



*2009 Software as a Service  
Valuation & Capital Efficiency  
Benchmarking Study*

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<i>Main Office:</i>	<i>221 East Fourth Street, Suite 2400, Cincinnati, OH, 45202</i>	<i>513-621-9700</i>
<i>Raleigh Office:</i>	<i>3737 Glenwood Avenue, Suite 1000, Raleigh, NC, 27612</i>	<i>919-573-6111</i>

*[www.rccf.com](http://www.rccf.com)*

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# ***Introduction***

## **Summary of Key Findings**

Below is a summary of the key findings from the following benchmarking report:

- There are still only 18 public pure-play SaaS providers across a myriad of industries. However, traditional software vendors continue to expand their SaaS offerings.
- Public SaaS companies are still relatively small with only one company achieving revenue in excess of \$1 billion and the majority hovering around \$200 MM in revenue.
- The average public, pure-play SaaS Company generated \$61 MM in trailing twelve months (TTM) revenue when it went public. To achieve this scale, those same public companies raised on average \$46 MM of pre-IPO equity funding.
- Most industry estimates suggest that SaaS companies require approximately 50% - 70% more capital to achieve cash flow breakeven than their software company counterparts.
- The primary SaaS valuation metrics include multiples of both recurring revenue and cash flow. Also important are contracted monthly recurring revenue growth, capital efficiency and churn rates. Other qualitative considerations consist of intellectual property and pricing power (e.g. switching costs, ability to up-sell additional applications, etc.).
- Prior to the market downturn in late 2008, pure-play SaaS providers traded at six times TTM revenue, a premium to the traditional two times trailing revenue for public software vendors, largely given the predictable nature of the revenue stream. The comparable average multiple of free cash flow at the date of this study approximates 28 times free cash flow.
- However, market valuations plummeted by almost 50% since January 2008, bringing SaaS valuations more in line with historic traditional software valuation metrics. The public markets saw one SaaS IPO in the last 18 months.
- Best-of-breed SaaS companies achieve gross margins in the 70%+ range and manage annual churn rates below 15%. SaaS vendors who have reached scale (\$50+ MM in TTM revenue for purposes of this report) generate EBITDA margins in the high teens to low 20% range. Not surprisingly, given the attractive industry growth, most companies aggressively reinvest cash into sales and marketing to fuel top-line growth, at the expense of near-term profitability. As a result, many companies aren't typically reaching EBITDA positive operations until they exceed \$50 MM in revenue.
- Ultimately, valuation is driven by confidence in a company's ability to generate healthy free cash flow margins. Amongst the public SaaS universe, Salesforce.com generates the highest free cash flow margins. Driven by its high gross margins (73%) and low cap ex requirements (6%), Salesforce.com generates 24% free cash flow margins. Given the immaturity of this market, many of the public SaaS comps are just now achieving small free cash flow margins.

- Particular attention in this study is devoted to sales and marketing efficiency and effectiveness. Well-performing SaaS companies achieve payback on sales and marketing investments in less than 24 months with the better performing SaaS companies achieving payback in less than 15 months. Simply translated, 24 month payback equates to a 50% ROI on sales and marketing investment and 12 month payback represents 100% ROI.
- SaaS companies demonstrating payback below 15 months should consider further investment in sales and marketing. Longer than 2 year payback, SaaS should probably consider alternate spend initiatives to drive more efficient growth.
- Public SaaS companies spent an average 23% of revenue on research and development between \$15 MM and \$30 MM in TTM revenue. Influencing the percentage spend is price point, number of customers served and level of a specificity/technicality associated with the service offering. Between \$5 MM - \$15 MM in TTM revenue, these same companies spent approximately 40%.
- An analysis of general and administrative expenses demonstrates that SaaS companies spend approximately \$2 MM at \$10 MM in TTM revenue. Above \$15 MM in revenue, companies tend to invest about 21% of their revenue in general and administrative expenses.
- Not surprisingly, capital expenses for SaaS companies are higher than on-premise software companies, given the required infrastructure to host their customers' data. Capital expenditure percentage of revenue for public SaaS companies last year ranges from 2% to 15%.

## **Introduction and Study Overview**

SaaS represents a transformational business and delivery model in the IT sector. Growing, but under-penetrated, the SaaS market achieved \$9 billion in 2007 revenue and is expected to see 23% CAGR, reaching \$19 billion in 2010.<sup>i</sup> For comparison, the global software market generated revenues of \$203 billion in 2006 and is forecasted to grow 6%, achieving \$271 billion in revenue by the end of 2011.<sup>ii</sup> Considering the SaaS market potential exceeds 40% of the overall software market, the addressable SaaS market size is estimated to grow to \$110 billion by 2011<sup>iii</sup>. While the SaaS business model expands the overall software application addressable market, a large portion of the sector's growth will come from cannibalization of traditional software models. Nonetheless, software vendors have started and will continue to deploy significant resources towards a SaaS initiative. However, pure play SaaS providers will continue to demonstrate higher growth rates than traditional software companies, since a significant amount of growth from SaaS for traditional software companies will cannibalize their on-premise deployments.

Given the recurring nature of the revenue model, SaaS businesses provide wonderful predictability. Considering River Cities' eight SaaS portfolio company investments, we are able to establish a best of breed analysis of key operating metrics for this business model, which allows us to provide fact-based recommendations to our portfolio companies. Additionally, the following analysis enables us to more critically assess new SaaS investment opportunities.

Key operating metrics for the subject companies were collected for the years ending 2001-2008. In addition, data was collected from public companies' S-1 filings to compare relative operating metrics at

a comparable stage of development as our portfolio companies (e.g. pre-\$50 MM revenue). For example, Salesforce.com, a \$1 billion company was analyzed in the 2001 to 2003 time frame when it had revenues between \$ 5.4 MM and \$ 96 MM. Key metrics considered in this study include capital efficiency, revenue growth, gross margins, sales and marketing expenditure, research and development expenditure, general and administrative expenditure, capital expenditures and EBITDA margins.

## **Company Profiles**

Given the emerging nature of the Software as a Service business model, there are only eighteen public pure play SaaS vendors. Salesforce.com is the largest, generating approximately \$1 billion in 2008 revenue. Annual revenue drops substantially when considering the rest of the universe, most of whom are generating less than \$200 MM in trailing twelve months revenue. The public SaaS universe span a variety of services including E-commerce, Human Capital Management (HCM), IT security, marketing, supply chain / procurement and other back office applications. The go-to-market strategies vary by company with some employing a broad base approach and most others through a vertical market specialization (including higher-education, legal, life sciences, retail and manufacturing). The following table profiles eighteen best-of-breed public SaaS companies and eight River Cities' portfolio companies that were considered in the study:

**Exhibit 1: Public and Portfolio Company Profiles**

<b>Public Comps.</b>	<b>Ticker</b>	<b>Application</b>	<b>Vertical / Function Focus</b>
AthenaHealth	ATHN	Business services for physician practices	Healthcare
BlackBoard	BBBB	Online teaching and learning system	Education
Concur	CNQR	Employee spend management solutions	Human Resources
Constant Contact	CTCT	E-mail marketing and online survey solutions	Marketing
DealerTrack	TRAK	Data solutions	Automotive - Retail
Demandtec	DMAN	Consumer demand management solutions	Retailers
Kenexa	KNXA	Recruitment software & services	Human Resources
Liveperson	LPSN	Online ecommerce interaction	Marketing
LogMeIn	LOGM	Remote connectivity solutions	Information Technology
NetSuite	N	Integrated business mgmt. application suites	General
Omniure	OMTR	Business optimization software	Marketing
RightNow	RNOW	Customer relationship management	CRM
Salary.com	SLRY	Compensation management solutions	Employee Performance Mgmt.
Salesforce	CRM	Customer relationship management	CRM
Success Factors	SFSF	Performance and talent mgmt. software solutions	Human Resources
Taleo	TLEO	Talent management software solutions	Human Resources
Ultimate Software	ULTI	Human resources, payroll and talent mgmt	Human Resources
Vocus	VOCS	Software for public relations management	Contact Management
<b>RCCF Companies</b>	<b>Ticker</b>	<b>Application</b>	<b>Vertical / Function Focus</b>
CST	Private	Online construction information	Construction
EVault	Private	Online data backup and disaster recovery	Disaster Recovery
MX Logic	Private	Email defense solutions	Email Security
PerfectServe	Private	Physician contact and comm. Mgmt. services	Healthcare
ProFind	Private	Hiring optimization solutions	Human Resources
SciQuest	Private	Supplier management and procurement automation	Life Science & Higher Education
SPS Commerce	Private	Supply chain integration platform	Retail
Talent Technology	Private	Application tracking system	Human Resources

