INC.**	MB	Big 4	Yes	No	12/31/2016	$ 139,021	$ 1,877	$ 20	$ 321	N/A	N/A	N/A
58	**MITEK SYSTEMS INC**	MITK	National	No	No	9/30/2016	$ 34,701	N/A	N/A	N/A	N/A	N/A	N/A
59	**MOBILEIRON**	MOBL	Big 4	No	No	12/31/2016	$ 163,926	N/A	N/A	N/A	N/A	N/A	N/A
60	**NETAPP INC.2162**	NTAP	Big 4	Yes	No	4/28/2017	$ 5,519,000	$ 104,000	$ 353,000	$ 44,000	N/A	N/A	N/A
61	**NETSOL TECHNOLOGIES INC**	NS9B	Regional	Yes	No	6/30/2016	$ 64,550	$ 4,400	$ 2,500	N/A	N/A	N/A	N/A
62	**NEW RELIC**	NEWR	Big 4	Yes	No	3/31/2017	$ 263,479	$ 10,300	$ 4,900	$ 6,900	N/A	N/A	N/A
63	**ORACLE CORPORATION**	ORCL	Big 4	No	Yes	5/31/2016	$ 37,047,000	N/A	N/A	N/A	N/A	N/A	N/A
64	**PALO ALTO NETWORKS INC**	PANW	Big 4	Yes	No	7/31/2016	$ 1,378,500	$ 37,700	$ 7,700	N/A	N/A	N/A	N/A

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									Dollars in Thousands				
65	PARK CITY GROUP, INC.	PCYG	Regional	Yes	No	6/30/2016	$ 14,011	$ 183	$ 183	$ -	N/A	N/A	N/A
66	PROOFPOINT INC	PFPT	Big 4	No	No	12/31/2016	$ 375,496	N/A	N/A	N/A	N/A	N/A	N/A
67	PROS HOLDINGS, INC.	PRO	Big 4	Yes	No	12/31/2016	$ 153,276	$ 1,078	$ 1,100	$ -	N/A	N/A	N/A
68	PUREBASE CORP	PUBC	Regional	No	No	11/30/2016	$ 177	N/A	N/A	N/A	N/A	N/A	N/A
69	Q2 HOLDINGS	QTWO	Big 4	Yes	Yes	12/31/2016	$ 150,224	$ 3,005	$ 3,000	$ -	$ 8,928	N/A	N/A
70	QUAD INC	QADA	Big 4	Yes	No	1/31/2017	$ 4,329,500	$ 200	$ 100	$ -	N/A	N/A	N/A
71	QUALYS INC	QLYS	National	Yes	No	12/31/2016	$ 197,925	$ 400	$ -	$ 400	N/A	N/A	N/A
72	QUOTIENT TECHNOLOGY INC.	QUOT	Big 4	Yes	No	12/31/2016	$ 275,190	$ 32,286	$ 700	N/A	N/A	N/A	N/A
73	REALPAGE, INC.	RP	Big 4	Yes	No	12/31/2016	$ 568,128	$ 55,400	$ 13,700	$ 5,800	N/A	N/A	N/A
74	RED HAT, INC.	RHT	Big 4	Yes	Yes	2/29/2017	$ 2,411,803	$ 93,727	N/A	N/A	$ 147,695	N/A	N/A
75	RINGCENTRAL INC	RNG	Big 4	Yes	No	12/31/2016	$ 379,724	$ 4,400	$ 2,162	N/A	N/A	N/A	N/A
76	ROSETTA STONE INC	RST	Big 4	Yes	Yes	12/31/2016	$ 194,089	$ 43,688	$ 11,375	$ 6,369	$ 18,228	919	N/A
77	SALESFORCE.COM, INC.	CRM	Big 4	Yes	Yes	1/31/2017	$ 8,391,984	$ 141,671	$ 7,200	$ 64,600	$ 539,619	$ 460,030	$ 371,541
78	SERVICENOW INC	NOW	Big 4	No	Yes	12/31/2016	$ 1,390,513	N/A	N/A	N/A	$ 138,770	$ 136,459	$ 81,217
79	SMITH MICRO SOFTWARE INC	SMSI	Regional	No	No	12/31/2016	$ 28,235	N/A	N/A	N/A	N/A	N/A	N/A
80	SPLUNK	SPLK	Big 4	No	No	1/31/2017	$ 949,955	N/A	N/A	N/A	N/A	N/A	N/A
81	SPS COMMERCE, INC.	SPSC	Big 4	No	No	12/31/2016	$ 193,295	N/A	N/A	N/A	N/A	N/A	N/A
82	SYMANTEC CORP	SYMC	Big 4	Yes	Yes	3/31/2017	$ 4,019,000	$ 1,100,000	N/A	N/A	$ 77,000	N/A	N/A
83	SYNOPSYS INC	SNPS	Big 4	Yes	No	10/31/2016	$ 2,422,532	$ 4,533	$ 4,131	$ 3,697	N/A	N/A	N/A
84	TABLEAU SOFTWARE INC	DATA	Big 4	No	No	12/31/2016	$ 826,943	N/A	N/A	N/A	N/A	N/A	N/A
85	TEXTMUNICATION HOLDINGS, INC.	TXHD	Regional	No	No	12/31/2016	$ 458	N/A	N/A	N/A	N/A	N/A	N/A
86	THE KEYW HOLDING CORPORATION	KEYW	National	Yes	No	12/31/2016	$ 288,027	$ 2,100	N/A	$ 300	N/A	N/A	N/A
87	THE ULTIMATE SOFTWARE GROUP, INC.	ULTI	Big 4	Yes	Yes	12/31/2016	$ 781,291	$ 110,482	$ 37,900	$ 1,200	N/A	N/A	N/A
88	TWILIO INC	TWLO	Big 4	Yes	No	12/31/2016	$ 277,335	$ 28,661	$ 11,527	$ 5,500	N/A	N/A	N/A
89	TYLER TECHNOLOGIES, INC.	TYL	Big 4	No	No	12/31/2016	$ 756,043	N/A	N/A	N/A	N/A	N/A	N/A
90	UPLAND SOFTWARE	UPLD	Big 4	No	No	12/31/2016	$ 74,767	N/A	N/A	N/A	N/A	N/A	N/A
91	VAPIR ENTERPRISES INC.	VAPI	Regional	No	No	12/31/2016	$ 1,087	N/A	N/A	N/A	N/A	N/A	N/A
92	VEEVA SYSTEMS INC	VEEV	Big 4	Yes	No	1/31/2017	$ 544,043	$ 7,386	$ 584	$ 2,375	N/A	N/A	N/A
93	VERTICAL COMPUTER SYSTEMS, INC.	VCSY	Regional	Yes	No	12/31/2016	$ 3,828	$ -	$ 246	$ -	N/A	N/A	N/A
94	VMWARE, INC.	VMW	Big 4	Yes	No	12/31/2016	$ 7,093,000	N/A	N/A	N/A	N/A	N/A	N/A
95	WEB.COM GROUP, INC.	WWWW	Big 4	No	No	12/31/2016	$ 710,505	N/A	N/A	N/A	N/A	N/A	N/A
96	WORKDAY, INC.	WDAY	Big 4	No	Yes	1/31/2017	$ 1,569,407	N/A	N/A	N/A	N/A	N/A	N/A

#	Company Name	Ticker Symbol	Auditor	Capitalize Software or Website Development Costs ?	Capitalize Commissions?	YE Date	Revenues, Current Year (CY)	Software Dev.Costs Capitalized on Balance Sheet (BS)	Software Dev. Costs Capitalized (CY)	Amortization Expense of Software Development Costs (CY)	NET Commissions Capitalized (BS)	Commissions Deferred/Capitalized (CY)	Commissions Amortized (CY)
									Dollars in Thousands				
97	**WORLDS INC**	WDDD	Regional	No	No	12/31/2016	$ -	N/A	N/A	N/A	N/A	N/A	N/A
98	**XACTLY CORP**	XTLY	Big 4	No	No	1/31/2016	$ 95,461	N/A	N/A	N/A	N/A	N/A	N/A
99	**ZENDESK**	ZEN	Big 4	Yes	No	12/31/2016	$ 311,999	$ 15,400	$ 6,310	$ 7,400	N/A	N/A	N/A
100	**ZIX CORPORATION**	ZIXI	Regional	No	Yes	12/31/2016	$ 60,144	N/A	N/A	N/A	N/A	N/A	N/A

#	Company	Notes on Capitalization of Software Development	Notes on Capitalization of Commissions
1	**ADOBE SYSTEMS INCORPORATED**	Capitalization of software development costs for software to be sold, leased, or otherwise marketed begins upon the establishment of technological feasibility, which is generally the completion of a working prototype that has been certified as having no critical bugs and is a release candidate. Amortization begins once the software is ready for its intended use, generally based on the pattern in which the economic benefits will be consumed. To date, software development costs incurred between completion of a working prototype and general availability of the related product have not been material. We capitalize costs associated with customized internal-use software systems that have reached the application development stage. Such capitalized costs include external direct costs utilized in developing or obtaining the applications and payroll and payroll related expenses for employees who are directly associated with the development of the applications. Capitalization of such costs begins when the preliminary project stage is complete and ceases at the point in which the project is substantially complete and is ready for its intended purpose.	No discussion in footnotes
2	**ACTIVISION BLIZZARD, INC.**	Software development costs include payments made to independent software developers under development agreements, as well as direct costs incurred for internally developed products. Software development costs are capitalized once technological feasibility of a product is established and such costs are determined to be recoverable. Technological feasibility of a product requires both technical design documentation and game design documentation, or the completed and tested product design and a working model. Significant management judgments and estimates are utilized in the assessment of when technological feasibility is established and the evaluation is performed on a product-by-product basis. For products where proven technology exists, this may occur early in the development cycle. Software development costs related to hosted service revenue arrangements are capitalized after the preliminary project phase is complete and it is probable that the project will be completed and the software will be used to perform the function intended. Prior to a product's release, if and when we believe capitalized costs are not recoverable, we expense the amounts as part of "Cost of revenues—software royalties, amortization, and intellectual property licenses." Capitalized costs for products that are canceled or are expected to be abandoned are charged to "Product development" in the period of cancellation. Amounts related to software development which are not capitalized are charged immediately to "Product development." Commencing upon a product's release, capitalized software development costs are amortized to "Cost of revenues—software royalties, amortization, and intellectual property licenses" based on the ratio of current revenues to total projected revenues for the specific product, generally resulting in an amortization period of six months to approximately two years.	No discussion in footnotes
3	**APPFOLIO INC**	We account for the costs of computer software obtained or developed for internal use in accordance with ASC 350 , *Intangibles-Goodwill and Other* ("ASC 350"). These include costs incurred in connection with the development of our internal-use software solutions when (I) the preliminary project stage is completed, (ii) management has authorized further funding for the completion of the project and (iii) it is probable that the project will be completed and performed as intended. These capitalized costs include personnel and related expenses for employees who are directly associated with and who devote time to internal-use software projects and, when material, interest costs incurred during the development. Capitalization of these costs ceases once the project is substantially complete and the software is ready for its intended purpose. Costs incurred for significant upgrades and enhancements to our software solutions are also capitalized. Costs incurred for post-configuration training, maintenance and minor modifications or enhancements are expensed as incurred. Capitalized software development costs are amortized using the straight-line method over an estimated useful life of three years. We do not transfer ownership of our software, or lease our software, to third parties.	Sales commissions and other incremental costs to acquire contracts are expensed as incurred. Sales commissions and other incremental costs to acquire customers and grow adoption and utilization of our Value+ services by new and existing customers are expensed as incurred
4	**ARI NETWORK SERVICES INC**	Certain software development and acquisition costs are capitalized when incurred. Capitalization of these costs begins upon the establishment of technological feasibility. The establishment of technological feasibility and the on-going assessment of recoverability of software costs require considerable judgment by management with respect to certain external factors, including, but not limited to, the determination of technological feasibility, anticipated future gross revenue, estimated economic life and changes in software and hardware technologies. The Company capitalizes software enhancements on an on-going basis and all other software development and support expenditures are charged to expense in the period incurred. The annual amortization of software products is computed using the straight-line method over the estimated economic life of the product, which currently ranges from 2 to 14 years. Amortization starts when the product is available for general release to customers.	No discussion in footnotes
