



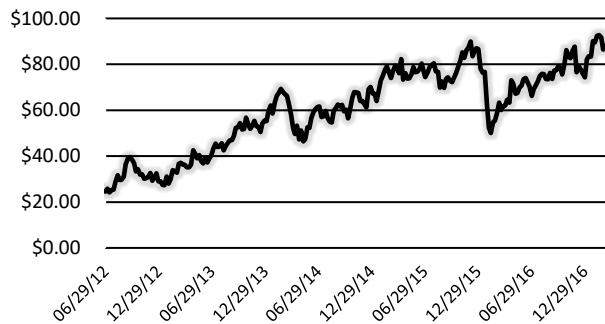
Final Report

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Ticker: NOW



Stock Price 3/10/17	\$87.60
Target Price	\$75.63
Downside	(13.66%)

Trading	
Current Price	\$87.60
52 Week Range	\$59.77 - \$94.72
Management Target	\$77.66
Base Target	\$65.57
Downside Target	\$52.33
Market Capitalization	\$15.05B

ServiceNow is overvalued. The market has overvalued ServiceNow's future growth without fully considering their large and significant risks. ServiceNow has potential to grow into the Enterprise Cloud Computing Company, or be taken over by their competitors and become obsolete. It is our opinion that the former is more likely to happen, but these substantial risks are too great to ignore, and thus we believe that ServiceNow is overvalued.

Key Ratios and Projections			
	EBITDA Margin	EBIT Margin	Diluted EPS (\$)
2016A	(24%)	(30%)	(\$2.68)
2017E	(3%)	(8%)	(\$1.12)
2018E	0%	(5%)	(\$0.96)
2019E	4%	(2%)	(\$0.64)
2020E	8%	2%	\$0.19
2021E	13%	7%	\$1.04

BUSINESS DESCRIPTION

OVERVIEW

Founded in 2003, ServiceNow, Inc. has grown into the global industry driver in transforming service management of enterprise cloud computing. By using a SaaS business model, ServiceNow is able to build a base of customers under contracts usually lasting between three and five years. Under their own highly secure platform, ServiceNow provides cloud based services that modernizes the enterprise. By standardizing, consolidating and automating their services, ServiceNow has grown across their numerous business segments. Customers are offered a wide range of software services such as: service management, orchestration core, service mapping, cloud and portfolio management, edge encryption, performance analytics, service portal designer, visual task boards, and configuration management database. In the simplest terms, ServiceNow is making life at work more like life at home through seamless cloud computing and services.

G2K PENETRATION

Through the cloud, ServiceNow provides business solutions that are customizable to each customer across the globe. With over 4,800 employees, ServiceNow operates in every region of the world with major sites in Silicon Valley, Seattle, Amsterdam, London, Israel, and India with the target clients being the Global 2,000 (G2K). G2K penetration will be a key factor that determines the future success of ServiceNow. Currently, ServiceNow provides services to 37% of the G2K (Figure 1A) and 58% of North American companies within the G2K.

The different business units within ServiceNow are one of the main differentiators that separate ServiceNow from their competitors, and they can all be accessed using the ServiceNow platform. Business and Product solutions can be run on the same platform within different industries, all while being customized to the customer's exact needs.