## **Capital Efficiency**

### **Public Comps. IPO Statistics & Funding**

Prior to 2004, only three SaaS companies had been taken public. However, as the business model matured, six additional SaaS companies went public in 2007. To access the public markets, the following 18 SaaS companies achieved average trailing twelve months revenue of \$61 MM with four below \$40 MM. The following chart highlights key IPO-related metrics of the public SaaS vendors before they went public:

**Exhibit 2: Public Comps. and IPO Statistics (\$s in MM)**

Public Comps.	Date founded	Funding to IPO	IPO Date	IPO Proceeds	Years to IPO	Revenue*	EBITDA*
AthenaHealth	22-Aug-97	\$49	20-Sep-07	\$113	10.1	\$76	\$11
BlackBoard	1-Jun-97	\$101	18-Jun-04	\$77	7.1	\$92	\$9
Concur	20-Aug-93	\$30	16-Dec-98	\$39	5.3	\$20	(\$25)
ConstantContact	1-Aug-95	\$37	3-Oct-07	\$107	12.2	\$50	(\$2)
Dealertrack	29-Jan-01	\$48	31-Dec-05	\$170	4.9	\$121	\$34
Demandtec	1-Nov-99	\$42	9-Aug-07	\$66	7.8	\$43	\$1
Kenexa	1-Jan-87	\$55	24-Jun-05	\$60	18.5	\$66	\$12
LivePerson	1-Oct-98	\$42	6-Apr-00	\$32	1.5	\$1	NA
LogMeIn	1-Feb-03	\$25	1-Jul-09	\$107	6.4	\$52	(\$0)
NetSuite	1-Oct-98	\$85	20-Dec-07	\$161	9.2	\$109	\$18
Omniture	1-Jan-96	\$67	28-Jun-06	\$70	10.5	\$80	\$8
RightNow Tech.	1-Jan-97	\$32	5-Aug-04	\$44	7.6	\$62	\$6
Salary.com	1-Apr-99	\$6	15-Feb-07	\$60	7.9	\$23	(\$3)
Salesforce	1-Feb-99	\$65	23-Jun-04	\$110	5.4	\$96	\$19
Success Factors	1-Jan-93	\$55	20-Nov-07	\$108	14.9	\$63	(\$59)
Taleo	15-Jul-99	\$37	29-Sep-05	\$94	6.2	\$78	\$6
Ultimate Software	1-Jan-90	\$25	2-Jun-98	\$33	8.4	\$43	(\$2)
Vocus	1-Jul-99	\$26	7-Dec-05	\$45	6.4	\$28	(\$1)
<b>Average</b>		<b>\$46</b>		<b>\$83</b>	<b>8.4</b>	<b>\$61</b>	<b>\$2</b>

\* Approximate Revenue and EBITDA at the time of IPO

Source: SEC Filings and Wachovia Securities - May 2008 report on the state of the SaaS market

Industry experts estimate that SaaS companies require approximately 50% - 70% more capital to achieve cash flow breakeven than their software company counterparts.<sup>iv</sup>

Growing a SaaS business is capital intensive because revenue and cash flow are typically spread out over the life of the contract concurrent with the monthly delivery of the software services. By comparison, perpetual software license vendors typically collect the respective license fees upfront. As noted above, the average pre-IPO equity raised for all eighteen companies was \$46 MM. 10 out of the 18 public SaaS companies had positive EBITDA margins.

## Cumulative Capital Efficiency

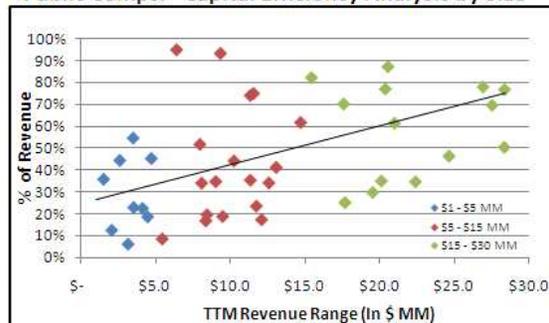
Exhibit 3 highlights a simplistic efficiency ratio, which demonstrates the capital efficiency of a business by measuring a company's TTM revenue relative to the total amount of capital raised within certain ranges up to \$30 MM in revenue. The ratio divides trailing twelve months (TTM) revenue by the cumulative debt and equity raised. A 200% ratio suggests that a company generated in TTM revenue twice the total debt and equity that it raised.

**Exhibit 3: Cumulative Capital Efficiency (%)**

Public Comps.	\$1 - \$5 MM	\$5 - \$15 MM	\$15 - \$30 MM	At IPO
AthenaHealth	-	-	47%	98%
BlackBoard	-	17%	-	106%
Concur	-	35%	35%	35%
Constant Contact	19%	48%	70%	130%
DealerTrack	7%	23%	-	240%
Demandtec	-	19%	30%	115%
Kenexa	-	-	51%	126%
Livestorm	-	-	-	-
LogMeIn	34%	74%	102%	102%
NetSuites	6%	17%	25%	128%
Omniture	-	-	87%	123%
RightNow	13%	35%	70%	192%
Salary.com	45%	143%	437%	562%
Salesforce	8%	-	35%	149%
Success Factors	23%	43%	-	112%
Taleo	-	34%	77%	207%
Ultimate Software	-	93%	70%	173%
Vocus	45%	63%	91%	113%
<b>Average</b>	<b>22%</b>	<b>50%</b>	<b>88%</b>	<b>159%</b>
RCCF Companies	\$1 - \$5 MM	\$5 - \$15 MM	\$15 - \$30 MM	2008
<b>Average</b>	<b>25%</b>	<b>35%</b>	<b>61%</b>	<b>62%</b>
<b>Range</b>	<b>15% - 54%</b>	<b>18% - 65%</b>	<b>31% - 96%</b>	<b>33% - 132%</b>

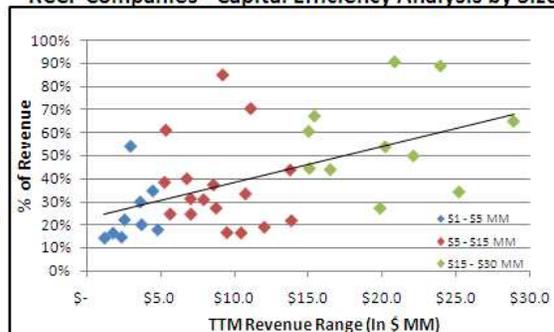
Note: If more than one datapoint was present in a revenue range average numbers are used. Blanks indicate data was not available or not applicable.

**Public Comps. - Capital Efficiency Analysis by Size**



Two datapoints over 100% of Revenue excluded in the \$15-\$30 MM range

**RCCF Companies - Capital Efficiency Analysis by Size**



(Note: As with all of the exhibits in this report, the graphs to the right of the chart include all available data points from the associated companies. A company might have multiple data points within the considered revenue range as it grows through the ranges over time.)

As noted above, Public SaaS companies posting revenue below \$30 MM, produced capital efficiency ratios between 6% and 437% as compared to River Cities' portfolio companies that generated efficiency ratios between 15% and 132%. Most efficient of the public companies was Salary.com achieving a capital efficiency ratio of 437%. Between \$30 MM TTM revenue until the company filed for an IPO, public SaaS companies gained significant leverage as the average capital efficiency approached 120%. Only Concur (35%) and AthenaHealth (98%) posted efficiency ratios less than 100% at the time of their IPO.

Within River Cities' portfolio, two efficient performers demonstrated 125% capital efficiency ratios. One such company generated \$30.3 MM in TTM revenue in 2008 on \$23 MM in total capital raised. The other generated \$41.5 MM in TTM revenue in 2006 on \$27.4 MM total capital.

To gain better insight to the above ratios, we explore the sales and marketing effectiveness of each of these companies in further detail later in this study.