5	**ARISTA NETWORKS, INC.**	Costs related to the research, design and development of our products are charged to research and development expenses as incurred. Software development costs are capitalized beginning when a product's technological feasibility has been established and ending when the product is available for general release to customers. Generally, our products are released soon after technological feasibility has been established. As a result, costs incurred subsequent to achieving technological feasibility have not been significant and accordingly, all software development costs have been expensed as incurred.	No discussion in footnotes
6	**ASPEN TECHNOLOGY, INC.**	Certain computer software development costs are capitalized in the accompanying consolidated balance sheets. Capitalization of computer software development costs begins upon establishing technological feasibility defined as meeting specifications determined by the program design. Amortization of capitalized computer software development costs is provided on a product-by-product basis using the greater of (a) the amount computed using the ratio that current gross revenue for a product bears to total of current and anticipated future gross revenue for that product or (b) the straight-line method, beginning upon commercial release of the product, and continuing over the remaining estimated economic life of the product, not to exceed three years.	No discussion in footnotes
7	**ASTEA INTERNATIONAL INC**	The Company capitalizes software development costs incurred during the period from the establishment of technological feasibility through the product's availability for general release. Costs incurred prior to the establishment of technological feasibility are charged to product development expense. Product development expense includes payroll, employee benefits, allocation of indirect costs such as rent, other headcount-related costs associated with product development and any related costs to third parties under sub-contracting or net of any collaborative arrangements. Software development costs are amortized on a product-by-product basis over the greater of the ratio of current revenues to total anticipated revenues (current and future revenues) or on a straight-line basis over the estimated useful lives of the products beginning with the initial release to customers. The Company's estimated life for its capitalized software products is two years based on current sales trends and the rate of product release. The Company continually evaluates whether events or circumstances had occurred that indicate that the remaining useful life of the capitalized software development costs should be revised or that the remaining balance of such assets may not be recoverable. The Company evaluates the recoverability of capitalized software based on the net realizable value of each product, which includes the estimated future gross revenues from that product reduced by the estimated future costs of completing and disposing of that product, including the costs of performing maintenance and customer support required to satisfy the Company's responsibility set forth at the time of sale. As of December 31, 2016 and 2015, management believes that no revisions to the remaining useful lives or write-downs of capitalized software development costs were required.	No discussion in footnotes

#	Company	Notes on Capitalization of Software Development	Notes on Capitalization of Commissions
8	**ATHENAHEALTH, INC.**	We capitalize certain costs related to the development of athenaNet services and other internal-use software. Costs incurred during the application development phase are capitalized only when we believe it is probable the development will result in new or additional functionality. The types of costs capitalized during the application development phase include employee wages and stock-based compensation expense, as well as consulting fees for third-party developers working on these projects. Costs related to the preliminary project stage and post-implementation activities are expensed as incurred. Internal-use software is amortized on a straight-line basis over its estimated useful life. The estimated useful lives of the software is two to five years (refer to Note 6 – Capitalized Software Costs).	In August 2015, the FASB issued ASU 2015-14, *Revenue from Contracts with Customers* , which defers the effective date of ASU 2014-09 for all entities by one year. ASU 2014-09, which was issued in March 2014 and has been codified with the Accounting Standards Codification as Topic 606, is now effective for public companies for annual reporting periods beginning after December 15, 2017, including interim periods within those reporting periods. ASC 606 outlines a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and supersedes most current revenue recognition guidance, including industry-specific guidance. In addition, ASC 606 provides guidance on accounting for certain revenue-related costs including, but not limited to, when to capitalize costs associated with obtaining and fulfilling a contract. Since ASU 2014-09 was issued, several additional ASUs have been issued and incorporated within ASC 606 to clarify various elements of the guidance. We anticipate that this standard will have a material impact on our consolidated financial statements with respect to the capitalization of costs of commissions, upfront costs, and other contract acquisition-based and contract fulfillment costs on our consolidated balance sheets. We are continuing to assess all potential impacts of the standard, including the impact to the pattern with which we recognize revenue.
9	**AUTODESK INC**	Software development costs incurred prior to the establishment of technological feasibility are included in research and development expenses. Autodesk defines establishment of technological feasibility as the completion of a working model. Software development costs incurred subsequent to the establishment of technological feasibility through the period of general market availability of the products are capitalized and generally amortized over a three year period, if material. Autodesk had no material capitalized software development costs at January 31, 2017 and January 31, 2016	As part of our preliminary evaluation, Autodesk has also considered the impact of the guidance in ASC Topic 340-40, "Other Assets and Deferred Costs; Contracts with Customers," and the interpretations of the FASB Transition Resource Group for Revenue Recognition ("TRG") from their November 7, 2016 meeting with respect to capitalization and amortization of incremental costs of obtaining a contract. As a result of this new guidance, Autodesk preliminarily believes that the Company will capitalize additional costs of obtaining the contract, which primarily relates to sales commissions. The amortization period for the Company's deferred costs will be recognized over the period of benefit. Autodesk's current accounting policy is to expense such costs as incurred. While Autodesk continues to assess the potential impacts of the new standard, including the areas described above, and disclosure requirements of the standard, Autodesk does not know or cannot reasonably estimate quantitative information related to the impact of the new standard on our financial statements except as specifically noted above.
10	**AUTOMATIC DATA PROCESSING, INC.**	Expenditures for major software purchases and software developed or obtained for internal use are capitalized and amortized over a three to five-year period on a straight-line basis. The Company's policy provides for the capitalization of external direct costs of materials and services associated with developing or obtaining internal use computer software. In addition, the Company also capitalizes certain payroll and payroll-related costs for employees who are directly associated with internal use computer software projects. The amount of capitalizable payroll costs with respect to these employees is limited to the time directly spent on such projects. Costs associated with preliminary project stage activities, training, maintenance, and all other post-implementation stage activities are expensed as incurred. The Company also expenses internal costs related to minor upgrades and enhancements, as it is impractical to separate these costs from normal maintenance activities.	No discussion in footnotes
11	**BAZAARVOICE INC**	The Company capitalizes certain development costs incurred in connection with its internal-use software. These capitalized costs are primarily related to its proprietary social commerce solutions that is hosted by the Company and accessed by its clients on a subscription basis. Costs incurred in the preliminary stages of development are expensed as incurred. Once an application has reached the development stage, direct internal and external costs are capitalized until the software is substantially complete and ready for its intended use. Maintenance and training costs are expensed as incurred. Internal-use software development costs are amortized on a straight-line basis over its estimated useful life, generally three years, into cost of revenue.	While the Company is still evaluating the full impact of the pending adoption of ASU 2014-09 and related amendments on its consolidated financial statements, the Company anticipates adopting the standard using the modified retrospective methodology in the first quarter of fiscal 2019, with the cumulative effect of adoption recognized as of the date of initial application. Additionally, the Company has identified the following areas of anticipated impact based on its preliminary review of the standard: Under the new standard the Company will be required to capitalize certain sales commissions that are incremental in obtaining the contract and amortize over the period of benefit. These costs are currently expensed.
12	**BENEFITFOCUS INC**	The Company capitalizes certain costs related to its software developed or obtained for internal use. Costs related to preliminary project activities and post-implementation activities are expensed as incurred. Internal and external costs incurred during the application development stage, including upgrades and enhancements representing modifications that will result in significant additional functionality, are capitalized. Software maintenance and training costs are expensed as incurred. Capitalized costs are recorded as part of property and equipment and are amortized on a straight-line basis over the software's estimated useful life which is three years. The Company evaluates these assets for impairment whenever events or changes in circumstances occur that could impact the recoverability of these assets.	Sales commissions are generally expensed when the sales contract is executed by the customer.