Figure 1A

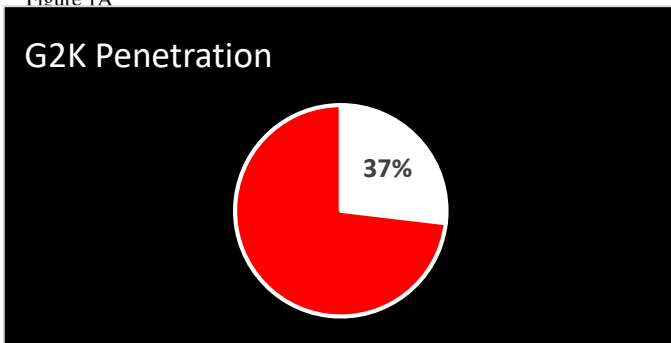


Figure 1B

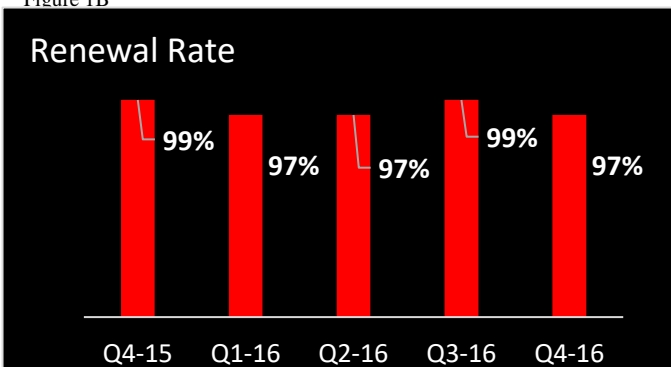
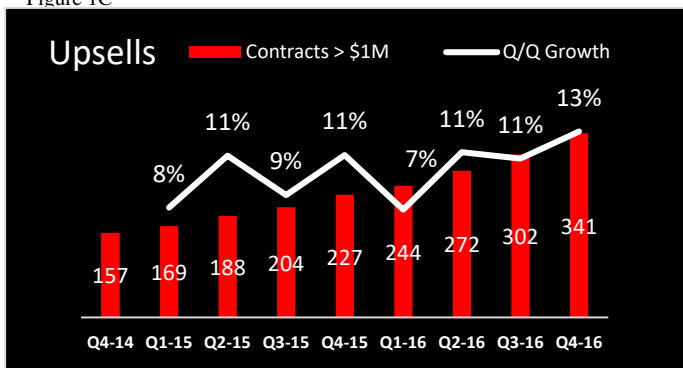


Figure 1C



KEY PERFORMANCE INDICATORS

There are many key performance indicators that are unique to a SaaS Business Model that are important to understand when valuing a company like ServiceNow. The first being Renewal Rate, shown in Figure 1B. The Renewal Rate is not how many customers agree to renew their contract. Furthermore, it is not found by subtracting the percentage of customers not renewing their contracts. In reality, it is found calculating the Attrition Rate which is found by dividing the Average Contract Value (ACV) of lost customers, who are customers who aren't renewing an expired contract and ServiceNow doesn't believe that they will renew, by the total ACV of all contracts within that period of time. To calculate the Renewal Rate, you must subtract the Attrition Rate from 100%. The Renewal Rate shows is what percentage of the Aggregate ACV stays with ServiceNow each quarter. ServiceNow has averaged a Renewal Rate of 98% the past five quarters. Another KPI for a SaaS business is measuring Upsells, which can be seen in Figure 1C. Upsells are calculated by measuring what a customer has purchased, or not purchased, in different products not sold in the previous contract. Therefore, upsells can be seen as how much money ServiceNow has gotten existing customers to spend in excess of the contract's future value. Therefore, the upsells do not represent an increase in prices charged by ServiceNow, but rather what new products customers are purchasing that they didn't purchase before. ServiceNow has seen upsells that have led to an increase of 184 customers with an ACV greater than \$1,000,000 in the last two years.

INVESTMENT SUMMARY

STRENGTHS

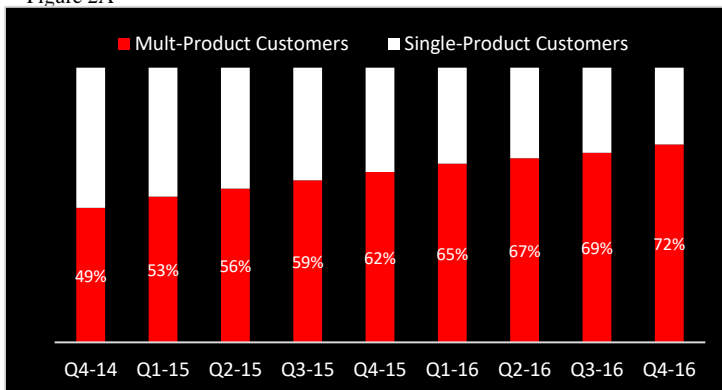
ServiceNow operates under a SaaS Business model. This allows ServiceNow to retain customers by offering longer term contracts. The purpose of this model is to hold on to clients by fully integrating their business with the ServiceNow platform to the point that the client relies on the software to operate, and therefore essentially has to renew their contract once it expires. Because ServiceNow has put a substantial amount of time and resources to building, implementing, and integrating their enterprise software, they have been able to maintain impressively high retention and renewal rates, which ServiceNow will use to spearhead their future growth and penetration into the G2K.

ServiceNow are the first movers and pioneers into IT Service Management for enterprises. This has allowed them to maintain their market share and substantial top line growth, where they've experienced over \$1 Billion in total sales growth the past four years. This level of growth can largely be attributed to the innovation of ServiceNow and how they have maintained momentum through their first mover's advantage.

ServiceNow differentiates themselves from their competitors by offering a ready-made platform for customers to use ServiceNow products and have a customizable experience. Coupled with ServiceNow's dedicated and established business units, the platform offers customers greater value in choosing exactly what they want out of their cloud computing partners. This level of service that ServiceNow offers differentiates them from the likes of Microsoft and Salesforce. This also has increase the number of customers who purchase multiple products, as shown in Figure 2A.