# Valuation Metrics

## Public SaaS Company Valuation Metrics

While all companies are ultimately valued on the present value of their discounted future cash flows, industry analysts use both multiples of revenue and cash flow as close proxies for valuing SaaS businesses. In early 2008, public pure-play SaaS providers traded at an average of six times TTM revenue. Given the growth potential, these multiples represent a premium over traditional public software companies. As of June 30<sup>th</sup> 2009, public SaaS companies' valuations have recovered somewhat from the downturn of late 2008 / early 2009 and are trading at approximately 3.5 times TTM revenue:

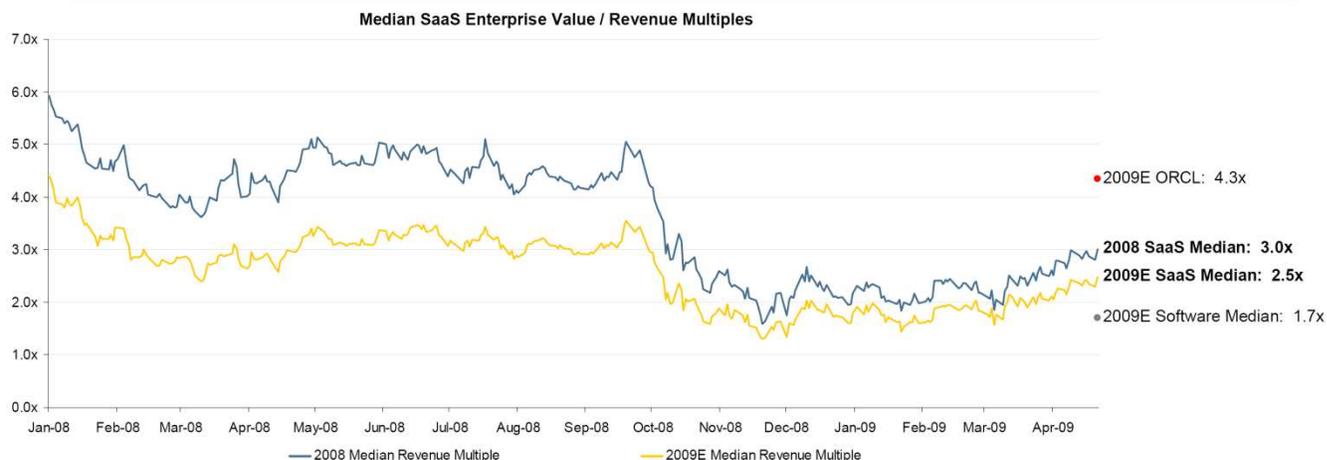
Exhibit 4: Public SaaS Company Valuation (\$s in MMs)

Company	Ticker	Market Cap.	Enterprise Value (EV)	TTM Revenue	2008 Revenue	Qtrly. y.o.y Growth	EBITDA TTM	EV / TTM Revenue	EV / 2008 Revenue	EV / EBITDA
Athena Health	ATHN	\$1,220	\$1,160	\$152	\$136	42%	\$19	7.6	8.5	59.9
Blackboard	BBBB	\$921	\$922	\$330	\$312	26%	\$61	2.8	3.0	15.1
Concur	CNQR	\$1,530	\$1,290	\$233	\$215	16%	\$56	5.5	6.0	23.2
Constant Contact	CTCT	\$559	\$452	\$97	\$87	55%	\$1	4.6	5.2	396.5
Demandtec	DMAN	\$247	\$169	\$75	\$75	11%	(\$2)	2.3	2.3	(93.8)
Kenexa	KNXA	\$263	\$230	\$194	\$203	-19%	\$29	1.2	1.1	7.8
Liveperson	LPSN	\$181	\$162	\$77	\$75	17%	\$9	2.1	2.2	18.4
LogMeIn	LOGM	\$422	\$394	\$59	\$52	73%	\$3	6.7	7.6	118.0
NetSuite	N	\$720	\$610	\$160	\$152	22%	(\$11)	3.8	4.0	(54.4)
Omniture	OMTR	\$955	\$862	\$320	\$296	38%	\$25	2.7	2.9	34.3
RightNow	RNOW	\$373	\$286	\$144	\$140	10%	\$3	2.0	2.0	94.6
Salary.com	SLRY	\$48	\$35	\$42	\$35	21%	(\$18)	0.8	1.0	(1.9)
Salesforce	CRM	\$4,780	\$4,210	\$1,130	\$1,077	23%	\$111	3.7	3.9	37.9
Success Factors	SFSF	\$512	\$416	\$124	\$112	50%	(\$49)	3.4	3.7	(8.6)
Taleo	TLEO	\$577	\$512	\$181	\$168	34%	\$13	2.8	3.0	40.4
Ultimate Software	ULTI	\$603	\$570	\$184	\$179	12%	\$5	3.1	3.2	118.2
Vocus	VOCS	\$388	\$292	\$80	\$78	14%	\$5	3.6	3.8	63.3
<b>Mean</b>						<b>26%</b>		<b>3.5</b>	<b>3.7</b>	<b>51.1</b>
<b>Median</b>						<b>22%</b>		<b>3.1</b>	<b>3.2</b>	<b>34.3</b>

Source: Yahoo Finance as of 6/30/2009; except for LogMeIn as of 5/8/2009.

Exhibit 5 highlights that SaaS market valuations have plummeted by 50% since January 2008, bringing SaaS valuations more in line with historic software valuation metrics.

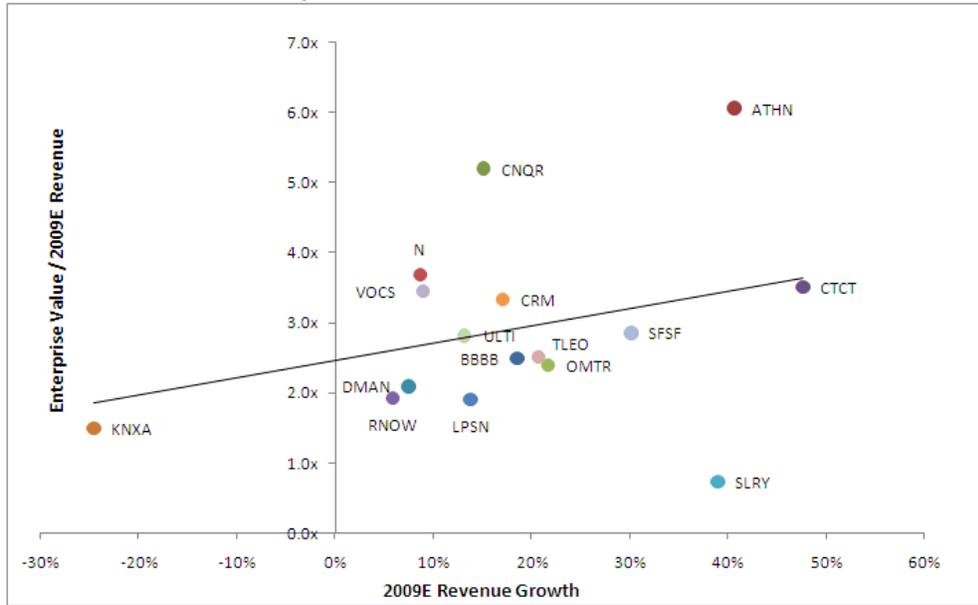
## Exhibit 5: Revenue Multiples since January 2008



Source: PacificCrest  
August 31, 2009

Regardless of the economic environment, several other factors impact SaaS company valuations, the dominant consideration being top line revenue growth. Exhibit 6 shows that public companies delivering stronger revenue growth are generally rewarded with higher valuation multiples. Other important considerations include gross margin percentage, churn rates, pricing power (e.g. switching costs, up-sell opportunities) and free cash flow margins.

**Exhibit 6: Revenue Multiples versus Growth**



Source: Yahoo Finance

## SaaS Merger and Acquisitions Valuation Metrics

Exhibit 7 profiles valuation multiples for selected transactions since the beginning of 2007.

The transactions profiled below show a decline of average M&A valuation metrics from 5.4 times TTM revenue in 2007 to 2.8 times TTM revenue in the first half of 2009.

River Cities' SaaS portfolio companies have acquired three small companies at or under \$5 MM in revenue. The respective valuation metrics paid range from 1.1 times TTM revenue to 3.2 times TTM revenue.

Additionally, two River Cities' portfolio companies were sold to strategic acquirers. Seagate acquired EVault in 2006 for \$185 MM and McAfee acquired MXLogic in September 2009 for up to \$170 MM.