13	**BLACKBAUD, INC.**	We incur certain costs associated with the development of internal-use software, which are primarily related to activities performed to develop our cloud-based solutions. Internal and external costs incurred in the preliminary project stage of internal-use software development are expensed as incurred. Once the software being developed has reached the application development stage, qualifying internal costs including payroll and payroll-related costs of employees who are directly associated with and devote time to the software project as well as external direct costs of materials and services are capitalized. Capitalization ceases at the point at which the developed software is substantially complete and ready for its intended use, which is typically upon completion of all substantial testing. Qualifying costs capitalized during the application development stage include those related to specific upgrades and enhancements when it is probable that those costs incurred will result in additional functionality. Overhead costs, including general and administrative costs, as well as maintenance, training and all other costs associated with post-implementation stage activities are expensed as incurred. In addition, internal costs that cannot be reasonably separated between maintenance and relatively minor upgrades and enhancements are expensed as incurred. Historically, we have also incurred and capitalized costs in connection with the development of certain of our software solutions licensed to customers on a perpetual basis, which are accounted for as costs of software to be sold, leased or otherwise marketed; however, costs capitalized related to those solutions were insignificant as of December 31, 2016 and 2015. Qualifying capitalized software development costs are amortized on a straight line basis over the software asset's estimated useful life, which is generally three to seven years. We evaluate the useful lives of these assets on an annual basis and test for impairment whenever events or changes in circumstances occur that could impact the recoverability of these assets.	We pay sales commissions at the time contracts with customers are signed or shortly thereafter, depending on the size and duration of the sales contract. To the extent that these commissions relate to revenue not yet recognized, the amounts are recorded as deferred sales commission costs. Subsequently, the commissions are recognized as sales, marketing and customer success expense as the revenue is recognized

#	Company	Notes on Capitalization of Software Development	Notes on Capitalization of Commissions
14	**BLACKLINE, INC.**	The Company accounts for the costs of computer software obtained or developed for internal use in accordance with ASC 350, *Intangibles—Goodwill and Other* ("ASC 350"). The Company capitalizes certain costs in the development of its SaaS subscription solution when (i) the preliminary project stage is completed, (ii) management has authorized further funding for the completion of the project and (iii) it is probable that the project will be completed and performed as intended. These capitalized costs include personnel and related expenses for employees and costs of third-party contractors who are directly associated with and who devote time to internal-use software projects and, when material, interest costs incurred during the development. Capitalization of these costs ceases once the project is substantially complete and the software is ready for its intended purpose. Costs incurred for significant upgrades and enhancements to the Company's SaaS software solutions are also capitalized. Costs incurred for training, maintenance and minor modifications or enhancements are expensed as incurred. Capitalized software development costs are amortized using the straight-line method over an estimated useful life of three years.	Sales and marketing expenses consist primarily of compensation and employee benefits, including stock-based compensation, of sales and marketing personnel and related sales support teams, sales and partner commissions, marketing events, advertising costs, travel, trade shows, other marketing materials, and allocated overhead. Deferred sales commissions are the incremental costs that are directly associated with non-cancelable subscription contracts with customers and consist of sales commissions paid to the Company's direct sales force and third-party partners. The commissions are deferred and amortized over the non-cancelable terms of the related customer contracts, which are typically one year in duration. The commission payments are paid in full the month after the customer's service commences. The deferred commission amounts are recoverable through the future revenue streams under the non-cancelable customer contracts. The Company believes this is the preferable method of accounting as the sales commission charges are so closely related to the revenue from the non-cancelable customer contracts and accordingly, should be recorded as an asset and charged to expense over the same period that the subscription revenue is recognized. Amortization of deferred sales commissions is included in sales and marketing in the accompanying consolidated statements of operations.
15	**BOTTOMLINE TECHNOLOGIES (DE), INC.**	Capitalization of software development costs for software that is to be sold, leased or otherwise marketed begins upon the establishment of technological feasibility. The establishment of technological feasibility and the ongoing assessment of recoverability of capitalized software development costs requires considerable judgment by us with respect to certain factors, including, but not limited to, technological feasibility, anticipated future gross revenues, estimated economic life, and changes in software and hardware technologies. Capitalized costs commence amortization on the date of general release using the greater of the straight-line method over the estimated useful life, or the ratio of revenue in the period to total expected revenues over the product's expected useful life.	We record commissions as a component of sales and marketing expense when earned by the respective salesperson. Excluding certain arrangements within our Digital Banking segment, for which commissions are earned as revenue is recorded over the period of project performance, substantially all software commissions are earned in the month in which a customer order is received. Commissions associated with professional services are typically earned in the month that services are rendered. Commissions associated with post-contract customer support arrangements and subscription-based arrangements are typically earned when the customer is billed for the underlying contractual period, or in the period the order is received. Commissions are normally paid within thirty days of the month in which they are earned.
16	**BOX**	Internal Use Software- We capitalize costs to develop software for internal use incurred during the application development stage. Costs related to preliminary project activities and post implementation activities are expensed as incurred. Once an application has reached the development stage, management has authorized and committed to the funding of the software project, it is probable the project will be completed and the software will be used to perform the function intended, internal and external costs, if direct and incremental, are capitalized until the application is substantially complete and ready for its intended use. There were no material qualifying costs incurred during the application development stage in any of the periods presented.	Deferred commissions consist of direct incremental costs paid to our sales force associated with non-cancellable terms of the related contracts. The deferred commission amounts are recoverable through future revenue streams under the non-cancellable customer contracts. Direct sales commissions are deferred when earned and amortized over the same period that revenue is recognized for the related non-cancellable subscription period. Amortization of deferred commissions is included in sales and marketing expense in the consolidated statements of operations.
17	**BRIGHTCOVE INC**	Costs incurred to develop software applications used in the Company's on-demand application services consist of (a) certain external direct costs of materials and services incurred in developing or obtaining internal-use computer software, and (b) payroll and payroll-related costs for employees who are directly associated with, and who devote time to, the project. These costs generally consist of internal labor during configuration, coding, and testing activities. Research and development costs incurred during the preliminary project stage or costs incurred for data conversion activities, training, maintenance and general and administrative or overhead costs are expensed as incurred. Capitalization begins when the preliminary project stage is complete, management, with the relevant authority, authorizes and commits to the funding of the software project, it is probable the project will be completed, the software will be used to perform the functions intended and certain functional and quality standards have been met. Qualified costs incurred during the operating stage of the Company's software applications relating to upgrades and enhancements are capitalized to the extent it is probable that they will result in added functionality, while costs that cannot be separated between maintenance of, and minor upgrades and enhancements to, internal-use software are expensed as incurred. These capitalized costs are amortized on a straight-line basis over the expected useful life of the software, which is estimated to be three years. Capitalized internal-use software development costs are classified as "Software" within "Property and Equipment, net" in the accompanying consolidated balance sheets	No discussion in footnotes
18	**BROADRIDGE FINANCIAL SOLUTIONS, INC.**	Expenditures for major software purchases and software developed or obtained for internal use are capitalized and amortized over a three- to five-year period on a straight-line basis. For software developed or obtained for internal use, the Company's accounting policy provides for the capitalization of external direct costs of materials and services associated with developing or obtaining internal use computer software. In addition, the Company also capitalizes payroll and payroll-related costs for employees who are directly associated with internal use computer software projects. The amount of capitalizable payroll costs with respect to these employees is limited to direct time spent on such projects. Costs associated with preliminary project stage activities, training, maintenance, and all other post-implementation stage activities are expensed as incurred. The Company also expenses internal costs related to minor upgrades and enhancements, as it is impractical to separate these costs from normal maintenance activities.	No discussion in footnotes
19	**BROADSOFT**	Software development costs for software to be sold, leased or marketed that is incurred prior to the establishment of technological feasibility are expensed as incurred as research and development expense. Software development costs incurred subsequent to the establishment of technological feasibility, if any, are capitalized until the software is available for general release to customers. The Company has determined that technological feasibility has been established at approximately the same time as the general release of such software to customers. Therefore, to date, the Company has not capitalized any related software development costs. The Company capitalizes costs associated with customized internal-use software systems that have reached the application development stage. Such capitalized costs include costs directly associated with the development of the applications. Capitalization of such costs begins when the preliminary project stage is complete and ceases at the point the project is substantially complete and is ready for its intended purpose. Internal-use software is amortized on a straight-line basis over the estimated useful life. Costs incurred during the preliminary development stage, as well as maintenance and training costs, are expensed as incurred.	No discussion in footnotes
20	**BROADVISION INC**	ASC 985-20, *Cost of Software to be Sold, Leased, or Marketed* ("ASC 985-20"), requires capitalization of certain software development costs subsequent to the establishment of technological feasibility. Based on our product development process, technological feasibility is established upon the completion of a working model. To date, costs incurred by us from the completion of the working model to the point at which the product is ready for general release have been insignificant. Accordingly, we have charged all such costs to research and development expenses in the period incurred.	No discussion in footnotes

#	Company	Notes on Capitalization of Software Development	Notes on Capitalization of Commissions
21	**BSQUARE CORPORATION**	Costs incurred internally in researching and developing a computer software product are charged to expense until technological feasibility has been established for the product. Once technological feasibility is established, all software costs would be capitalized until the product is available for general release to customers. Judgment is required in determining when technological feasibility of a product is established. Generally, this would be reached after all high-risk development issues have been resolved through coding and testing, and would occur shortly before the product is released. Amortization of costs incurred after this point would be included in cost of revenue over the estimated life of the products. As of December 31, 2016 and 2015, we had not recorded any such capitalized costs.	No discussion in footnotes
22	**CADENCE DESIGN SYSTEMS INC**	Software development costs are capitalized beginning when a product's technological feasibility has been established by completion of a working model of the product and amortization begins when a product is available for general release to customers. The period between the achievement of technological feasibility and the general release of Cadence's products has typically been of short duration. Costs incurred during fiscal 2016, 2015 and 2014 were not material.	No discussion in footnotes
23	**CALLIDUS SOFTWARE**	No discussion in footnotes	The deferred costs mainly represent commission payments to the Company's direct sales force and third parties for on-demand subscription and maintenance agreements, which the Company amortizes as sales and marketing expense over the non-cancellable term of the contract as the related revenue is recognized. The commission payments are a direct and incremental cost of the revenue arrangements.
24	**CASTLIGHT HEALTH**	For the Company's development costs related to its cloud-based service, the Company capitalizes costs incurred during the application development stage. Costs related to preliminary project and post-implementation stages are expensed as incurred. Capitalized software development costs are included as part of property, plant and equipment and are amortized on a straight-line basis over the technology's estimated useful life, which is generally three years. The amortization expense is recorded as a component of cost of subscription revenue. The Company did not have any capitalized software development costs for the year ended December 31, 2016. Capitalized software development cost was $2.6 million for the year ended December 31, 2015. Maintenance and repairs are charged to expense as incurred, and improvements are capitalized.	Deferred commissions are the incremental costs that are directly associated with the noncancelable portion of cloud-based subscription service contracts with customers and consist of sales commissions paid to the Company's direct sales force and channel partners. The commissions are deferred and amortized over the noncancelable terms of the related contracts. The deferred commission amounts are recoverable through the future revenue streams under the noncancelable customer contracts. Amortization of deferred commissions is included in sales and marketing expense in the consolidated statements of operations. The Company currently capitalizes certain sales commissions and amortizes those costs over the non-cancelable portion of its subscription contracts.
25	**CHANNELADVISOR CORP**	Property and equipment are recorded at cost. Expenditures for major additions and improvements are capitalized. Depreciation and amortization is provided over the estimated useful lives of the related assets using the straight-line method.	Sales commissions are expensed when the related subscription agreement is executed by the customer.
26	**CITRIX SYSTEMS, INC.**	The authoritative guidance requires certain internal software development costs related to software to be sold to be capitalized upon the establishment of technological feasibility. The Company's software development costs incurred subsequent to achieving technological feasibility have not been significant and substantially all software development costs have been expensed as incurred. In accordance with the authoritative guidance, the Company capitalizes external direct costs of materials and services and internal costs such as payroll and benefits of those employees directly associated with the development of new functionality in internal use software. These costs are being amortized over the estimated useful life of the software, which is generally three to seven years, and are included in property and equipment in the accompanying consolidated balance sheets. The Company capitalized costs related to internally developed computer software to be sold as a service related to its Cloud Services products and GoTo Business offerings, incurred during the application development stage, of $48.6 million and $47.7 million, during the years ended December 31, 2016 and December 31, 2015, respectively, and is amortizing these costs over the expected lives of the related services, which is generally two years, and are included in property and equipment in the accompanying consolidated balance sheets.	The Company capitalizes certain third-party commissions related to Subscription Advantage, maintenance and support renewals. The capitalized commissions are amortized to Sales, marketing and services expense at the time the related deferred revenue is recognized as revenue.