ServiceNow has greatly expanded their R&D department by offering customers a customizable service through their platform. The headcount in R&D has increased from 756 to 1,054 in this past year. Persistent innovation is required if ServiceNow hopes to compete in the enterprise software market. ServiceNow has invested approximately 15% of their revenue into R&D the past two years, and they plan to keep investing approximately 10-12% by year 2020. If ServiceNow hits their revenue targets in 2020, they're planning on investing anywhere between \$400 and \$480 million into their R&D.

Figure 2A



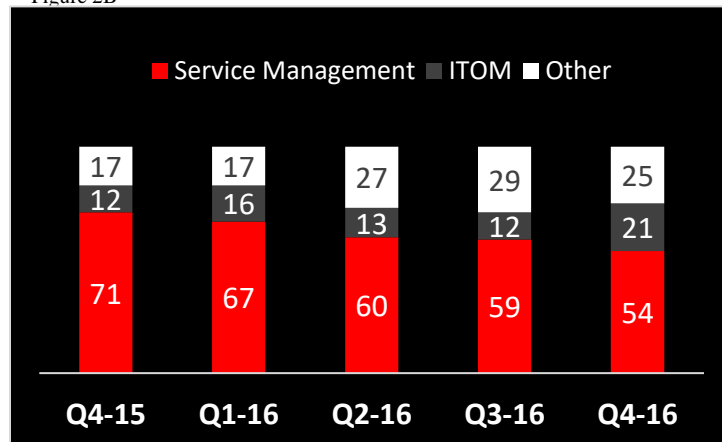
INTERNATIONAL GROWTH

ServiceNow has experienced incredible international growth since its inception and that trend is not expected to end any time soon. Although the growth rate is expected to decrease in the coming years, above average growth is still expected. The enterprise cloud computing industry has immense potential to grow within the next ten years as more companies from the Forbes Global 2K realize the benefits of outsourcing business solutions.

EXPANSION OF PRODUCT LINES

ServiceNow is constantly updating, upgrading, and expanding their product lines. Traditionally, ServiceNow has been known to focus on Service Management and Information Technology Operations Management solutions. However, in order to survive and excel in this enterprise software market, ServiceNow must continue to introduce more products to serve the varying business needs of the G2K and other large enterprises. Figure 2B shows the percentage mix of product sales.

Figure 2B



STRATEGIC PARTNERSHIPS

ServiceNow has recently agreed to a long term partnership with IBM to help accelerate the adoption of Intelligent Automation within the cloud. They plan to change the economics of enterprises by implementing seamless and automated solutions to customers through the cloud. This partnership has incredible strategic benefits for ServiceNow as it will help their penetration effort with the G2K as they will utilize IBM's business connections and established infrastructure and capital investments.

RECENT M&A ACTIVITY

ServiceNow has made recent forays into the M&A market to better establish their market share and attempt to address their business risks. BrightPoint Security was a recent purchase by ServiceNow to address the substantial risk of security breaches of client information and data. This specific acquisition enhances the future value of ServiceNow as it allows them to provide greater insight to their clients about their security threats, and respond to cyber threats in an efficient and predictive manner. This means ServiceNow is developing the ability to stop a cyber threat before it even occurs.

COMPARABLE COMPANIES & COMPETITION

COMPETITION

While ServiceNow provides products and services that no other company currently offers, the cloud computing industry is highly competitive with relatively low barriers to entry. According to their 10-K ServiceNow views Microsoft, Oracle, SAP, BMC Software, and Salesforce.com as their primary competitors. Many of these competitors have more established business relationships and greater financial and technological resources to promote continued innovation and expansion into new product categories. Larger competitors with more diverse product and service offerings may reduce the price of products or subscriptions that compete with ServiceNow's or may bundle them with other products and subscriptions. Smaller competitors and new entrants may accelerate pricing pressure in the IT service management market, which is ServiceNow's more mature offering from which they derive the substantial majority of their revenues.

In order to develop an outlook on the cloud computing market, we conducted research on companies that are similar to ServiceNow in both size and product offering.

Figure 3A

CA, Inc.	
Share Price	\$32.40
P/E (LTM)	17.2
Market/Book	2.4
EV/EBITDA	8.3
Market Capitalization	\$13.20B
Net Debt	(\$0.76B)
Enterprise Value	\$12.50B

CA, Inc. CA engages in the provision of information technology management software and solutions. It operates through the following segments: Enterprise Solutions, Mainframe Solutions, and Services. The Enterprise Solutions segment includes products that are designed for distributed and cloud computing environments and run on industry standard servers. The Mainframe Solutions segment is designed for the IBM z Systems mainframe platform, which runs many of its largest customers' mission-critical business applications, with a focus on lowering cost per transaction, while increasing business agility, security and compliance. The Services segment helps customers reach information technology and business goals primarily by enabling the rapid implementation and adoption of the Mainframe and Enterprise solutions. The company was founded by Russell M. Artzt and Charles B. Wang in 1974 and is headquartered in New York, NY. Their information can be found in Figure 3A.