**Exhibit 7: Select SaaS Merger & Acquisition Transactions (\$s in MMs)**

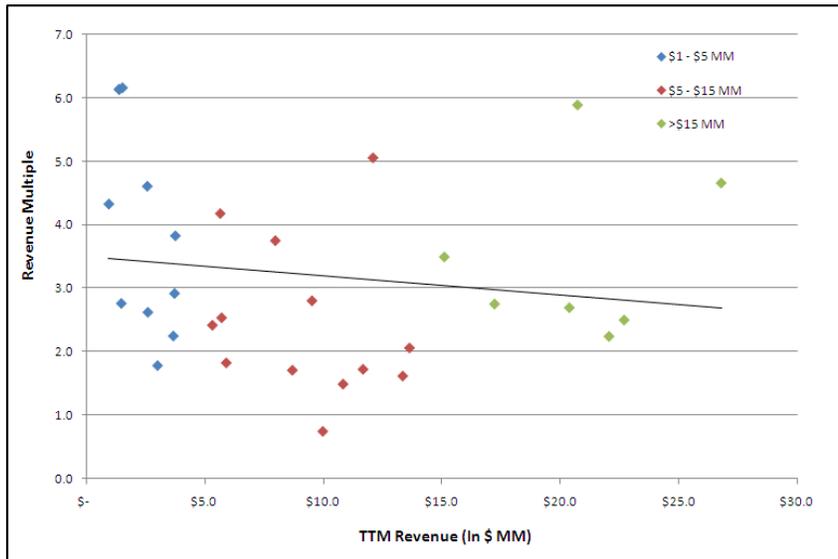
Date	Acquirer	Target	Enterprise Value (MMs)	TTM Revenue	LTM Revenue Multiple
<b>2007</b>					
2-Jan-07	Allscripts Healthcare Solutions	Extended Care Information Network	\$90.0	\$19.0	4.7
15-Mar-07	Cisco	Webex	\$3,200.0	\$380.0	8.4
26-Apr-07	WebSense	SurfControl	\$400.0	\$135.6	2.9
6-Jun-07	IBM	Watchfire	\$85.0	\$30.4	2.8
3-Jul-07	Autonomy	Zantaz	\$375.0	\$100.0	3.8
9-Jul-07	Google	Postini	\$625.0	\$75.0	8.3
7-Sep-07	Omniture	Offermatica	\$65.0	\$8.7	7.5
20-Sep-07	Ariba	Procuri	\$93.0	\$20.7	4.5
8-Oct-07	McAfee	Safeboot	\$350.0	\$60.0	5.8
25-Oct-07	Omniture	Visual Sciences	\$394.0	\$80.0	4.9
31-Oct-07	Iron Mountain	Stratify	\$158.0	\$30.0	5.3
		<b>2007 Average</b>	<b>\$530.5</b>	<b>\$85.4</b>	<b>5.4</b>
<b>2008</b>					
14-Jan-08	Blackboard	NTI Group	\$182.0	\$30.0	6.1
12-Feb-09	Yahoo!	Maven Networks	\$160.0	\$14.5	11.0
8-Apr-08	Nuance Comm.	eScription	\$400.0	\$40.0	10.0
11-Apr-08	Apax	TriZetto	\$1,258.7	\$449.5	2.8
6-May-08	Taleo	Vurv Technology	\$128.8	\$49.0	2.6
29-May-08	Blackbaud	Kintera	\$46.0	\$44.9	1.0
6-Jun-08	Symantec	SwapDrive	\$123.0	\$22.0	5.6
9-Jun-08	US Investigation	HireRight	\$195.0	\$84.6	2.3
29-Sep-08	Bedford	Authoria	\$63.1	\$16.5	3.8
8-Oct-08	Symantec	MessageLabs	\$695.0	\$144.8	4.8
3-Dec-08	Intuit	Entellium	\$7.7	\$1.7	4.5
8-Dec-08	CSG Systems	Quaero Corp.	\$15.0	\$13.0	1.2
10-Dec-08	Salary.com	Genesys	\$6.8	\$8.0	0.9
10-Dec-08	Experian Group	SearchAmerica	\$90.0	\$14.0	6.4
		<b>2008 Average</b>	<b>\$240.8</b>	<b>\$66.6</b>	<b>4.5</b>
<b>2009</b>					
5-Feb-09	Descartes Systems	Oceanwide	\$8.4	\$6.0	1.4
6-Apr-09	Vista Equity Partners	SumTotal Systems	\$108.0	\$114.4	0.9
27-May-09	EMC Corporation	Configuresoft	\$95.0	\$29.7	3.2
2-Jun-09	Intuit	PayCycle	\$170.0	\$29.8	5.7
		<b>2009 Average</b>	<b>\$95.4</b>	<b>\$45.0</b>	<b>2.8</b>
		<b>Overall Average</b>	<b>\$330.6</b>	<b>\$70.8</b>	<b>4.6</b>

Source: River Cities estimates

## River Cities' Portfolio Company Valuation Metrics

While numerous factors and methods are considered when valuing a company, most River Cities' SaaS investments occurred at a valuation near 3 times TTM revenue. Exhibit 8 depicts the valuation multiple relative to the company's stage of development and demonstrates a range between .7 times to as high as 6 times TTM revenue. Not unlike public companies, other factors such as revenue growth, capital efficiency, churn rates, intellectual property and pricing power are also important considerations. While not evident from the multiples show below, institutional investors almost always require certain terms that further impact the valuation including preferences, participation and dividend features. In any case, consistent adherence to pricing discipline will enhance long-term investment returns.

**Exhibit 8: River Cities Portfolio Company Valuation Multiple vs. TTM Revenue**



## **Key Operating Metrics**

This section benchmarks key operating metrics, including revenue growth, gross margins, sales & marketing investment, research & development spend, general & administrative expenses, capital expenditure and EBITDA margins. To make meaningful comparisons between the public vendors and River Cities' portfolio companies, the following analysis considers the above metrics for public vendors when they were generating less than \$30 MM in revenue. Financial details were gathered from their respective S-1 filings.

### **Revenue Growth**

As noted earlier, revenue growth is one of the more important considerations when valuing SaaS companies. The following chart tracks the four year CAGR starting from the year in which the Public Comps and portfolio companies were generating at approximately \$10 MM in TTM revenue. As an example, we looked at Salesforce.com for the four years following the year they posted \$5.4 MM in TTM revenue. The Company generated an impressive 139% CAGR to achieve TTM revenue of \$176 MM four years later.

**Exhibit 9: Select four year CAGR for SaaS companies (\$s in '000s)**

Public Comps.	Year 0	Year 4	CAGR
AthenaHealth	\$11,984	\$75,813	59%
BlackBoard	\$1,903	\$92,478	164%
Concur	\$9,003	\$41,099	46%
ConstantContact	\$4,465	\$50,495	83%
DealerTrack	\$1,340	\$120,219	208%
Demandtec	\$8,423	\$43,485	51%
Kenexa	\$28,371	\$65,641	23%
LivePerson	\$12,023	\$52,228	44%
LogMeIn	\$2,574	\$51,723	112%
NetSuite	\$8,345	\$67,202	68%
Omniture	\$3,595	\$42,804	86%
RightNow Tech.	\$2,025	\$35,879	105%
Salary.com	\$3,484	\$23,034	60%
Salesforce	\$5,435	\$176,375	139%
Success Factors	\$4,122	\$63,350	98%
Taleo	\$12,547	\$78,410	58%
Ultimate Software	\$3,727	\$55,757	97%
Vocus	\$4,720	\$20,393	44%
<b>Average</b>	<b>\$7,116</b>	<b>\$64,244</b>	<b>86%</b>
RCCF Companies	Year 0	Year 4	CAGR
<b>Average</b>	<b>\$4,989</b>	<b>\$21,798</b>	<b>47%</b>
<b>Range</b>	<b>\$2,367 - \$10,425</b>	<b>\$6,988 - \$34,402</b>	<b>25% - 95%</b>

Exhibit 9 highlights that all but four of the public comparables demonstrated greater than 50% CAGR. The best of these companies grew revenues around 208% CAGR with very good performers generating around 100% CAGR. At these growth rates, companies are able to grow from less than \$10 MM in TTM revenue to more than \$40 MM in four years. By comparison, three of River Cities' portfolio companies achieved comparable growth rates.

Exhibit 10 provides a good perspective into recent compounded annual growth rates for each of the public and River Cities' portfolio companies. As can be seen, the compounded annual growth rate in the last three years for the Public SaaS vendors is impressive with 11 out of the 18 companies delivering growth rates exceeding 40%. River Cities' portfolio companies are generating comparable growth rates that together average 40%.

Revenue per Employee: While revenue per employee is not widely published, the industry targets \$150,000 in revenue per employee as a proxy for the point at which SaaS companies reach EBITDA positive operations.

### **Gross Margins**

SaaS vendors deploy a multi-tenant architecture, which means they manage one code base across an entire installed customer base. Cost savings include shared hardware and software. Additionally, maintenance costs, are significantly lower due to the ease of deployment. Software upgrades or bug fixes are deployed against one instance for thousands of customers as opposed to supporting thousands of instances.