27	**CORNERSTONE ONDEMAND, INC.**	The Company capitalizes the costs associated with software developed or obtained for internal use, including costs incurred in connection with the development of its products, when the preliminary project stage is completed, management has decided to make the project a part of its future offering, and the software will be used to perform the function intended. These capitalized costs include external direct costs of materials and services consumed in developing or obtaining internal-use software, personnel and related expenses for employees who are directly associated with and who devote time to internal-use software projects and, when material, interest costs incurred during the development. Capitalization of these costs ceases once the project is substantially complete and the software is ready for its intended purpose. Costs incurred for upgrades and enhancements to the products are also capitalized. Post-configuration training and maintenance costs are expensed as incurred. Capitalized software costs are amortized to cost of revenue using the straight-line method over an estimated useful life of the software, which is typically three years, commencing when the software is ready for its intended use. The Company does not transfer ownership of, or lease its software to its clients.	The Company defers commissions paid to its sales force and related payroll taxes because these amounts are recoverable from the future revenue due to the non-cancelable client agreements that gave rise to the commissions. Commissions are deferred on the balance sheet and are recognized as sales and marketing expense over the term of the client agreement in proportion to the revenue that is recognized. Commissions are considered direct and incremental costs to client agreements and the Company generally commences payment of commissions within 45 to 75 days after execution of client agreements.
28	**COUPA SOFTWARE INC**	The Company capitalizes certain development costs incurred in connection with software development for its cloud-based platform. Costs incurred in the preliminary stages of development are expensed as incurred. Once the software has reached the development stage, internal and external costs, if direct and incurred for adding incremental functionality to our platform, are capitalized until the software is substantially complete and ready for its intended use. Capitalization ceases upon completion of all substantial testing. These software development costs are recorded as part of property and equipment. Capitalized software development costs are amortized on a straight-line basis to cost of revenues—subscription services over the technology's estimated useful life, which is two years. Software development costs incurred in the maintenance and minor upgrade and enhancement of software without adding additional functionality are expensed as incurred.	The Company capitalizes commission costs that can be associated specifically with a non-cancelable subscription contract. Commissions are earned by sales personnel upon the execution of the sales contract by the customer, and commission payments are made shortly after they are earned. Deferred commissions are amortized over the term of the related non-cancelable customer contract.
29	**COVISINT CORPORATION**	Capitalized software includes the costs of internally developed software products capitalized in accordance with ASC 350-40, "Internal Use Software," and software technology purchased through acquisitions. Capitalized and purchased software costs are amortized on a straight line basis over the expected useful life of the software, which is generally three years. Amortization begins when the software technology is ready for its intended use. The Company focuses its research and development on new and expanded features of the Platform and vertical-specific solutions, utilizing an agile delivery methodology for Platform enhancements. A portion of these costs related to hosted software and application services that have reached the application development stage are capitalized per the guidance set forth in ASC350-40 which requires companies to capitalize qualifying computer software costs. Capitalization of such cost begins when the preliminary project stage is complete and ceases at the point in which the project is substantially complete and is ready for its intended purpose. Costs related to preliminary project activities and post-implementation activities are expensed as incurred.	No discussion in footnotes
30	**DATAWATCH CORPORATION**	The Company capitalizes certain software development costs as well as purchased software upon achieving technological feasibility of the related products. Costs that are incurred internally in researching and developing a computer software product are charged to expense until technological feasibility has been established for the product. Once technological feasibility is established, software development costs are capitalized until the product is available for general release to customers. Such capitalized costs are amortized to cost of software licenses straight-line over the estimated life of the product, generally nine to 18 months. The Company evaluates the realizability of the assets and the related periods of amortization on a regular basis. Judgment is required in determining when technological feasibility of a product is established as well as its economic life. During fiscal years 2016 and 2015, there were no significant costs incurred during the period after technological feasibility was established and the time in which the product became available for general release.	No discussion in footnotes

#	Company	Notes on Capitalization of Software Development	Notes on Capitalization of Commissions
31	**DETERMINE, INC.**	The Company capitalizes costs for internal use software incurred during the application development. Costs related to preliminary project activities and post implementation activities are expensed as incurred. Capitalized software will be amortized once the product is ready for its intended use, using the straight-line method over the estimated useful lives of the assets, which is three years. During fiscal 2016, the Company evaluated the capitalized software development costs across all product lines given the recent acquisition of b-pack. Management concluded it was necessary to impair the investment previously made in what was to be a separate platform that would hold all the Company's product offerings, resulting in an impairment charge of $1.4 million in the fiscal year ended March 31, 2016. There were no impairment charges during the year ended March 31, 2017.	No discussion in footnotes
32	**EGAIN CORP**	We account for software development costs in accordance with ASC 985, *Software* , for costs of the software to be sold, leased or marketed, whereby costs for the development of new software products and substantial enhancements to existing software products are included in research and development expense as incurred until technological feasibility has been established, at which time any additional costs are capitalized. Technological feasibility is established upon completion of a working model. To date, software development costs incurred in the period between achieving technological feasibility and general availability of software have not been material and have been charged to operations as incurred.	Deferred commissions are the direct and incremental costs directly associated with cloud and term license contracts with customers and consist of sales commissions to our direct sales force. The commissions are deferred and amortized over the terms of the related customer contracts, which are typically 12 to 36 months. The commission payments are paid based on contract terms in the month following the quarter in which the commissions are earned. The deferred commission amounts are recognized as "sales and marketing" expense in the consolidated statements of operations over the terms of the related customer contracts, in proportion to the recognition of the associated revenue.
33	**ELECTRONIC ARTS INC.**	Research and development costs, which consist primarily of software development costs, are expensed as incurred. We are required to capitalize software development costs incurred for computer software to be sold, leased or otherwise marketed after technological feasibility of the software is established or for development costs that have alternative future uses. Under our current practice of developing new games, the technological feasibility of the underlying software is not established until substantially all product development and testing is complete, which generally includes the development of a working model. Software development costs that have been capitalized to date have been insignificant.	No discussion in footnotes
34	**ELLIE MAE, INC.**	The Company capitalizes internal and external costs incurred to develop internal-use software and website applications. Capitalized internal costs include salaries, benefits, and stock-based compensation charges for employees that are directly involved in developing the software or website application, and depreciation of assets used in the development process. Capitalized external costs include third-party consultants involved in the development process, as well as other direct costs incurred therein. Capitalization of costs begins when the preliminary project stage has been completed, management authorizes and commits to funding a project and it is probable that the project will be completed and the software or website application will be used to perform the function intended. Internal and external costs incurred as part of the preliminary project stage are expensed as incurred. Capitalization ceases at the point at which the project is substantially complete and ready for its intended use. Internal and external training costs and maintenance costs during the post-implementation operation stage are expensed as incurred. Internal-developed core software is amortized on a straight-line basis over its estimated useful life, generally three to five years. Amortization of product related internal-use software and website applications is typically recorded to cost of revenues, and amortization of other internal-use software and website applications is typically recorded to the operating expense line to which it most closely relates. Management evaluates the useful lives of these assets on an annual basis and tests for impairment whenever events or changes in circumstances occur that could impact the recoverability of these assets. The capitalized costs are included in property and equipment, net in the accompanying consolidated balance sheets.	Deferred commission expenses are the incremental costs that are directly associated with non-cancelable subscription contracts with customers and consist of sales commissions paid to the Company's direct sales force. Commissions are calculated based on a percentage of the revenues for the non-cancelable term of subscription contracts, which are typically one to five years. The deferred commission expense amounts are recoverable through the future revenue streams under the non-cancelable customer contracts.
35	**FALCONSTOR SOFTWARE INC**	In accordance with the authoritative guidance issued by the FASB on costs of software to be sold, leased, or marketed, costs associated with the development of new software products and enhancements to existing software products are expensed as incurred until technological feasibility of the product has been established. Based on the Company's product development process, technological feasibility is established upon completion of a working model. Amortization of software development costs is recorded at the greater of the straight-line basis over the product's estimated life, or the ratio of current period revenue of the related products to total current and anticipated future revenue of these products.	No discussion in footnotes
36	**FINANCIAL ENGINES, INC.**	Property and equipment are stated at cost less accumulated depreciation. Depreciation is computed using the straight-line method over the estimated useful lives of the assets and allocated to the department of benefit in the accompanying Consolidated Statements of Income. Leasehold improvements and capital lease equipment are amortized over the shorter of the remaining lease term or the useful life of the asset. Software purchased for internal use is amortized over its useful life. Expenditures for maintenance and repairs are charged to expense as incurred.	No discussion in footnotes
37	**FIVE 9**	Research and development expenses consist primarily of salary and related expenses (including stock-based compensation) for personnel related to the development of improvements and expanded features for our services, as well as quality assurance, testing, product management and allocated overhead. Research and development costs are expensed as incurred except for internal use software development costs that qualify for capitalization. The Company reviews development costs incurred for internal-use software in the application development stage and assesses costs for capitalization.	Commissions consist of variable compensation earned by sales personnel and referral fees we paid to third parties. Sales commissions associated with the acquisition or renewal of a client contract are recognized as sales and marketing expense as incurred.
38	**FRIENDABLE, INC.**	No discussion in footnotes	No discussion in footnotes
39	**GIGAMON INC.**	Research and development costs are expensed as incurred. The Company's software development process is essentially completed concurrently with the establishment of technological feasibility. To-date, software development costs qualifying for capitalization have not been material. Accordingly, the Company has not capitalized any software development costs.	No discussion in footnotes
40	**GUIDANCE SOFTWARE INC**	We maintain a research and development staff to develop new products and enhance or maintain existing products. In accordance with *Software Industry—Costs of Software to Be Sold, Leased, or Marketed* ("ASC 985-20") software costs are expensed as incurred until technological feasibility of the software is determined and the recovery of the cost can reasonably be expected, after which any additional costs are capitalized. To date, we have expensed all software development costs because the establishment of technological feasibility of products and their availability for sale has substantially coincided.	Although we expense our sales commissions at the time a sale is invoiced to the customer, revenues from certain of our products are recognized over the relevant performance or license period. Accordingly, for those products, we generally experience a delay between when sales commissions are expensed and when we recognize the corresponding revenue.
41	**GUIDEWIRE SOFTWARE INC**	Certain software development costs incurred subsequent to the establishment of technological feasibility are subject to capitalization and amortized over the estimated lives of the related products. Technological feasibility is established upon completion of a working model. Through July 31, 2016, costs incurred subsequent to the establishment of technological feasibility have not been material, and therefore, all software development costs have been charged to research and development expense in the accompanying consolidated statements of income as incurred.	Sales commissions are recognized as an expense when earned by the sales representative, generally occurring at the time the customer order is signed. Substantially all of the effort by the sales force is expended through the time of closing the sale, with limited to no involvement thereafter.