Figure 3B

Salesforce.com, Inc.	
Share Price	\$83.51
P/E (LTM)	321.2
Market/Book	7.9
EV/EBITDA	83.3
Market Capitalization	\$50.70B
Net Debt	(\$0.20B)
Enterprise Value	\$50.70B

Salesforce.com, Inc. (CRM) Salesforce.com, Inc. provides enterprise cloud computing applications. It provides a comprehensive customer and collaboration relationship management service to businesses of all sizes and industries and also provides a technology platform for customers and developers to build and run applications. It's designs and develops applications to be easy-to-use and intuitive solutions that can be deployed, customized and integrated with other software applications. It also offer services on a subscription basis, primarily through its direct sales efforts and indirectly through partners. The company was founded by Marc Benioff, Parker Harris, David Moellenhoff, and Frank Dominguez in February 1999 and is headquartered in San Francisco, CA. Their information can be found in Figure 3B.

Figure 3C

Workday, Inc.	
Share Price	\$82.65
P/E (LTM)	(40.1)
Market/Book	14.6
EV/Sales	9.7
Market Capitalization	\$20.00B
Net Debt	(\$1.40B)
Enterprise Value	\$18.60B

Workday, Inc. (WDAY) Workday engages in the provision of enterprise cloud applications for finance and human resources. It delivers financial management, human capital management and analytics applications designed for the world's largest companies, educational institutions, and government agencies. It operates under one segment; cloud applications. The company was founded by David A. Duffield and Aneel Bhusri in March 2005 and is headquartered in Pleasanton, CA. Their information can be found in Figure 3C.

INVESTMENT RISKS

CYBER SECURITY

ServiceNow collects and uses a lot of data from their clients, meaning a breach in their security could be catastrophic to client relationships. The severity of this risk is much more than just the breached client's loss of business. Should one client be breached, most every client would feel vulnerable to a breach as well. One breach could lead to a domino effect of clients leaving and canceling their subscription. This would be detrimental to ServiceNow in both reputation and value, since revenue and subscription growth and the key drivers to their future value and success.

CONVERTIBLE DEBT

ServiceNow's current convertible debt could potentially be extremely harmful to their ownership of their equity. The convertible debt matures in November 2018. One specified scenario for conversion prior to maturity date involves the stock to be greater than \$96.04 for 20 days within a quarter. Should this happen, all 7.8 million shares will be converted, thereby diluting the outstanding shares. ServiceNow will have the option to settle their obligation with cash, stock, or a combination of the two. There is a significant risk that ServiceNow will not have enough cash or will not be able to raise enough cash because of the high risk nature of their debt.

NEW PRODUCTS WITH NO OPERATIONAL HISTORY

To remain relevant in the enterprise software market, ServiceNow must constantly provide new and innovate products for their clients. In doing so, ServiceNow is implementing products which they have no operational history with. This means ServiceNow may not be able to accurately forecast sales for these products. There is a risk that the development of the products will cost more than they generate in revenue, meaning breakeven is not guaranteed with these new products.

PATENTS

The enterprise software market is a patent heavy industry. Legal fees are likely to increase in the future as others claim ServiceNow has infringed upon a patent. Just this last year, ServiceNow settled two separate legal disputes, costing ServiceNow \$270 million. As business continues, there is a greater risk of similar legal disputes arising.

MANAGEMENT TURNOVER

ServiceNow has seen a concerning increase in C-Suite Management turnover. Frank Sloatman, CEO of ServiceNow for the past 7 years, has just recently announced his upcoming departure from ServiceNow is April of 2017. Management turnover at this level will cause doubt and uncertainty with the direction and cohesion of top management, but the departure of the long time CEO brings a higher level of doubt and uncertainty.

CURRENCY EXCHANGE RATES

ServiceNow is exposed to exchange rate fluctuations as they remain unhedged. Without any currency derivatives, ServiceNow will remain exposed to the appreciation and depreciation of the United States Dollar. As ServiceNow increases their penetration of the G2K, they will become increasingly vulnerable to currency movements. ServiceNow has indicated they are evaluating the costs and benefits of hedging their position with options, but until steps are taken, ServiceNow will remain vulnerable to exchange rate fluctuations.

FINANCIAL ANALYSIS

FINANCIAL OVERVIEW

ServiceNow's negative Net Income is misleading. ServiceNow has spent impressively high amounts in R&D and SG&A as an attempt to gain and maintain their market share now and in the future.

DCF VALUATION

The Weighted Average Target Price for the DCF was \$74.58. When looking at the DCF values, we decided to create a weighted average to signal our beliefs of how likely each scenario truly is. The Management Case received a weight of 0.8. The Base Case received a weight of 0.15. The Downside Case received a weight of 0.05. Stock prices from each case can be found in Figure 5A.