**Exhibit 10: TTM Revenue Performance (\$s in MM)**

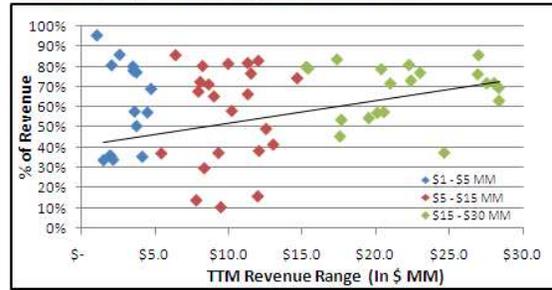
Public Comps.	2005	2006	2007	2008	CAGR
AthenaHealth	\$54	\$76	\$101	\$140	38%
BlackBoard	\$136	\$183	\$239	\$312	32%
Concur	\$72	\$97	\$129	\$216	44%
Constant Contact	\$15	\$28	\$50	\$87	81%
DealerTrack	\$120	\$173	\$234	\$243	26%
Demandtec	\$33	\$43	\$61	\$75	32%
Kenexa	\$66	\$112	\$182	\$204	46%
Liveperson	\$22	\$34	\$52	\$75	50%
LogMeIn	\$4	\$11	\$27	\$52	145%
NetSuite	\$36	\$67	\$109	\$152	61%
Omniture	\$43	\$80	\$143	\$296	90%
RightNow	\$87	\$110	\$112	\$140	17%
Salary.com	\$15	\$23	\$35	\$43	41%
Salesforce	\$310	\$497	\$749	\$1,077	51%
Success Factors	\$13	\$33	\$63	\$112	105%
Taleo	\$78	\$97	\$128	\$178	31%
Ultimate Software	\$89	\$115	\$151	\$179	26%
Vocus	\$28	\$40	\$58	\$78	40%
<b>Average</b>	<b>\$68</b>	<b>\$101</b>	<b>\$146</b>	<b>\$203</b>	<b>53%</b>
RCCF Companies	2005	2006	2007	2008	CAGR
<b>Average</b>	<b>\$9</b>	<b>\$14</b>	<b>\$14</b>	<b>\$21</b>	<b>40%</b>
<b>Range</b>	<b>\$1 - \$24</b>	<b>\$1 - \$34</b>	<b>\$1 - \$25</b>	<b>\$7 - \$31</b>	<b>22% - 70%</b>

**Exhibit 11: Gross Margins**

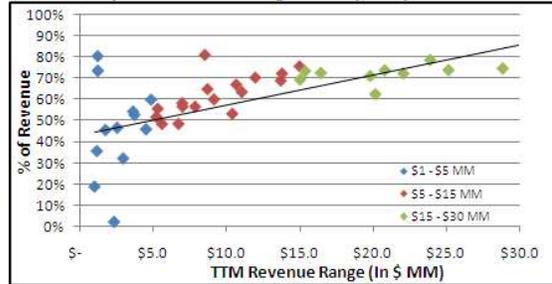
Public Comps.	\$1 - \$5	\$5 - \$15	\$15 - \$30	2008
AthenaHealth	-	16%	38%	69%
BlackBoard	36%	38%	-	70%
Concur	35%	65%	57%	68%
Constant Contact	57%	74%	72%	72%
DealerTrack	-	-50%	-	53%
Demandtec	-	2%	55%	69%
Kenexa	-	-	69%	70%
Liveperson	-	38%	82%	73%
LogMeIn	87%	82%	85%	88%
NetSuite	-68%	30%	54%	68%
Omniture	68%	71%	58%	57%
RightNow	81%	66%	74%	64%
Salary.com	57%	84%	78%	69%
Salesforce	37%	-	73%	80%
Success Factors	36%	50%	-	65%
Taleo	-	49%	63%	66%
Ultimate Software	51%	37%	46%	54%
Vocus	69%	72%	76%	81%
<b>Average</b>	<b>46%</b>	<b>45%</b>	<b>65%</b>	<b>69%</b>
RCCF Companies	\$1 - \$5	\$5 - \$15	\$15 - \$30	2008
<b>Average</b>	<b>40%</b>	<b>60%</b>	<b>73%</b>	<b>67%</b>
<b>Range</b>	<b>2% - 77%</b>	<b>50% - 65%</b>	<b>68% - 77%</b>	<b>48% - 81%</b>

Note: If more than one datapoint was present in a revenue range average numbers are used. Blanks indicate data was not available or not applicable.

**Public Comps. - Gross Margins Analysis by Size**



**RCCF Companies - Gross Margins Analysis by Size**



Given the shared-cost approach, SaaS companies generate attractive gross margins targeting more than 70%. Obviously, as the installed base grows, so does the ability to share fixed infrastructure costs over more clients. The above exhibits demonstrate that sub-\$5 MM SaaS companies generally generate gross margins in the 40%-60% range and those consistently grow to the 70% range once companies exceed \$20 MM in TTM revenue. The gross margins of River Cities’ portfolio stack up closely to those of the public comparables. Typically, margins below 70% imply a model that requires sizable hardware and capital expenses or significant services / customization.

## **Sales & Marketing Effectiveness**

Since sales momentum represents an important part of River Cities’ investment consideration, particular attention is given in this study to identifying important sales and marketing operating metrics that help assess a company’s efficiency and effectiveness. While visibility into these metrics isn’t always obvious from the financial statements, the predictability associated with the recurring revenue model provides a unique opportunity to uncover and benchmark relevant metrics. These findings not only guide decision-making at our existing companies, but also help assess new investment opportunities.

As seen below, sales and marketing is typically the largest and most widely variable expense component of a SaaS company’s cost structure, ranging from approximately 19%-500% of revenue below \$ 30 MM in revenue. As with all cost components, the relative percentages are dependent on multiple factors. First of these is the stage of a company’s development. As one would expect, the sales and marketing percentage declines as businesses grow their top line. Second is the average selling price (“ASP”). Higher ASPs tend to be highly correlated with fewer customers, which results in lower relative sales and marketing percentages at given revenue levels. Third, the accounting treatment employed by a company will also impact sales and marketing percentages. Most companies amortize commissions

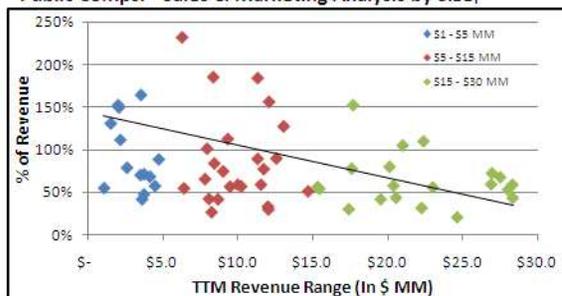
over the life of a contract. However, several companies such as Vocus and DealerTrac expense their commissions upfront.<sup>v</sup> Lastly, a direct sales model will demonstrate higher sales and marketing percentages than indirect channels. As examples, NetSuite and Salesforce generate approximately 18% and 10% of their revenue respectively from indirect channels.<sup>vi</sup>

**Exhibit 12: Sales & Marketing as a % of Revenue**

Public Comps.	\$1 - \$5 MM	\$5 - \$15 MM	\$15 - \$30 MM
AthenaHealth	-	33%	20%
BlackBoard	509%	156%	-
Concur	131%	74%	80%
Constant Contact	57%	46%	67%
DealerTrack	-	77%	-
Demandtec	-	70%	41%
Kenexa	-	-	59%
Liveperson	-	88%	31%
LogMeIn	99%	89%	72%
NetSuite	315%	185%	152%
Omniture	44%	41%	43%
RightNow	149%	184%	82%
Salary.com	100%	57%	56%
Salesforce	467%	-	110%
Success Factors	68%	92%	-
Taleo	-	89%	43%
Ultimate Software	71%	112%	78%
Vocus	88%	80%	55%
<b>Average</b>	<b>175%</b>	<b>92%</b>	<b>66%</b>
RCCF Companies	\$1 - \$5 MM	\$5 - \$15 MM	\$15 - \$30 MM
<b>Average</b>	<b>117%</b>	<b>62%</b>	<b>38%</b>
<b>Range</b>	<b>63% - 260%</b>	<b>27% - 111%</b>	<b>31% - 43%</b>

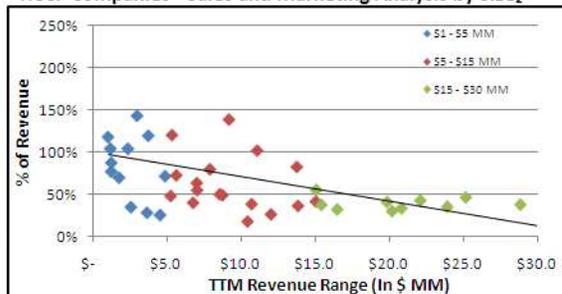
Note: If more than one datapoint was present in a revenue range average numbers are used. Blanks indicate data was not available or not applicable.

**Public Comps. - Sales & Marketing Analysis by Size<sub>1</sub>**



Three data points (sub \$6 MM in revenue) over 250% of revenue excluded

**RCCF Companies - Sales and Marketing Analysis by Size<sub>2</sub>**



One data point over 250% in the \$1 - \$5MM revenue range excluded

The above graphs depict a relatively consistent sales and marketing percentage trend between the public companies and River Cities' portfolio companies. Public companies spend on average 30% more on sales and marketing above \$5 MM in revenue and 68% more on sales and marketing below \$5 MM in revenue, than did our portfolio companies. We can only hypothesize as to why this is the case.