42	**HEALTHSTREAM, INC.**	Capitalized software development is stated on the basis of cost, and is presented net of accumulated amortization. The Company capitalizes costs incurred during the software development phase for projects when such costs are material. These assets are amortized using the straight-line method, generally ranging between three to five years Maintenance and operating costs are expensed as incurred. As of December 31, 2016 and 2015, there were no capitalized software development costs for computer software developed for resale.	No discussion in footnotes

#	Company	Notes on Capitalization of Software Development	Notes on Capitalization of Commissions
43	**HORTONWORKS, INC.**	The Company develops open source software that is generally freely available on the Apache Hadoop platform. Capitalization of software development costs begins upon the establishment of technological feasibility and ceases when the product is available for general release. There is usually a very minimal passage of time between the achievement of technological feasibility and the availability of the Company’s software for general release. Accordingly, there are no capitalized software development costs for the years ended December 31, 2016 and 2015. The Company’s capitalized internal use software costs were not material for the years ended December 31, 2016 and 2015.	Sales and marketing expenses consist primarily of personnel costs (including salaries, commissions, benefits and stock-based compensation expense) for the Company’s sales and marketing employees. In addition, sales and marketing expense include the cost of advertising, online marketing, promotional events, corporate communications, product marketing, other brand-building activities, plus allocated shared costs. All costs of advertising, including cooperative marketing arrangements, are expensed as incurred.
44	**HUBSPOT**	Certain payroll and stock compensation costs incurred to develop functionality for the Company’s software and sales and billing platforms, as well as certain upgrades and enhancements that are expected to result in increased functionality are capitalized. The costs incurred in the preliminary stages of development are expensed as incurred. Once an application has reached the development stage, certain internal costs are capitalized until the software is substantially complete and ready for its intended use. Capitalized software development costs are amortized on a straight-line basis over their estimated useful life of two to five years. Management evaluates the useful lives of these assets on a quarterly basis and tests for impairment whenever events or changes in circumstances occur that could impact the recoverability of these assets. Intern use software: The Company capitalizes certain payroll and stock compensation costs incurred to develop functionality for the Company’s sales and billing platform. The costs incurred during the preliminary stages of development are expensed as incurred. Once a piece of incremental functionality has reached the development stage certain internal costs are capitalized until the functionality is ready for its intended use. Internal use software is included within property and equipment on the balance sheet. The costs are amortized on a straight-line basis over an estimated useful life of five years as either sales in marketing and or general and administrative expense.	Sales and marketing expenses consist primarily of personnel costs of our sales and marketing employees, including sales commissions and incentives, benefits and stock-based compensation expense, marketing programs, including lead generation, costs of our annual INBOUND conference, other brand building expenses, amortization of capitalized software development costs associated with our sales and billing platform, and allocated overhead costs. We defer certain sales commissions related to acquiring new customers and amortize them ratably over the term of the corresponding subscription agreement. Sales and marketing expenses also include commissions paid to our marketing agency partners when we are the primary obligor for providing the subscription that has been purchased.
45	**IMPERVA**	The costs to develop software for sale have not been capitalized as the Company believes that the technological feasibility of the related software is not established until substantially all product development is complete.	No discussion in footnotes
46	**INTELLIGENT CLOUD RESOURCES INC.**	No discussion in footnotes	No discussion in footnotes
47	**INTUIT INC.**	Software Development Costs- We expense software development costs as we incur them until technological feasibility has been established, at which time those costs are capitalized until the product is available for general release to customers. To date, our software has been available for general release concurrent with the establishment of technological feasibility and, accordingly, we have not capitalized any development costs. Costs we incur to enhance our existing products or after the general release of the service using the product are expensed in the period they are incurred and included in research and development expense in our statements of operations. Internal Use Software - We capitalize costs related to development of hosted services that we provide to our customers and internal use of enterprise-level business and finance software in support of our operational needs. Costs incurred in the application development phase are capitalized and amortized on a straight-line basis over their useful lives, which are generally three to five years. Costs related to planning and other preliminary project activities and to post-implementation activities are expensed as incurred. We test these assets for impairment whenever events or changes in circumstances occur that could impact their recoverability.	No discussion in footnotes
48	**J2 GLOBAL COMMUNICATIONS, INC.**	Research, development and engineering costs are expensed as incurred. Costs for software development incurred subsequent to establishing technological feasibility, in the form of a working model, are capitalized and amortized over their estimated useful lives. The Company has capitalized certain internal use software and website development costs which are included in property and equipment. The estimated useful life of costs capitalized is evaluated for each specific project and ranges from 1 to 5 years.	No discussion in footnotes
49	**JIVE SOFTWARE INC**	We expense research and development costs, including costs to develop software products to be marketed to external users, before technological feasibility of such products is reached. We believe our software development process is essentially complete concurrent with the establishment of technological feasibility; accordingly, development costs are expensed as incurred. Through the third quarter of 2014, we capitalized costs to develop internal-use software during the application development stage. In the third quarter of 2014, management developed a substantive plan to repurpose the in-process development into our existing software platform and new software products. As a result of this decision, the associated capitalized internal-use software costs became governed by the accounting standards related to development costs for software to be sold. As such, subsequent to July 2014, we no longer capitalize costs related to internal-use software and we account for our current capitalized costs as development costs for software to be sold. Software development costs incurred subsequent to establishing technological feasibility through the general release of the software products are capitalized. Technological feasibility is demonstrated by the completion of a detailed program design or, working model if no program design is completed. Historically, technological feasibility has occurred concurrently with the commercial release of our products and as a result we have not capitalized software development costs. We do not anticipate capitalizing material software development costs in future periods. The software development costs are being amortized on a straight-line basis over their estimated useful life and recorded as a component of cost of product revenues. Amortization of the capitalized costs begins when the associated product or enhancement is released. As of December 31, 2016, we have released all of the products and enhancements related to the $9.0 million of capitalized costs. We make ongoing evaluations of the recoverability of our capitalized software by comparing the amount of capitalized software development costs for each product to the estimated net realizable value of the underlying asset. If such evaluations indicate the unamortized software development costs exceed the net realizable value, we write off the amount by which the unamortized software development costs exceed net realizable value. As of December 31, 2016 and 2015 the net balance of software development costs is included in other assets.	Commissions are recorded as a component of sales and marketing expenses and consist of the variable compensation paid to our direct sales force. Generally, sales commissions are earned and recorded as an expense at the time that a customer has entered into a binding purchase agreement. Commissions paid to sales personnel are recoverable only in the case that we cannot collect against any invoiced fee associated with a sales order.
50	**KLEVER MARKETING INC**	The Company capitalizes software development costs incurred from the time technological feasibility has been obtained until the product is generally released to customers. Amortization of capitalized software development costs begins when the products are available to customers and is computed using the straight-line method over the remaining estimated economic life of the product. Currently, the Company anticipates amortization of software development costs to commence in fiscal year 2017. The Company achieved technological feasibility with regard to its mobile phone technology during the fourth quarter of 2010.	No discussion in footnotes
51	**LIVEPERSON, INC.**	In accordance with the Financial Accounting Standards Board (“FASB”) Accounting Standards Codification (“ASC”) 350-40, Internal-Use Software, the Company capitalizes its costs to develop its internal use software when preliminary development efforts are successfully completed, management has authorized and committed project funding, and it is probable that the project will be completed and the software will be used as intended. These costs are included in property and equipment in the Company's consolidated balance sheets and are amortized on a straight-line basis over the estimated useful life of the related asset, which approximates three years. Costs incurred prior to meeting these criteria, together with costs incurred for training and maintenance, are expensed as incurred.	No discussion in footnotes

#	Company	Notes on Capitalization of Software Development	Notes on Capitalization of Commissions
52	**LOGMEIN, INC.**	*Software Development Costs* — The Company has determined that technological feasibility of its software products that are sold as a perpetual license is reached shortly before their introduction to the marketplace. The Company capitalizes certain direct costs to develop functionality as well as certain upgrades and enhancements of its on-demand products that are probable to result in additional functionality. The costs incurred in the preliminary stages of development are expensed as incurred. Once an application has reached the development stage, internal and external costs, if direct and incremental, are capitalized as part of intangible assets until the software is substantially complete and ready for its intended use. Internally developed software costs that are capitalized are classified as intangible assets and amortized over a three-year period.	No discussion in footnotes
53	**MANHATTAN ASSOCIATES, INC.**	Research and development expenses are charged to expense as incurred. For the years ended December 31, 2016, 2015 and 2014, the Company did not capitalize any internal research and development costs because the costs incurred between the attainment of technological feasibility for the related software product through the date when the product was available for general release to customers have been insignificant. Internal Use Software: The Company determines the amount of development costs capitalizable under the provisions of FASB Codification accounting for costs of computer software to be sold, leased, or marketed. Under this guidance, computer software development costs are charged to R&D expense until technological feasibility is established, after which remaining software production costs are capitalized. The Company has defined technological feasibility as the point in time at which the Company has a detailed program design or a working model of the related product, depending on the type of development efforts, and high-risk development issues have been resolved through end-to-end system testing.	No discussion in footnotes
54	**MARIN SOFTWARE INC**	Costs incurred in the development phase are capitalized and amortized over the product's estimated useful life, which is three years. The Company expenses all costs incurred that relate to planning and post implementation phases of development. Capitalized costs related to internally developed software under development are treated as construction in progress until the program, feature or functionality is ready for its intended use, at which time amortization commences.	Sales and marketing expenses include personnel costs, sales commissions and other costs including travel and entertainment, marketing and promotional events, lead generation activities, public relations, marketing activities, professional fees and allocated overhead. All of these costs are expensed as incurred, including sales commissions. Our commission plans provide that commission payments to our sales representatives are paid based on the actual amounts we invoice customers over a period that is generally up to six months following the execution of the applicable customer contract.
55	**MCORPCX, INC.**	Costs for the development and delivery of the SaaS technology are capitalized once planning is completed and technological feasibility is established. Costs incurred during the operating stage of the software application relating to upgrades and enhancements are capitalized to the extent that they result in the extended life of the product. All other costs are expensed as incurred. Capitalized costs include only direct external costs of materials and services as well as compensation and benefits for employees directly associated with the software project. Such amounts are included in the accompanying balance sheets under the caption "Capitalized software development costs". Refer to discussion in the "Results of operations" section.	No discussion in footnotes
56	**MEDIDATA SOLUTIONS INC**	Costs incurred in the development and implementation of internal-use software are capitalized during the application development stage. Upgrades and enhancements to existing internal-use software are capitalized only if it is probably that those expenditures will result in additional functionality. Research and development expenses consist primarily of personnel and related expenses for our research and development staff, including salaries, benefits, bonuses, and stock-based compensation, as well as the cost of certain third-party service providers and allocated overhead. We have focused our research and development efforts on expanding the functionality and ease of use of our cloud-based solutions. We expect research and development costs to increase in the future as we intend to release new features and functionality designed to maximize the efficiency and effectiveness of the clinical development process for our customers. Over the long term, we believe that research and development expenses as a percentage of total revenues will decrease.	For arrangements where revenue is recognized over the relevant contract period, the Company capitalizes related sales commissions that have been paid and recognizes these expenses over the period the related revenue is recognized. Commissions are generally payable to the Company's sales representatives 25% at the time of booking and 75% at the time of invoicing. If a customer terminates a contract, the Company recaptures the related unearned commissions.