A Terminal Growth Rate of 3% was used. Justification can be found in Appendix K.

CONVERTIBLE DEBT EXECUTED

Debt conversion into equity would hurt the stock price. Should the convertible debt be converted into equity, dilution would lead to approximately a 4.45% decrease in the stock price, as shown in Figure 5B.

COMPARABLES & MULTIPLES VALUATION

The implied weighted average share price from comparables is \$79.09. Figure 5C. There are four firms that are similar to ServiceNow in both size and capital structure. Of those, Salesforce and Workday are the most similar to ServiceNow and thus were used for the valuation. Using the EV/Sales and Price to Book multiples for these two companies, an implied share price was found using a weighted average of Workday and Salesforce (0.8, 0.2 respectively).

VALUATION SUMMARY

The overall implied weighted average stock for ServiceNow is \$75.63. The weights can be found in Figure 5D. The DCF was weighted at 0.70. EV/Sales was given a weight of 0.28. The Price to Book was weighted at 0.02 because it substantially undervalued ServiceNow.

Figure 5A

Trading	
Current Price	\$87.60
52 Week Range	\$59.77 - \$94.72
Management Target	\$77.66
Base Target	\$65.57
Downside Target	\$52.33
Market Capitalization	\$15.05B

Figure 5B

Summary DCF Valuation (PreDeal)	
DCF Enterprise Value	\$12,609.1
Less: Net Debt (PreDeal)	391.6

Equity Value	13,000.7
Shares (PreDeal)	175.20
DCF Value with Convertible	\$74.20
DCF Value without Convertible	\$77.66
DCF Value without Convertible	(4.45%)

Figure 5C

	EV/Sales	Implied EV	Net Debt	Market Cap	Price
Workday	9.8	13,626.9	(391.6)	14,018.5	\$83.74
Salesforce	7.0	9,733.5	(391.6)	10,125.1	\$60.48
Average	8.4	11,680.3	(391.6)	12,071.9	\$72.11
				Weighted Average	\$79.09

Figure 5D

Share Price			
	Implied Price	Weight	Weighted Average
DCF Management	\$77.66	0.56	\$43.49
DCF Base Case	\$65.57	0.105	\$6.89
DCF Downside	\$52.33	0.035	\$1.83
Workday EV/Sales	\$83.74	0.252	\$21.10
Salesforce EV/Sales	\$60.48	0.028	\$1.69
Workday Price/Book	\$33.75	0.017	\$0.57
Salesforce Price/Book	\$18.26	0.003	\$0.05
			\$75.63

APPENDIX A: INCOME STATEMENT MANAGEMENT CASE

INCOME STATEMENTS

		Pro Forma		Projected			
		H1	P1	P2	P3	P4	P5
Revenues							
Subscription		\$1,221.6	\$1,626.3	\$2,171.2	\$2,779.1	\$3,473.9	\$4,116.5
Professional Services and other		168.9	264.8	353.4	452.4	565.5	670.1
COGS		<u>398.7</u>	<u>533.4</u>	<u>709.2</u>	<u>907.7</u>	<u>1122.9</u>	<u>1344.9</u>
Gross Profit		991.8	1,357.7	1,815.4	2,323.8	2,916.5	3,441.8
SG&A		<u>1,414.6</u>	<u>1,512.9</u>	<u>1,943.9</u>	<u>2,391.3</u>	<u>2,827.6</u>	<u>3,111.3</u>
EBIT		(422.8)	(155.2)	(128.6)	(67.5)	89.0	330.4
<i>Interest & Other Expense / (Income):</i>	<i>Rate</i>						
Revolver	8.0%	0.0	0.0	0.0	0.0	0.0	0.0
Term Loan	8.5%	0.0	0.0	0.0	0.0	0.0	0.0
Sr. Sub. Notes	11.5%	0.0	0.0	0.0	0.0	0.0	0.0
Sr. Convertible Notes	6.0%	<u>33.3</u>	<u>35.6</u>	<u>35.6</u>	<u>36.0</u>	<u>36.0</u>	<u>36.0</u>
Total Interest Expense		33.3	35.6	35.6	36.0	36.0	36.0
Interest Income	1.0%	(6.0)	(9.0)	(8.6)	(4.3)	(5.8)	(10.1)
Financing Costs Amortization	7 years	<u>5.2</u>	<u>5.2</u>	<u>5.2</u>	<u>5.2</u>	<u>5.2</u>	<u>5.2</u>
Pretax Income		(455.3)	(187.0)	(160.8)	(104.4)	53.5	299.4
Income Taxes	40.0%	5.0	5.0	5.0	5.0	21.6	120.1
Foreign Currency Translation		<u>(4.8)</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Net Income		(460.3)	(192.0)	(165.8)	(109.4)	31.9	179.2
Shares Outstanding		167.4	167.4	167.4	167.4	167.4	167.4
Earnings per Share (EPS)		(\$2.75)	(\$1.15)	(\$0.99)	(\$0.65)	\$0.19	\$1.07
<i>EBITDA Reconciliation:</i>							
EBIT		(\$422.8)	(\$155.2)	(\$128.6)	(\$67.5)	\$89.0	\$330.4
Plus: Depreciation		68.0	97.3	131.4	170.8	213.5	266.9
Plus: Amortization		15.1	10.6	9.8	9.8	0.5	1.0
EBITDA		<u>(339.7)</u>	<u>(47.3)</u>	<u>12.6</u>	<u>113.1</u>	<u>303.0</u>	<u>598.3</u>