It is possible that Management at the above public companies recognized leadership in their respective markets very early and they determined that spending ahead of the curve was warranted to maintain such position. Alternatively, the investors supporting those same investments could have had much larger venture funds and significantly more capital to invest in their respective portfolio companies relative to River Cities. Without data from those less successful SaaS companies who did not reach the public capital markets, it is difficult to make a fair comparison and pinpoint exactly why these companies invested so much more early in the companies' life cycle relative to River cities' SaaS portfolio companies.

Pricing, contract terms: Deal sizes per customer per year of the public comparables ranges from \$4,000 (Constant Contact) to \$2,000,000 (Demandtec). River Cities' portfolio companies deal sizes per customer per year ranges from \$900 to \$300,000. Generally speaking, solutions with an ASP less than \$10,000 per year target the SMB market. Moving up market, solutions with an ASP between \$10,000 -

\$50,000 are focused on the mid-market and solutions priced higher than \$50,000 per year are most appropriately offered to the fortune 1000 corporate market. <sup>vii</sup>

As noted in Exhibit 13 by the customer count and ASP, the low cost of ownership relative to traditional software solutions helps drive adoption in the SMB market. Seventy five percent of today's SaaS companies serve the SMB market. <sup>viii</sup>

To date, adoption by the enterprise market has been slower, since these organizations typically have a much larger user base, over which they can spread their costs, making it more affordable for them to manage their own solutions. Additionally, enterprises are traditionally more reluctant to allow their data to leave their network due to security concerns. However, this trend seems to be changing slightly and we expect further enterprise adoption as the market matures.

**Exhibit 13: Special Sales and Marketing Metrics**

Public Comps.	Deal Size (\$s)	No. of	Renewal rates
AthenaHealth	-	-	-
BlackBoard	-	-	-
Concur	\$30.0	7,000	97%
Constant Contact	\$0.4	185,948	74%
DealerTrack	-	-	-
Demandtec	\$2,000.0	>135	>88%
Kenexa	\$45.0	>4,000	>90%
Liveperson	\$9.0	6,000	NA
LogMeIn	-	-	-
NetSuite	\$78.0	>5,600	>85%
Omniture	\$48.3	>4,500	>95%
RightNow	\$90.0	1,800	85-90%
Salary.com	\$12.0	>2,800	90%
Salesforce	\$19.0	43,600	>88%
Success Factors	\$36.2	1,950	>90%
Taleo	\$85.0	>3,400	>95%
Ultimate Software	\$95.0	1,600	96%
Vocus	\$24.0	2,646	85-90%

Source: Thomas Weisel Partners, *Staring Down Giants: SaaS Takes on the Software Heavyweights*. May 27, 2008.

Note: Blanks indicate that data is not available

Renewal rates: Public SaaS companies and RCCF's portfolio companies achieve comparable renewal rates that are generally north of 85%. One company stands out with an impressive churn rate of less than 5%.

Renewal rates are driven by two elements. First is the vendor's ability to become entrenched within the business processes and other of their customers' applications. Second is the company's ability to expand their service offerings within a customer. Increasingly, IT departments are consolidating relationships with third party vendors and so a providers' ability to act as a unified platform for multiple services will significantly help companies achieve attractive renewal rates.

Return on Sales and Marketing investment: Well-performing SaaS companies should achieve payback on sales and marketing investments in less than 24 months with the better performing SaaS companies achieving payback in 15 months. Simply translated, 24 month payback equates to a 50% ROI on sales and marketing investment and 12 month payback represents 100% ROI. Payback is simply calculated by taking sales and marketing spend for a defined period and dividing it by that period's incremental gross margin. Because incremental gross profit is considered, this calculation takes into consideration a company's churn rates. Payback metrics essentially tell us how many months are required for a company to achieve break even on their sales and marketing investment.

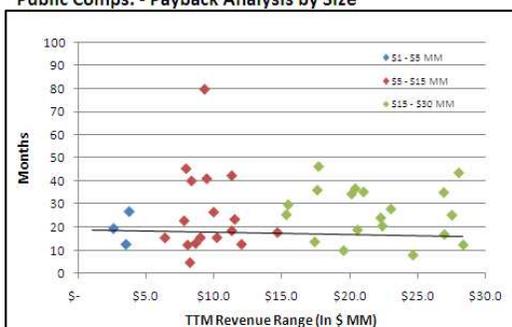
**Exhibit 14: Payback on Sales and Marketing Inv. (Months)**

Public Comps.	< \$5 MM	\$5 - \$15 MM	\$15 - \$30 MM	2008	Cost to acquire \$1M in Rev. <sub>t</sub> (\$ in MM's)	Cost to acquire \$1M in GP. <sub>t</sub> (\$ in MM's)
AthenaHealth	-	-	8	11	\$0.59	\$0.87
BlackBoard	-	-	-	26	\$1.25	\$2.15
Concur	-	16	34	12	\$0.69	\$0.96
Constant Contact	-	15	25	20	\$1.17	\$1.68
DealerTracking	-	-	-	-	-	-
Demandtec	-	41	10	18	\$0.97	\$1.49
Kenexa	-	-	-	44	\$1.87	\$3.66
Livestorm	-	13	19	20	\$1.16	\$1.67
LogMeIn	74	19	17	17	\$1.28	\$1.39
NetSuite	-	40	46	32	\$1.75	\$2.64
Omniture	27	13	19	20	\$0.85	\$1.62
RightNow	-	42	35	45	\$2.38	\$3.77
Salary.com	13	21	27	27	\$1.65	\$2.21
Salesforce	-	-	21	23	\$1.63	\$1.91
Success Factors	-	16	-	31	\$1.90	\$2.56
Taleo	-	-	13	27	\$1.33	\$2.28
Ultimate Software	-	80	36	55	\$1.74	\$4.61
Vocus	-	34	37	27	\$1.81	\$2.24
<b>Average</b>	<b>38</b>	<b>29</b>	<b>25</b>	<b>27</b>	<b>\$1.41</b>	<b>\$2.22</b>
RCCF Companies	\$1 - \$5 MM	\$5 - \$15 MM	\$15 - \$30 MM	2008	Cost to acquire \$1 MM in Rev. <sub>t</sub> (\$ in MM's)	Cost to acquire \$1M in GP. <sub>t</sub> (\$ in MM's)
<b>Average</b>	<b>46</b>	<b>32</b>	<b>30</b>	<b>35</b>	<b>\$1.73</b>	<b>\$2.94</b>
<b>Range</b>	<b>44 - 58</b>	<b>12 - 61</b>	<b>12 - 65</b>	<b>12 - 59</b>	<b>\$0.93 - \$2.29</b>	<b>\$0.98 - \$4.90</b>

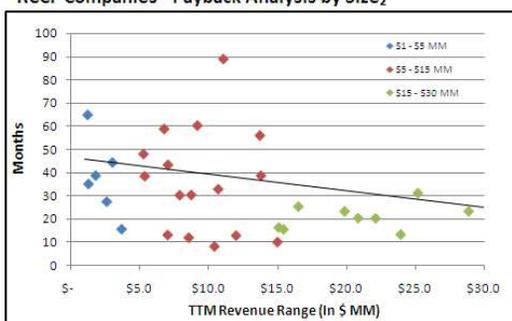
<sup>1</sup>Based on 2008 data

Note: If more than one datapoint was present in a revenue range average numbers are used. Blanks indicate data was not available or not applicable.

**Public Comps. - Payback Analysis by Size**



**RCCF Companies - Payback Analysis by Size<sub>2</sub>**



<sup>2</sup>Two datapoints over 100 months have been excluded; one in the \$1-\$5 MM and the other in the \$15-\$30 MM revenue range.

Institutional SaaS investors believe that a one to two year breakeven period on sales and marketing investment is reasonable. If companies deliver payback below 12-15 months, companies should consider further investment in sales and marketing. Above two years, companies should probably consider alternate spend initiatives to drive more efficient growth.

Under \$30 MM in TTM revenue, sales and marketing payback for public companies ranges from forty six months (NetSuite) for the least efficient to eight months (Athena) being the most efficient. Generally, River Cities' portfolio companies generated a comparable payback to the public companies with a couple of portfolio companies generating an impressive one year payback or 100% ROI on their sales and marketing investment at this stage of their development.

## **Research & Development**

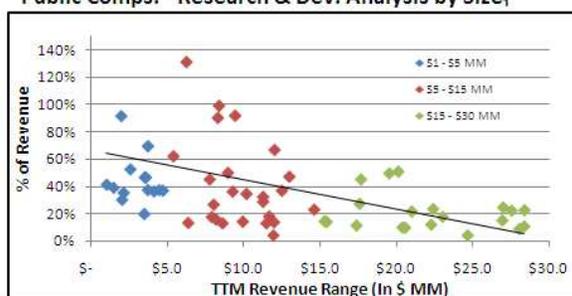
Effective Research and development provides long-term leverage and sustainability for companies. In particular, R&D enables a company to differentiate its offerings from competition and sustain organic growth. Since SaaS companies host software for their customers, they obtain better visibility into customer usage patterns and feedback, which enables rapid development cycles. These benefits support improved service offerings at lower costs and quicker turnaround times. As a result SaaS firms typically enjoy lower product development costs compared to traditional software firms.