57	**MINDBODY, INC.**	Certain development costs incurred in connection with internal use software are capitalized. Research and development costs incurred during the preliminary project stage or costs incurred for training, maintenance, and general and administrative or overhead costs are expensed as incurred. Capitalization begins when the preliminary project stage is complete, management with the relevant authority authorizes and commits to the funding of the software project, it is probable the project will be completed and the software will be used to perform the functions intended, and certain functional and quality standards have been met. There were no material qualifying development costs incurred during the year ended December 31, 2016. Capitalization of these costs ceases once the project is substantially complete and the software is ready for its intended purpose. Development costs related to upgrades or enhancements to existing applications are expensed as maintenance costs because such projects do not significantly enhance functionality. Capitalized software development costs are amortized to cost of revenue using the straight-line method over an estimated useful life of the software of two to three years, commencing when the software is ready for its intended use.	No discussion in footnotes
58	**MITEK SYSTEMS INC**	Costs incurred for the development of software that will be sold, leased, or otherwise marketed are capitalized when technological feasibility has been established. Software development costs consist primarily of compensation of development personnel and related overhead incurred to develop new products and upgrade and enhance the Company's current products, as well as fees paid to outside consultants. Capitalization of software development costs ceases and amortization of capitalized software development costs commences when the products are available for general release. For the fiscal years ended September 30, 2016 and 2015, no software development costs were capitalized because the time period and cost incurred between technological feasibility and general release for all software product releases were not material.	No discussion in footnotes

#	Company	Notes on Capitalization of Software Development	Notes on Capitalization of Commissions
59	MOBILEIRON	Software Development Costs Incurred in Connection with Software to be Sold or Marketed - The costs to develop new software products and enhancements to existing software products are expensed as incurred until technological feasibility has been established. We consider technological feasibility to have occurred whenall planning, designing, coding and testing have been completed according to design specifications. Once technological feasibility is established, any additional costs would be capitalized. We believe our current process for developing software is essentially completed concurrent with the establishment of technological feasibility, and accordingly, no costs have been capitalized. Internal Use Software -We capitalize costs incurred during the application development stage related to our internally used software. Such costs are primarily incurred by third-party vendors and consultants. Costs related to preliminary project activities and post-implementation activities are expensed as incurred. Amounts capitalized in all periods presented were not significant. All software development costs incurred in connection with our cloud offering, or SaaS, are also sold or marketed to partners or end customers, therefore we start capitalizing costs when technological feasibility is achieved. No costs were capitalized in any periods presented as we believe that our current process for developing software is essentially completed concurrent with the establishment of technological feasibility.	Sales and marketing expense consists primarily of personnel costs, including sales commissions. We expense commissions up-front at the time of the sale. Sales and marketing expense also includes costs associated with third-party events, lead generation campaigns, promotional and other marketing activities, as well as travel, equipment and software depreciation, consulting, information technology and facilities. While our sales and marketing expense, exclusive of stock-based compensation expense, may fluctuate as a percentage of total revenue over the short term, we expect it to decrease as a percentage of total revenue over the long term. Prepaid commissions that will be recognized during the subsequent 12-month period are recorded as current prepaid commissions and the remaining portion included in other noncurrent assets.
60	NETAPP INC.	Software Development Costs — The costs for the development of new software products and substantial enhancements to existing software products are expensed as incurred until technological feasibility has been established, at which time any additional costs would be capitalized in accordance with the accounting guidance for software. Because our current process for developing software is essentially completed concurrently with the establishment of technological feasibility, which occurs upon the completion of a working model, no costs have been capitalized for any of the periods presented. Internal-Use Software Development Costs — We capitalize qualifying costs, which are incurred during the application development stage, for computer software developed or obtained for internal-use and amortize them over the software's estimated useful life.	The company has a non-qualified deferred compensation plan that allows a group of employees within the U.S. to contribute base salary and commissions or incentive compensation on a tax deferred basis in excess of the IRS limits imposed on 401(k) plans. The marketable securities related to these investments are held in a Rabbi Trust.
61	NETSOL TECHNOLOGIES INC	Costs incurred to internally develop computer software products or to enhance an existing product are recorded as research and development costs and expensed when incurred until technological feasibility for the respective product is established. Thereafter, all software development costs are capitalized and reported at the lower of unamortized cost or net realizable value. Capitalization ceases when the product or enhancement is available for general release to customers. The Company makes on-going evaluations of the recoverability of its capitalized software projects by comparing the amount capitalized for each product to the estimated present value of future net income from the product. If such evaluations indicate that the unamortized software development costs exceed the present value of expected future net income, the Company writes off the amount which the unamortized software development costs exceed such present value. Capitalized and purchased computer software development costs are being amortized ratably based on the projected revenue associated with the related software or on a straight-line basis.	No discussion in footnotes
62	NEW RELIC	We capitalize certain development costs incurred in connection with our internal use software and website. These capitalized costs are primarily related to our digital intelligence tools that are hosted by us and accessed by our customers on a subscription basis. Costs incurred in the preliminary stages of development are expensed as incurred. Once an application has reached the development stage, internal and external costs, if direct and incremental, are capitalized until the software is substantially complete and ready for its intended use. Capitalization ceases upon completion of all substantial testing. We also capitalize costs related to specific upgrades and enhancements when it is probable the expenditures will result in additional features and functionality. Maintenance costs are expensed as incurred. Internal use software is amortized on a straight-line basis over its estimated useful life, generally three years.	Sales and marketing commissions are recognized as an expense at the time of the customer order. Substantially all of the effort by the sales and marketing organization is expended through the time of closing the sale
63	ORACLE CORPORATION	All research and development costs are expensed as incurred. Software development costs required to be capitalized under ASC 985-20, Costs of Software to be Sold, Leased or Marketed, and under ASC 350-40, Internal-Use Software, were not material to our consolidated financial statements in fiscal 2016, 2015 and 2014.	We defer sales commission expenses associated with our cloud SaaS, PaaS and IaaS offerings, and recognize the related expenses over the non-cancelable term of the related contracts, which are typically one to three years. Amortization of deferred sales commissions is included as a component of sales and marketing expenses in our consolidated statements of operations.
64	PALO ALTO NETWORKS INC	Internally developed software includes security software developed to meet our internal needs to provide cloud-based subscription services to our end-customers and business software that we customize to meet our specific operational needs. These capitalized costs consist of internal compensation related costs and external direct costs incurred during the application development stage and will be amortized over a useful life of three to five years. The costs to develop software that is marketed externally have not been capitalized as we believe our current software development process is essentially completed concurrent with the establishment of technological feasibility. As such, all related software development costs are expensed as incurred and included in research and development expense in our consolidated statements of operations.	No discussion in footnotes
65	PARK CITY GROUP, INC.	The Company accounts for research costs of computer software to be sold, leased or otherwise marketed as expense until technological feasibility has been established for the product. Once technological feasibility is established, all software costs are capitalized until the product is available for general release to customers. Judgment is required in determining when technological feasibility of a product is established. We have determined that technological feasibility for our software products is reached shortly after a working prototype is complete and meets or exceeds design specifications including functions, features, and technical performance requirements. Costs incurred after technological feasibility is established have been and will continue to be capitalized until such time as when the product or enhancement is available for general release to customers.	No discussion in footnotes
66	PROOFPOINT INC	Internally developed software includes security software developed to meet the Company's internal needs to provide cloud-based subscription services to its end-customers and business software that the Company customizes to meet its operating needs. These capitalized costs consist of internal compensation related costs and external direct costs incurred during the application development stage. The costs capitalized were not material in the years ended December 31, 2016 and 2015. The costs to develop software that is marketed externally have not been capitalized as the current software development process is essentially completed concurrently with the establishment of technological feasibility. As such, all related software development costs are expensed as incurred and included in research and development expense in the consolidated statements of operations. Internally and externally developed software is amortized over the software's estimated useful life of three to five years.	No discussion in footnotes

#	Company	Notes on Capitalization of Software Development	Notes on Capitalization of Commissions
67	**PROS HOLDINGS, INC.**	Internal Use Software- Costs incurred to develop internal-use software during the application development stage are capitalized, stated at cost, and depreciated using the straight-line method over the estimated useful lives of the assets. Application development stage costs generally include salaries and personnel costs and third-party contractor expenses associated with internal-use software development, configuration, coding and testing. Capitalization of such costs begins when the preliminary project stage is complete and ceases at the point in which the project is substantially complete and is ready for its intended purpose. Capitalized internal-use software is included in property and equipment, net in the Consolidated Balance Sheets. Software Devlopment Costs- Capitalization of software development costs for software to be sold, leased, or otherwise marketed begins upon the establishment of technological feasibility, which is generally the completion of a working prototype that has been certified as having no critical bugs and is a release candidate. Amortization begins once the software is ready for its intended use, generally based on the pattern in which the economic benefits will be consumed. To date, software development costs incurred between completion of a working prototype and general availability of the related product have not been material.	No discussion in footnotes
68	**PUREBASE CORP**	No discussion in the footnotes.	No discussion in footnotes
69	**Q2 HOLDINGS**	Software development costs include salaries and other personnel-related costs, including employee benefits and bonuses attributed to programmers, software engineers and quality control teams working on the Company's software solutions. The costs related to software development that are incurred between reaching technological feasibility of a solution and the point at which the solution is ready for general release are capitalized and are included in intangible assets, net on the consolidated balance sheet. Amortization of capitalized software development costs will be computed on an individual product basis for those products available for market and will be recognized based on the product's estimated economic life and these costs will be recognized in cost of revenues.	We capitalize sales commissions and other third-party costs, such as third-party licenses and maintenance related to our customer agreements. We capitalize sales commissions because the commission charges are so closely related to the revenues from the non-cancellable customer agreements that they should be recorded as an asset and charged to expense over the same period that the related revenue is recognized. We begin amortizing deferred solution and other costs for a particular customer agreement once the revenue recognition criteria are met and amortize those deferred costs over the remaining term of the customer agreement. We analyze solution and other costs that may be capitalized to assess their recoverability and only capitalize costs that we anticipate to be recoverable. The portion of capitalized costs expected to be amortized during the succeeding twelve-month period is recorded in current assets as deferred solution and other costs, current portion, and the remainder is recorded in long-term assets as deferred solution and other costs, net of current portion.