APPENDIX B: BALANCE SHEET MANAGEMENT CASE

BALANCE SHEETS								
	Actual		12/31/P2	Incr./ (Decr.)	ProFma 12/31/P2	Projected		
	12/31/H1	12/31/P1				12/31/P3	12/31/P4	12/31/P5
ASSETS:								
Cash	899.4	862.4	432.7	582.0	1,014.7	1,169.7	1,504.7	1,986.7
Accounts Receivable	322.8	439.0	586.1	--	586.1	750.2	937.7	1,111.2
Deferred Commissions CP	76.8	104.4	139.4	--	139.4	178.5	223.1	264.4
Prepaid Expenses	43.6	58.3	77.6	--	77.6	99.3	122.8	147.1
Current Assets	1,341.1	1,464.2	1,235.7	582.0	1,817.7	2,197.6	2,788.3	3,509.4
Other assets	324.6	324.6	324.6	--	324.6	324.6	324.6	324.6
PP&E - Net	181.6	218.9	250.5	--	250.5	287.6	308.7	291.9
Intangibles	148.4	137.8	128.0	--	128.0	118.2	117.7	116.7
Cap. Financing Costs	36.6	31.4	26.1	18.0	44.1	38.9	33.7	28.5
Total Assets	<u>\$2,033.8</u>	<u>\$2,176.8</u>	<u>\$1,965.0</u>	600.0	<u>\$2,565.0</u>	<u>\$2,966.9</u>	<u>\$3,573.0</u>	<u>\$4,271.0</u>
LIABILITIES & EQUITY:								
Accounts Payable	38.1	51.0	67.8	--	67.8	86.7	107.3	128.5
Accrued Expenses	171.6	183.5	235.8	--	235.8	290.1	343.0	377.4
CP Deferred Revenue	861.8	1,172.0	1,564.7	--	1,564.7	2,002.8	2,503.5	2,966.6
Current Liabilities	1,071.5	1,406.5	1,868.3	--	1,868.3	2,379.6	2,953.8	3,472.6
Revolver	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0
Term Loan	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0
Sr. Sub. Notes	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0
Sr. Convertible Notes	507.8	507.8	0.0	600.0	600.0	600.0	600.0	600.0
Total Debt	507.8	507.8	0.0	600.0	600.0	600.0	600.0	600.0
Other	67.5	67.5	67.5	--	67.5	67.5	67.5	67.5
Total Liabilities	1,646.8	1,981.8	1,935.8	600.0	2,535.8	3,047.1	3,621.3	4,140.1
Common Equity	387.0	195.0	29.2	--	29.2	(80.2)	(48.3)	130.9
Liabilities & Equity	<u>\$2,033.8</u>	<u>\$2,176.8</u>	<u>\$1,965.0</u>	600.0	<u>\$2,565.0</u>	<u>\$2,966.9</u>	<u>\$3,573.0</u>	<u>\$4,271.0</u>
Check	0.000	0.000	0.000	--	0.000	0.000	0.000	0.000