**Exhibit 15: Research & Development as a % of Revenue**

Public Comps.	\$1 - \$5 MM	\$5 - \$15 MM	\$15 - \$30 MM
AthenaHealth	-	4%	4%
BlackBoard	208%	67%	-
Concur	63%	50%	51%
Constant Contact	37%	25%	22%
DealerTrack	-	18%	-
Demandtec	-	95%	50%
Kenexa	-	-	11%
Liveperson	-	51%	12%
LogMeIn	47%	29%	25%
NetSuite	205%	90%	45%
Omniture	42%	13%	10%
RightNow	30%	32%	19%
Salary.com	29%	14%	16%
Salesforce	62%	-	24%
Success Factors	36%	41%	-
Taleo	-	37%	23%
Ultimate Software	70%	36%	27%
Vocus	37%	15%	11%
<b>Average</b>	<b>72%</b>	<b>39%</b>	<b>23%</b>
RCCF Companies	\$1 - \$5 MM	\$5 - \$15 MM	\$15 - \$30 MM
<b>Average</b>	<b>37%</b>	<b>43%</b>	<b>23%</b>
<b>Range</b>	<b>0% - 57%</b>	<b>18% - 116%</b>	<b>14% - 36%</b>

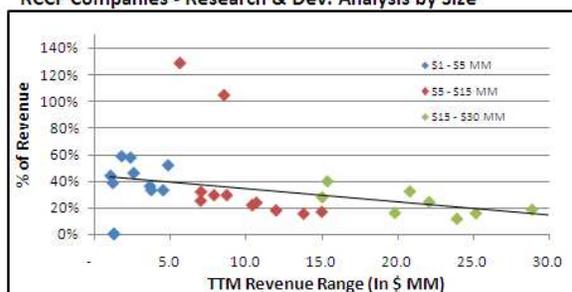
Note: If more than one datapoint was present in a revenue range average numbers are used. Blanks indicate data was not available or not applicable.

**Public Comps. - Research & Dev. Analysis by Size**



Two data points (sub \$5 MM in revenue) over 150% of revenue excluded

**RCCF Companies - Research & Dev. Analysis by Size**



Several factors influence a company’s commitment to R&D including stage of development, level of technical complexity of a Company’s offering and management’s technical competency. Highly-technical and high-priced solutions to fewer customers on average require relatively higher research and development expenses (Demandtec). As with all operating metrics, early-stage companies tend to spend more as a percentage of revenue than they do later in their development.<sup>ix</sup>

Successful SaaS companies who eventually accessed the public markets spent an average of 72% of their revenue on R&D when they were less than \$5 MM in sales. This percentage trended down to 20% of revenue once they exceeded \$20 MM in TTM sales. As a further comparison, public SaaS companies invested close to 15% of their revenue on research and development in 2008.

## General & Administrative

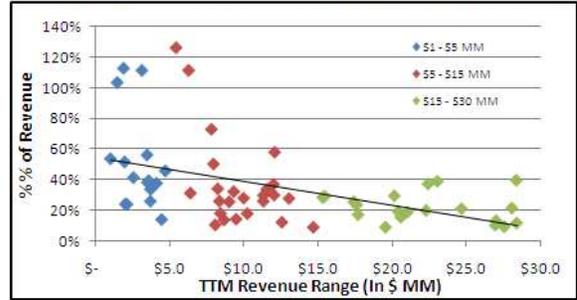
Public SaaS companies considered in this study spend approximately \$2 - \$3 MM on G&A expenses under \$10 MM in revenue. Except for two River Cities’ portfolio companies G&A spending fairly aligns with that of the public SaaS companies. In one case, the company carried the extra burden associated with being a public company before it was taken private. The revenue base of the other was immaterial, thereby skewing the average upward.

**Exhibit 16: General & Administrative as a % of Revenue**

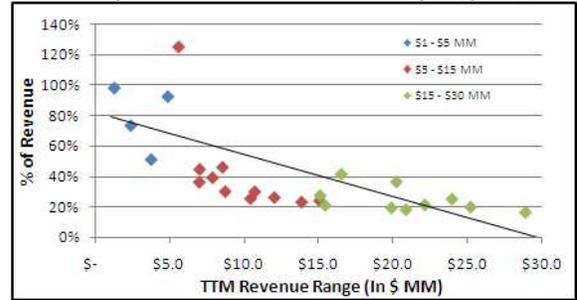
Public Comps.	\$1 - \$5 MM	\$5 - \$15 MM	\$15 - \$30 MM
AthenaHealth	-	37%	21%
BlackBoard	113%	58%	-
Concur	38%	26%	29%
Constant Contact	14%	10%	10%
DealerTrack <sub>1</sub>	-	-	-
Demandtec	-	16%	9%
Kenexa	-	-	39%
Liveperson	-	62%	23%
LogMeIn	45%	26%	13%
NetSuite	111%	26%	17%
Omniture	33%	14%	16%
RightNow	24%	30%	15%
Salary.com	80%	30%	34%
Salesforce	126%	-	37%
Success Factors	38%	23%	-
Taleo	-	12%	12%
Ultimate Software	34%	32%	24%
Vocus	46%	42%	23%
<b>Average</b>	<b>59%</b>	<b>30%</b>	<b>21%</b>
RCCF Companies	\$1 - \$5 MM	\$5 - \$15 MM	\$15 - \$30 MM
<b>Average</b>	<b>91%</b>	<b>44%</b>	<b>24%</b>
<b>Range</b>	<b>51% - 147%</b>	<b>25% - 86%</b>	<b>19% - 39%</b>

*Note: If more than one datapoint was present in a revenue range average numbers are used. Blanks indicate data was not available or not applicable.*

**Public Comps. - General & Administrative Analysis by Size**



**RCCF Companies - General and Admin. Analysis by Size<sub>2</sub>**



Between \$15 MM - \$30 MM in TTM revenue, both public companies and portfolio companies commit approximately 20% -30% of their revenue to general and administrative resources. At scale, G&A expenses should trend down to 8-12%, which is demonstrated by the more mature public SaaS companies.

## **Capital Expenditure**

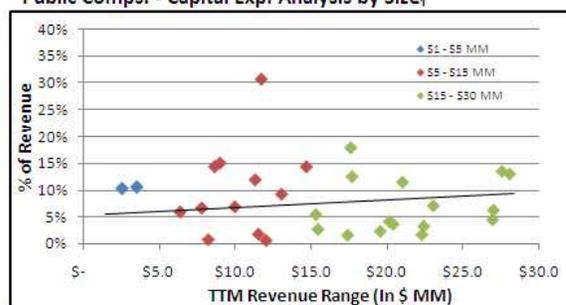
Capital expenditure percentage of revenue across the universe of both public and portfolio companies is varied. As the amount of data managed by the service offerings increases, so too do the infrastructure requirements for that company. River Cities more capital intensive portfolio companies are investing close to 13% in capital expenditures between \$15 MM - \$30 MM in revenue, which is aligned with the public company average.

**Exhibit 17: Capital Expenditure as a % of Revenue**

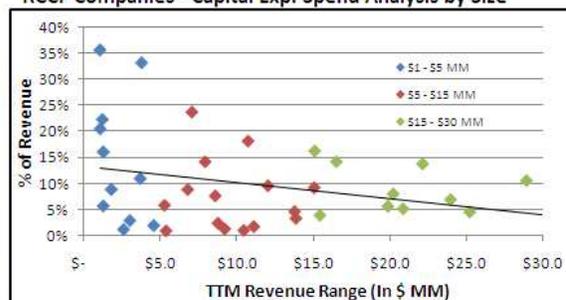
Public Comps.	\$1 - \$5 MM	\$5 - \$15 MM	\$15 - \$30 MM
AthenaHealth	-	-	-
BlackBoard	-	-	-
Concur	-	15%	4%
Constant Contact	-	14%	13%
DealerTrack	-	31%	-
Demandtec	-	-	2%
Kenexa	-	-	-
Liveperson	-	61%	2%
LogMeIn	10%	12%	6%
NetSuite	-	-	12%
Omniture	-	14%	72%
RightNow	-	-	8%
Salary.com	-	6%	6%
Salesforce	108%	-	3%
Success Factors	-	5%	-
Taleo	-	-	-
Ultimate Software	-	-	18%
Vocus	-	2%	6%
<b>Average</b>	<b>59%</b>	<b>18%</b>	<b>13%</b>
RCCF Companies	\$1 - \$5 MM	\$5 - \$15 MM	\$15 - \$30 MM
<b>Average</b>	<b>17%</b>	<b>9%</b>	<b>8%</b>
<b>Range</b>	<b>11% - 33%</b>	<b>2% - 15%</b>	<b>4% - 13%</b>

Note: If more than one datapoint was present in a revenue range average numbers are used. Blanks indicate data was not available or not applicable.