70	**QUAD INC**	Other Intangible Assets —Identifiable intangible assets are recognized apart from goodwill and are amortized over their estimated useful lives.	No discussion in footnotes
71	**QUALYS INC**	The Company capitalizes qualifying software costs developed for internal use. These costs generally include internal costs, such as payroll and benefits of those employees directly associated with the development of the software, and other consulting expenses.	Sales commissions are expensed in the quarter in which the related order is received and are paid in the month subsequent to the end of that quarter, which results in increased expenses prior to the recognition of related revenues.
72	**QUOTIENT TECHNOLOGY INC.**	Internal Use Software -For costs incurred for computer software developed or obtained for internal use, the Company begins to capitalize its costs to develop software when preliminary development efforts are successfully completed, management has authorized and committed project funding, and it is probable that the project will be completed and the software will be used as intended. These costs are amortized to cost of revenues over the estimated useful life of the related asset, generally estimated to be three years. Costs incurred prior to meeting these criteria together with costs incurred for training and maintenance are expensed as incurred and recorded in research and development expense on the Company's consolidated statements of operations.	No discussion in footnotes
73	**REALPAGE, INC.**	We capitalize specific product development costs, including costs to develop software products or the software components of our solutions to be marketed to our clients, as well as software programs to be used solely to meet our internal needs. The costs incurred in the preliminary stages of development related to research; project planning; training; maintenance and general and administrative activities; and overhead costs are expensed as incurred. The costs of relatively minor upgrades and enhancements to the software are also expensed as incurred. Once an application has reached the development stage, internal and external costs incurred in the performance of application development stage activities, including materials, services, and payroll-related costs for employees, are capitalized, if direct and incremental, until the software is substantially complete and ready for its intended use. Capitalization ceases upon completion of all substantial testing. We also capitalize costs related to specific upgrades and enhancements when it is probable the expenditures will result in additional functionality. Capitalized costs are recorded as part of property, equipment, and software. Internal use software is amortized on a straight-line basis over its estimated useful life, generally three years. Management evaluates the useful lives of these assets on an annual basis and tests for impairment whenever events or changes in circumstances occur that could impact the recoverability of these assets.	No discussion in footnotes
74	**RED HAT, INC.**	Internal use software - The Company capitalizes costs related to the development of internal use software for its website, enterprise resource planning system and systems management applications. The Company amortizes the costs of computer software developed for internal use on a straight-line basis over an estimated useful life of five years. The carrying value of internal use software is included in property and equipment on the Company's Consolidated Balance Sheets. Capitalized software costs - Capitalization of software development costs for products to be sold to third parties begins upon the establishment of technological feasibility and ceases when the product is available for general release. As a result of the Company's practice of frequently releasing source code that it has developed on an on-going basis for unrestricted download on the Internet, there is generally no passage of time between achievement of technological feasibility and the availability of the Company's product for general release. Therefore, at February 28, 2017 and February 29, 2016, the Company had no internally developed capitalized software costs for products to be sold to third parties.	Deferred commissions are the incremental costs that are directly associated with non-cancellable subscription contracts with customers and consist of sales commissions paid to the Company's sales force. The commissions are deferred and amortized over a period that approximates the subscription period. The commission payments are paid in full subsequent to the month in which the customer's service commences. The deferred commission amounts are recoverable through the future revenue streams under the non-cancellable customer contracts. In addition, the Company has the ability and intent under the commission plans with its sales force to recover commissions previously paid to its sales force in the event that customers breach the terms of their subscription agreements and do not fully pay for their subscription agreements. Deferred commissions are included in Prepaid expenses and Other assets, net on the accompanying Consolidated Balance Sheets. Amortization of deferred commissions is included in sales and marketing expense in the accompanying Consolidated Statements of Operations.
75	**RINGCENTRAL INC**	Internal use Software- The Company capitalizes qualifying internal-use software development costs that are incurred during the application development stage, provided that management with the relevant authority authorizes and commits to the funding of the project, it is probable the project will be completed, and the software will be used to perform the function intended. Costs related to preliminary project activities and post implementation activities are expensed as incurred. Capitalized internal-use software development costs are included in property and equipment and are amortized on a straight-line basis over their estimated useful lives.	No discussion in footnotes

#	Company	Notes on Capitalization of Software Development	Notes on Capitalization of Commissions
76	**ROSETTA STONE INC**	The Company capitalizes software development costs related to certain of its software platforms developed exclusively to provide its web-based subscription services and other general and administrative use software in accordance with ASC subtopic 350-40: Internal-Use Software. Development costs for internal-use software are expensed as incurred until the project reaches the application development stage. Internal-use software is defined to have the following characteristics: (a) the software is internally developed, or modified solely to meet the Company's internal needs, and (b) during the software's development or modification, no substantive plan exists or is being developed to market the software externally. Internally developed software is amortized over a three-year useful life.	Sales commissions from non-cancellable web-based software subscription contracts are deferred and amortized in proportion to the revenue recognized from the related contract. We capitalize sales commissions and other third-party costs, such as third-party licenses and maintenance related to our customer agreements. We capitalize sales commissions because the commission charges are so closely related to the revenues from the non-cancellable customer agreements that they should be recorded as an asset and charged to expense over the same period that the related revenue is recognized. We begin amortizing deferred solution and other costs for a particular customer agreement once the revenue recognition criteria are met and amortize those deferred costs over the remaining term of the customer agreement. We analyze solution and other costs that may be capitalized to assess their recoverability and only capitalize costs that we anticipate to be recoverable. The portion of capitalized costs expected to be amortized during the succeeding twelve-month period is recorded in current assets as deferred solution and other costs, current portion, and the remainder is recorded in long-term assets as deferred solution and other costs, net of current portion.
77	**SALESFORCE.COM, INC.**	The Company capitalizes costs related to its enterprise cloud computing services and certain projects for internal use incurred during the application development stage. Costs related to preliminary project activities and post implementation activities are expensed as incurred. Internal-use software is amortized on a straight-line basis over its estimated useful life, which is generally three to five years. Management evaluates the useful lives of these assets on an annual basis and tests for impairment whenever events or changes in circumstances occur that could impact the recoverability of these assets.	Deferred commissions are the incremental costs that are directly associated with non-cancelable subscription contracts with customers and consist of sales commissions paid to the Company's direct sales force.The commissions are deferred and amortized over the non-cancelable terms of the related customer contracts, which are typically 12 to 36 months. The commission payments are paid in full the month after the customer's service commences. The deferred commission amounts are recoverable through the future revenue streams under the non-cancelable customer contracts. The Company believes this is the preferable method of accounting as the commission charges are so closely related to the revenue from the non-cancelable customer contracts that they should be recorded as an asset and charged to expense over the same period that the subscription revenue is recognized. Amortization of deferred commissions is included in marketing and sales expense in the accompanying consolidated statements of operations.
78	**SERVICENOW INC**	Software development costs for software to be sold, leased, or otherwise marketed are expensed as incurred until the establishment of technological feasibility, at which time those costs are capitalized until the product is available for general release to customers and amortized over the estimated life of the product. Technological feasibility is established upon the completion of a working prototype that has been certified as having no critical bugs and is a release candidate. To date, costs and time incurred between the establishment of technological feasibility and product release have not been significant, and all software development costs have been charged to research and development expense in our consolidated statements of comprehensive loss. Costs incurred to develop our internal administration, finance and accounting systems are capitalized during the application development stage and amortized over the software's estimated useful life of three to five years.	Deferred commissions are the incremental selling costs that are directly associated with our customer contracts and consist of sales commissions paid to our direct sales force and referral fees paid to independent third-parties. The majority of commissions and referral fees are deferred and amortized on a straight-line basis over the terms of the related customer contracts. We include amortization of deferred commissions in sales and marketing expense in the consolidated statements of comprehensive loss.
79	**SMITH MICRO SOFTWARE INC**	Development costs incurred in the research and development of new software products and enhancements to existing software products are expensed as incurred until technological feasibility has been established. The Company considers technological feasibility to be established when all planning, designing, coding, and testing has been completed according to design specifications. After technological feasibility is established, any additional costs are capitalized. Through December 31, 2016, software has been substantially completed concurrently with the establishment of technological feasibility; accordingly, no costs have been capitalized to date.	No discussion in footnotes
80	**SPLUNK**	Capitalization of software development costs for software to be sold, leased, or otherwise marketed begins upon the establishment of technological feasibility, which is generally the completion of a working prototype that has been certified as having no critical bugs and is a release candidate. Amortization begins once the software is ready for its intended use, generally based on the pattern in which the economic benefits will be consumed. We did not capitalize any internal software development costs for fiscal 2017 and 2016 because the cost incurred and the time between technological feasibility and product release was insignificant. We had no amortization expense from capitalized purchased technology during fiscal 2017, 2016 or 2015. Costs related to software acquired, developed or modified solely to meet our internal requirements, with no substantive plans to market such software at the time of development, are capitalized. Costs incurred during the preliminary planning and evaluation stage of the project and during post implementation operational stage are expensed as incurred. Costs incurred during the application development stage of the project are capitalized. We define the design, configuration, and coding process as the application development stage.	Commissions are recorded as a component of sales and marketing expenses and consist of the variable compensation paid to our sales force. Sales commissions are earned and recorded at the time that a customer has entered into a binding purchase agreement. Commissions paid to sales personnel are recoverable only in the case that we cannot collect the invoiced amounts associated with a sales order.
81	**SPS COMMERCE, INC.**	Significant additions or improvements extending asset lives beyond one year are capitalized, while repairs and maintenance are charged to expense as incurred. We also capitalize and amortize eligible costs to acquire or develop internal-use software that are incurred during the development stage. The assets and related accumulated depreciation and amortization are adjusted for asset retirements and disposals with the resulting gain or loss included in our consolidated statements of comprehensive income.	No discussion in footnotes
82	**SYMANTEC CORP**	We capitalize costs incurred during the application development stage related to the development of internal use software and enterprise cloud computing services.	Sales commissions that are incremental and directly related to customer sales contracts in which revenue is deferred are accrued and capitalized upon execution of a non-cancelable customer contract, and subsequently expensed over the term of such contract in proportion to the related future revenue streams. For commission costs where revenue is recognized, the related commission costs are recorded in the period of revenue recognition.