APPENDIX C: STATEMENT OF CASH FLOW MANAGEMENT CASE

CASH FLOW STATEMENTS

	Projected				
	<u>P1</u>	<u>P2</u>	<u>P3</u>	<u>P4</u>	<u>P5</u>
<i>Operating Activities:</i>					
Net Income	(192.0)	(165.8)	(109.4)	31.9	179.2
Depreciation	97.3	131.4	170.8	213.5	266.9
Amortization	10.6	9.8	9.8	0.5	1.0
Financing Costs Amortization	5.2	5.2	5.2	5.2	5.2
Subtotal	(78.9)	(19.4)	76.4	251.2	452.3
<i>Changes in Working Capital</i>					
Accounts Receivable	(116.2)	(147.1)	(164.1)	(187.5)	(173.5)
Deferred Commissions CP	(27.6)	(35.0)	(39.0)	(44.6)	(41.3)
Prepaid Expenses	(14.7)	(19.2)	(21.7)	(23.5)	(24.3)
Accounts Payable	12.9	16.8	19.0	20.6	21.2
Accrued Expenses	11.9	52.3	54.3	52.9	34.4
Deferred Revenue CP	310.2	392.6	438.1	500.7	463.1
Working Capital Impact	176.4	260.4	286.5	318.5	279.8
Cash Flow from Operations	97.6	241.1	362.9	569.6	732.1
<i>Investing Activities:</i>					
Capital Expenditures	(134.6)	(163.0)	(207.9)	(234.6)	(250.1)
Cash Flow from / (Used by) Investing	(134.6)	(163.0)	(207.9)	(234.6)	(250.1)
Cash Available for Debt Repayment	(37.0)	78.1	155.0	335.0	482.0
<i>Financing Activities Capital Inflow / (Outflow):</i>					
Revolver	0.0	0.0	0.0	0.0	0.0
Term Loan	0.0	0.0	0.0	0.0	0.0
Sr. Sub. Notes	0.0	0.0	0.0	0.0	0.0
Sr. Convertible. Notes	0.0	(507.8)	0.0	0.0	0.0
Cash Flow from / (Used by) Financing	0.0	(507.8)	0.0	0.0	0.0
Net Increase / (Decrease) in Cash	(37.0)	(429.7)	155.0	335.0	482.0

APPENDIX D: DEBT SCHEDULE

DEBT SCHEDULE

			Projected				
			P1	P2	P3	P4	P5
<u>Scheduled Debt Retirement</u>							
Term Loan	Years to Amortize	7	0.0	0.0	0.0	0.0	0.0
Sr. Convertible Notes			0.0	507.8	0.0	0.0	0.0
Sr. Sub. Notes			0.0	0.0	0.0	0.0	0.0
<u>USES OF FUNDS</u>							
<u>Required Debt Retirement</u>							
Term Loan			0.0	0.0	0.0	0.0	0.0
Sr. Convertible Notes			0.0	507.8	0.0	0.0	0.0
Sr. Sub. Notes			0.0	0.0	0.0	0.0	0.0
Required Debt Retirement			0.0	507.8	0.0	0.0	0.0
<u>Optional Debt Retirement</u>							
Revolver		Prepay?	0.0	0.0	0.0	0.0	0.0
Term Loan		yes	0.0	0.0	0.0	0.0	0.0
Sr. Sub. Notes		no	0.0	0.0	0.0	0.0	0.0
Sr. Convertible Notes		no	0.0	0.0	0.0	0.0	0.0
Optional Debt Retirement			0.0	0.0	0.0	0.0	0.0
Uses of Funds Subtotal			0.0	507.8	0.0	0.0	0.0
Excess Cash Added to Balance Sheet			862.4	432.7	587.7	1,504.7	1,986.7
Total Uses of Funds			862.4	940.5	587.7	1,504.7	1,986.7
<u>SOURCES OF FUNDS</u>							
Existing Excess Cash			899.4	862.4	432.7	1,169.7	1,504.7
Cash Available for Debt Repayment			(37.0)	78.1	155.0	335.0	482.0
Subtotal			862.4	940.5	587.7	1,504.7	1,986.7
Incremental Revolver Borrowings			0.0	0.0	0.0	0.0	0.0
Total Sources of Funds			862.4	940.5	587.7	1,504.7	1,986.7

APPENDIX E: COST OF CAPITAL

Equity Cost of Capital	
Market Return	10.1%
Risk-Free Rate (10yr)	2.6%
Beta	1.67
R(e)	15.1%
WACC	
R(e)	15.1%
R(d)	6.8%
Tax Rate	40%
Market Value in Millions	14,520
Net Debt in Millions	(391.6)
WACC	15.4%

APPENDIX F: DCF MANAGEMENT CASE

VALUATION ANALYSIS

	Dec-17	Dec-18	Dec-19	Dec-20	Dec-21	Dec-41
	1	2	3	4	5	25
Free Cash Flow Calculation						
EBIT	(155.2)	(128.6)	(67.5)	89.0	330.4	
Plus: Depreciation	97.3	131.4	170.8	213.5	266.9	
Plus: Amortization	10.6	9.8	9.8	0.5	1.0	
EBITDA	(47.3)	12.6	113.1	303.0	598.3	
Less: Capex	(134.6)	(163.0)	(207.9)	(234.6)	(250.1)	
EBITDA Less Capex	(181.9)	(150.4)	(94.8)	68.4	348.2	
Less: Taxes on EBIT	(5.0)	(5.0)	(5.0)	(35.8)	(132.2)	
Less: Changes in Working Capital	176.4	260.4	286.5	318.5	279.8	
Unlevered Free Cash Flow	(10.4)	105.1	186.7	351.1	495.8	17,195.1