**Public Comps. - Capital Exp. Analysis by Size**



**RCCF Companies - Capital Exp. Spend Analysis by Size**



Three datapoints (two in the \$5-\$15 MM and one in the \$15-\$30 MM revenue range) over 50% of revenue excluded

## Profitability

SaaS vendors who have reached scale (\$50+ MM in TTM revenue for purposes of this report) generate EBITDA margins in the high teens to low 20% range. Not surprisingly, given the attractive industry growth, most companies aggressively reinvest cash into sales and marketing to fuel top-line growth, at the expense of near-term profitability. As a result, on average companies aren't reaching EBITDA positive operations on an average until approximately \$55 MM in revenue.

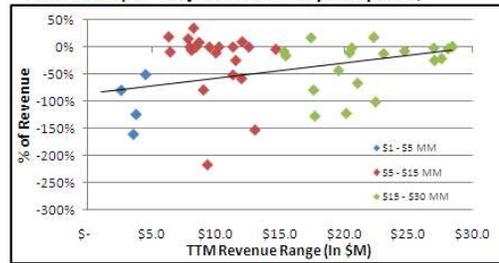
Liveperson was the fastest to reach EBITDA positive operations when it had just \$6.2 MM in revenue. Conversely, NetSuite reached EBITDA positive operations in 2007 when it had revenues of \$108.5 MM. Part of Liveperson's achievement can be explained by its relatively slow, but by no means low, CAGR of 44% from \$12 MM to \$52 MM in four years, relative to the average CAGR for public SaaS companies at 84%. Considering Liveperson's efficient payback on sales and marketing spend (<24 months), a case could be made that the company would have driven more value by increasing spend on sales and marketing at the expense of profitability, especially if the Company maintained valuation multiples of two times TTM revenue.

**Exhibit 18: Adjusted EBITDA Margins**

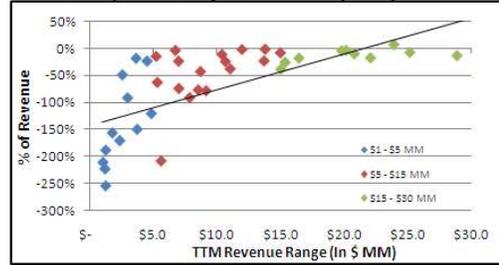
Public Comps.	\$1 - \$5 MM	\$5 - \$15 MM	\$15 - \$30 MM	2008
AthenaHealth	-	-59%	-8%	17%
BlackBoard	-	-	-	22%
Concur	-	-79%	-122%	16%
Constant Contact	-50%	-5%	-22%	5%
DealerTrack	-	-	-	25%
Demandtec	-	-	-44%	4%
Kenexa	-	-	-	23%
Liveperson	-	20%	17%	15%
LogMeIn	-121%	-52%	-25%	0%
NetSuites	-	-	-127%	15%
Omniiture	-	8%	-2%	16%
RightNow	-	-	-35%	3%
Salary.com	-	-10%	-11%	-8%
Salesforce	-539%	-	-101%	22%
Success Factors	-	-153%	-	-42%
Taleo	-	-	-	12%
Ultimate Software	-125%	-218%	-79%	12%
Vocus	-	-25%	-10%	15%
<b>Average</b>	<b>-209%</b>	<b>-57%</b>	<b>-44%</b>	<b>10%</b>
RCCF Companies	\$1 - \$5 MM	\$5 - \$15 MM	\$15 - \$30 MM	2008
<b>Average</b>	<b>-171%</b>	<b>-54%</b>	<b>-9%</b>	<b>-3%</b>
<b>Range</b>	<b>-244% to -114%</b>	<b>-143% to -6%</b>	<b>-19% to -1%</b>	<b>-25% to 10%</b>

Note: EBITDA is adjusted for stock based compensation. If more than one datapoint was present in a revenue range average numbers are used. Blanks indicate data was not available or not applicable.

**Public Comps. - Adj. EBITDA Analysis by Size<sub>1</sub>**



**RCCF Companies - Adj. EBITDA Analysis by Size**



<sub>1</sub>One data point in the \$5-\$15M revenue range below -300% excluded

A similar case could be made for two of River Cities’ portfolio companies where more investment in sales and marketing programs should have been made to drive higher enterprise value even at the expense of near-term profitability. As comparison, Salesforce.com committed 110% of its revenue to sales and marketing when it was generating \$23 MM in sales. At a comparable stage of development two of River Cities’ portfolio companies metered back their sales and marketing commitment to 38% and 35% of revenue, respectively.

Given the immaturity of the SaaS market, many of the public SaaS comps are just now achieving small free cash flow margins. Amongst the public SaaS universe, Salesforce.com is at the top, generating gross margins of 80% and 16% free cash flow margins with only 6% cap ex requirements. Similarly, Vocus generates 24% free cash flow margins. By way of comparison, four of River Cities’ portfolio companies have achieved positive free cash flow.

Exhibit 19 compares the composition of key operating metrics for the SaaS universe to the top 25 US software companies (by market cap), all of whom generate approximately \$1 billion in annual revenue. As the SaaS companies continue to grow and reach critical mass, we expect profitability from those companies to reach or even exceed those seen at the leading software companies. In particular efficiencies from shared infrastructure and the benefits of a single code base, should lead to lower overall operating expenses, including cost of revenue and R&D expenses. Also, we expect to see G&A expenses fall in line with traditional software companies.

**Exhibit 19: Operating Metric Composition (Software vs SaaS)**

Operating Metrics	Top 25 US Software companies (\$\$ in MM)	Public Universe SaaS companies (\$\$ in MM)
Average Revenue	\$4,895	\$212
Cost of Revenue %	23.4%	32.0%
Sales & Marketing as a % of Revenue	30.7%	40.0%
General & Administrative as a % of Revenue	9.9%	17.0%
Research & Development as a % of Revenue	17.4%	14.0%
Adjusted EBITDA as a % of Revenue <sub>1</sub>	26.7%	10.0%

<sub>1</sub>Adjusted to exclude Stock Based Compensation

Source: Yahoo Finance (based on 2008 data)

## Conclusion

### Looking Ahead

Estimates suggest that the on-premise to hosted ratio of software deployments is still 20:1.<sup>x</sup> However, relative to traditional on-premise software companies, SaaS providers continue to deliver a model that is more appealing, especially for SMB and mid-size customers. Additionally, the industry, including River Cities' portfolio companies, is just starting to see enterprise adoption. By any measure, the SaaS business model is set to grow measurably for the foreseeable future. Furthermore, capital constraints created by the current recession should only serve to amplify the advantages of the subscription model relative to the traditional on premise model for customers.

Some analysts draw parallels between the current state of the SaaS market to the evolution of the client-server market in the 1990s in that a better delivery model than SaaS awaits us in the near future. Despite this, momentum behind the SaaS movement is significant. As large software companies strive to maintain their leadership position, they will undoubtedly enter the market with their own offerings or through acquisition. Already leading security vendors are marketing a one-stop delivery model for SaaS, software and appliances to their customers. A wave of consolidation from application specific vendors wanting to extend the form factor for their delivery model is likely.

River Cities' thought leadership and portfolio company experience provides the firm with a unique perspective around strategic issues faced by SaaS companies. Continued focus on the firm's knowledgebase further supports River Cities' efforts to quickly assess prospective SaaS portfolio companies as well as make solid fact-based recommendations to existing portfolio companies.

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<sup>i</sup> *The Goldman Sachs Group, Inc., Getting SaaS savvy – successful investing in on-demand. November 1, 2007.*

<sup>ii</sup> *Datamonitor, Global Industry Guide: Software Market. March 2007.*

<sup>iii</sup> *Triple Tree, Software as a Service Update Spurring Innovation, Enhancing Business Value and Enabling Business Processes. September 2006.*

<sup>iv</sup> *THINKstrategies, Understanding the Financial Implications of the Software-as-Service Business Model. 2006.*

<sup>v</sup> *Thomas Weisel Partners, Staring Down Giants: SaaS Takes on the Software Heavyweights. May 27, 2008.*

<sup>vi</sup> *Thomas Weisel Partners, Staring Down Giants: SaaS Takes on the Software Heavyweights. May 27, 2008.*

<sup>vii</sup> *Thomas Weisel Partners, Staring Down Giants: SaaS Takes on the Software Heavyweights. May 27, 2008.*

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<sup>ix</sup> *Thomas Weisel Partners, Staring Down Giants: SaaS Takes on the Software Heavyweights. May 27, 2008.*

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