83	**SYNOPSYS INC**	Intangible assets consist of acquired technology, certain contract rights, customer relationships, trademarks and trade names, covenants not to compete, capitalized software, and in-process research and development. These intangible assets are either acquired through business combinations, direct purchases, or internally developed capitalized software. Intangible assets are amortized on a straight-line basis over their estimated useful lives which range from one to ten years.	No discussion in footnotes

#	Company	Notes on Capitalization of Software Development	Notes on Capitalization of Commissions
84	TABLEAU SOFTWARE INC	Software development costs associated with the development of new products, enhancements of existing products and quality assurance activities consists of employee, consulting and other external personnel costs. The costs incurred internally from the research and development ("R&D") of computer software products are charged to expense until technological feasibility has been established for the product. Once technological feasibility is established, all software costs are capitalized until the product is available for release to customers. Judgment is required in determining when technological feasibility of a product is established. To date, we have determined that technological feasibility of software products is reached shortly before the products are released. Costs incurred after establishment of technological feasibility have not been material, and therefore, we have expensed all R&D costs as they were incurred. R&D expenses primarily consist of personnel related costs attributable to our R&D personnel and allocated overhead, which includes facilities related costs. We capitalize certain costs relating to software developed or modified solely to meet our internal requirements and for which there are no substantive plans to market the software. To date, we have not capitalized any such costs as these costs have not been material.	No discussion in footnotes
85	TEXTMUNICATION HOLDINGS, INC.	No discussion in the footnotes.	No discussion in footnotes
86	THE KEYW HOLDING CORPORATION	Costs of internally developed software for resale are expensed until the technological feasibility of the software product has been established. In accordance with the pronouncement on software development costs of the Accounting Standards Codification ("ASC"), software development costs are capitalized and amortized over the product's estimated useful life. Capitalized software development costs are amortized using the greater of straight-line method or as a percentage of revenue recognized from the sale of the capitalized software.	No discussion in footnotes
87	THE ULTIMATE SOFTWARE GROUP, INC.	Computer software development costs related to software developed for internal use falls under the accounting guidance of ASC Topic 350-40, Intangibles Goodwill and Other–Internal Use Software, in which computer software costs are expensed as incurred during the preliminary project stage and capitalization begins in the application development stage once the capitalization criteria are met. Costs associated with post implementation activities are expensed as incurred. Costs capitalized during the application development stage include external direct costs of materials and services consumed in developing or obtaining internal-use software and payroll and payroll-related costs for employees who are directly associated with, and who devote time to, the internal-use computer software. In addition to capitalizing costs for software (which are used by us in our general operations, for internal purposes), we also capitalize costs under ASC Topic 350-40 for certain software development projects related to our suite of products sold to our customers exclusively on a subscription basis under our software-as-a-service offering of UltiPro.	Ultimate's financial statements include prepaid expenses and other current assets which include prepaid commissions on cloud sales. Prepaid expenses are amortized over the life of the asset (typically within one year) and commissions on cloud sales are amortized over the initial contract term (typically 24-36 months) typically commencing on the day the customer processes its first live payroll using UltiPro (also referred to as going "Live"), which corresponds with the related cloud revenue recognition. The portion of prepaid commissions that extends beyond one year is classified in other assets, net, in the consolidated balance sheets as of December 31, 2016 and 2015.
88	TWILIO INC	Certain costs of platform and other software applications developed for internal use are capitalized. The Company capitalizes qualifying internal-use software development costs that are incurred during the application development stage. Capitalization of costs begins when two criteria are met: (i) the preliminary project stage is completed and (ii) it is probable that the software will be completed and used for its intended function. Capitalization ceases when the software is substantially complete and ready for its intended use, including the completion of all significant testing. The Company also capitalizes costs related to specific upgrades and enhancements when it is probable theexpenditures will result in additional functionality and expenses costs incurred for maintenance and minor upgrades and enhancements. Costs related to preliminary project activities and post-implementation operating activities are expensed as incurred. Capitalized costs of platform and other software applications are included in property and equipment. These costs are amortized over the estimated useful life of the software on a straight-line basis over three years. Management evaluates the useful life of these assets on an annual basis and tests for impairment whenever events or changes in circumstances occur that could impact the recoverability of these assets. The amortization of costs related to the platform applications is included in cost of revenue, while the amortization of costs related to other software applications developed for internal use is included in research and development expenses.	No discussion in footnotes
89	TYLER TECHNOLOGIES, INC.	We capitalize software development costs upon the establishment of technological feasibility and prior to the availability of the product for general release to customers. Software development costs primarily consist of personnel costs and rent for related office space. We begin to amortize capitalized costs when a product is available for general release to customers. Amortization expense is determined on a product-by-product basis at a rate not less than straight-line basis over the product's remaining estimated economic life. We have not capitalized any internal software development costs in any of the periods presented.	Prepaid expenses and other current assets include direct and incremental costs such as commissions associated with arrangements for which revenue recognition has been deferred. Such costs are expensed at the time the related revenue is recognized.
90	UPLAND SOFTWARE	Software development costs are expensed as incurred until the point the Company establishes technological feasibility. Technological feasibility is established upon the completion of a working model. Costs incurred by the Company between establishment of technological feasibility and the point at which the product is ready for general release are capitalized, subject to their recoverability, and amortized over the economic life of the related products. Because the Company believes its current process for developing its software products essentially results in the completion of a working product concurrent with the establishment of technological feasibility, no software development costs have been capitalized to date. There were no software development costs required to be capitalized under ASC 985-20, Costs of Software to be Sold, Leased or Marketed, and under ASC 350-40, Internal-Use Software.	No discussion in footnotes
91	VAPIR ENTERPRISES INC.	No discussion in the footnotes.	No discussion in footnotes
92	VEEVA SYSTEMS INC	We capitalize certain costs incurred for the development of computer software for internal use. These costs generally relate to the development of our customer relationship management, content and information management and customer master solutions. We capitalize these costs during the development of the project, when it is determined that it is probable that the project will be completed, and the software will be used as intended. Costs related to preliminary project activities, post-implementation activities, training and maintenance are expensed as incurred. Internal-use software is amortized on a straight-line basis over its estimated useful life, generally three years, and the amortization expense is recorded as a component of cost of subscription services. Management evaluates the useful lives of these assets on an annual basis and tests for impairment whenever events or changes in circumstances occur that could impact the recoverability of these assets. We exercise judgment in determining the point at which various projects may be capitalized, in assessing the ongoing value of the capitalized costs and in determining the estimated useful lives over which the costs are amortized. To the extent that we change the manner in which we develop and test new features and functionalities related to our solutions, assess the ongoing value of capitalized assets or determine the estimated useful lives over which the costs are amortized, the amount of internal-use software development costs we capitalize and amortize could change in future periods.	Sales commissions paid for subscriptions are recorded as a component of sales and marketing expenses when earned by our sales team. Commissions are typically earned upon booking of a customer contract.
93	VERTICAL COMPUTER SYSTEMS, INC.	Software costs incurred internally in creating computer software products are expensed until technological feasibility has been established upon completion of a detailed program design. Thereafter, all software development costs are capitalized until the point that the product is ready for sale, and are subsequently reported at the lower of unamortized cost or net realizable value. The Company considers annual amortization of capitalized software costs based on the ratio of current year revenues by product to the total estimated revenues by the product, subject to an annual minimum based on straight-line amortization over the product's estimated economic useful life, not to exceed five years.	No discussion in footnotes

#	Company	Notes on Capitalization of Software Development	Notes on Capitalization of Commissions
94	**VMWARE, INC.**	Costs associated with internal-use software systems, including those used to provide hosted services, during the application development stage are capitalized. Capitalization of costs begins when the preliminary project stage is completed, management has committed to funding the project, and it is probable that the project will be completed and the software will be used to perform the function intended. Capitalization ceases at the point when the project is substantially complete and is ready for its intended purpose. The capitalized amounts are included in property and equipment, net on the consolidated balance sheets. Development costs of software to be sold, leased, or otherwise marketed are subject to capitalization beginning when technological feasibility for the product has been established and ending when the product is available for general release. During the years presented, software development costs incurred for products during the time period between reaching technological feasibility and general release were not material and accordingly were expensed as incurred	No discussion in footnotes
95	**WEB.COM GROUP, INC.**	Technology and development represents costs associated with creation, development and distribution of our products and websites. Technology and development expenses primarily consist of headcount-related costs associated with the design, development, deployment, testing, operation, enhancement of our products and costs associated with the data centers and all systems infrastructure costs supporting those products as well as all administrative platforms and allocated occupancy overhead costs. The Company expenses technology and development costs as incurred.	No discussion in footnotes
96	**WORKDAY, INC.**	No discussion in the footnotes.	Sales commissions earned by our sales force are considered to be direct sales commissions when they can be associated specifically with a non-cancelable subscription contract. Direct sales commissions are deferred when earned and amortized over the same period that revenues are recognized for the related non-cancelable subscription contract. The commission payments are paid in full after the customer has paid for its first year of service. Amortization of deferred commissions is included in Sales and marketing in the accompanying consolidated statements of operations
97	**WORLDS INC**	Research and development costs are charged to operations as incurred.	No discussion in footnotes
98	**XACTLY CORP**	The Company’s software and website development costs are accounted for under the guidance for internal use software and website development costs. The costs incurred in the preliminary stages of development are expensed as incurred. Once an application has reached the development stage, if: (1) the costs are direct and incremental and (2) management has determined that it is probable that the project will be completed and the software will be used to perform the function intended, internal and external costs are capitalized until the application is substantially complete and ready for its intended use. Because the majority of the Company’s development efforts are categorized in the operation stage (post-implementation) or do not result in additional functionality, no costs have been capitalized to date. These costs are included in the accompanying consolidated statements of operations as research and development expenses.	No discussion in footnotes
99	**ZENDESK**	We capitalize certain development costs incurred in connection with software development for our platform and software used in operations. Costs incurred in the preliminary stages of development are expensed as incurred. Once software has reached the development stage, internal and external costs, if direct and incremental, are capitalized until the software is substantially complete and ready for its intended use. Capitalization ceases upon completion of all substantial testing. We also capitalize costs related to specific upgrades and enhancements when it is probable the expenditures will result in additional functionality. Capitalized costs are recorded as part of property and equipment. Maintenance and training costs are expensed as incurred. Capitalized internal-use software is amortized on a straight-line basis over its estimated useful life and recorded in cost of revenue within the accompanying consolidated statements of operations. The weighted-average useful life of our capitalized internal-use software was 3.3 years as of December 31, 2016.	No discussion in footnotes
100	**ZIX CORPORATION**	Costs incurred in the development and testing of subscription software products related to research, project planning, training, maintenance and general and administrative activities, and overhead costs are expensed as incurred. The costs of relatively minor upgrades and enhancements to the software are also expensed as incurred. Costs for the development of new software solutions and substantial enhancements to existing software solutions are expensed as incurred until technological feasibility has been established, at which time any additional costs would be capitalized. No research and development costs have been capitalized because we believe that technological feasibility is established concurrent with general release to customers. Research and development costs associated with software developed for internal use on behalf of our customers are capitalized. To date, capitalized costs for software developed for internal use on behalf of our customers were not material.	No discussion in footnotes