DCF Enterprise Value Calculation

Growth Rate for 2022-2041						19.4%
<i>Terminal Value Calculation</i>						
Terminal Value Growth Rate						3%
Projected Free Cash Flow						17,710.9
Discount Rate (WACC)						15%
Terminal Enterprise Value						147,591.0
Implied Term. Value EBITDA Multiple						246.7x
<i>Discounted Cash Flows at WACC</i>						
Unlevered Free Cash Flow	(9.1)	79.4	122.8	200.7	246.5	522.3
Terminal Value						4,483.5
Total Discounted Cash Flows	12,609.1	(9.1)	79.4	122.8	200.7	5,005.8

Summary DCF Valuation (PreDeal)	
DCF Enterprise Value	\$12,609.1
Less: Net Debt (PreDeal)	391.6
Equity Value	13,000.7
Shares (PreDeal)	167.40
DCF Value per Share	\$77.66

DCF Value per Share			
Terminal Growth	WACC		
	14.0%	15.0%	15.5%
2.5%	\$92.55	\$76.35	\$69.67
2.7%	\$93.48	\$76.99	\$70.21
3.0%	\$94.46	\$77.66	\$70.76
3.5%	\$96.38	\$78.96	\$71.84
4.0%	\$98.49	\$80.38	\$73.01

APPENDIX G: DCF SENSITIVITY ANALYSIS

MANAGEMENT CASE

DCF Value per Share			
Terminal Growth	WACC		
	<u>14.0%</u>	<u>15.0%</u>	<u>15.5%</u>
2.5%	\$92.55	\$76.35	\$69.67
2.7%	\$93.48	\$76.99	\$70.21
3.0%	\$94.46	\$77.66	\$70.76
3.5%	\$96.38	\$78.96	\$71.84
4.0%	\$98.49	\$80.38	\$73.01

BASE CASE

DCF Value per Share			
Terminal Growth	WACC		
	<u>14.0%</u>	<u>15.0%</u>	<u>15.5%</u>
2.5%	\$78.15	\$64.46	\$58.82
2.7%	\$78.94	\$65.01	\$59.27
3.0%	\$79.77	\$65.57	\$59.74
3.5%	\$81.39	\$66.67	\$60.66
4.0%	\$83.17	\$67.87	\$61.65

DOWNSIDE CASE

DCF Value per Share			
Terminal Growth	WACC		
	<u>14.0%</u>	<u>15.0%</u>	<u>15.5%</u>
2.5%	\$62.33	\$51.44	\$46.96
2.7%	\$62.96	\$51.87	\$47.32
3.0%	\$63.62	\$52.33	\$47.69
3.5%	\$64.91	\$53.20	\$48.42
4.0%	\$66.32	\$54.15	\$49.20

APPENDIX H: COMPARABLES & MULTIPLES

	CA, Inc.	Salesforce	Workday	SAP	Average
P/E	17.2	321.2	(40.1)	29.5	82.0
P/Book	2.4	7.9	14.6	4.1	7.3
Market Cap (Billions)	13.2	50.7	20.0	104.8	
Net Debt	(0.8)	(0.2)	(1.4)	4.1	
EV	12.5	50.5	18.6	108.9	
EV/Sales	3.2	7.0	9.8	5.2	6.3
EV/EBITDA	8.3	83.3	NM	17.7	36.4

	EV/Sales	Implied EV	Net Debt	Market Cap	Price
Workday	9.8	13,626.9	(391.6)	14,018.5	\$83.74
Salesforce	7.0	9,733.5	(391.6)	10,125.1	\$60.48
Average	8.4	11,680.3	(391.6)	12,071.9	\$72.11

Share Price			
	Implied Price	Weight	Weighted Average
DCF Management	\$77.66	0.56	\$43.49
DCF Base Case	\$65.57	0.105	\$6.89
DCF Downside	\$52.33	0.035	\$1.83
Workday EV/Sales	\$83.74	0.252	\$21.10
Salesforce EV/Sales	\$60.48	0.028	\$1.69
Workday Price/Book	\$33.75	0.017	\$0.57
Salesforce Price/Book	\$18.26	0.003	\$0.05
			\$75.63

APPENDIX I: OPERATING ASSUMPTIONS

FINANCIAL ASSUMPTIONS

We expect revenue to reach \$4 billion by the year 2020. Year over year revenue growth has declined over the past two years and is expected to decline in the coming years due to increasing competition within the cloud computing industry. We factored this expectation into our model by including a modest decline in year over year revenue growth in the management and base cases, and a substantial decline in the downside case. Based on the SaaS business model and ServiceNow's upsell and renewal rates, we feel confident that ServiceNow will reach this \$4 billion mark, and thus we weighted the Management DCF more heavily in the valuation.

We expect Cost of goods sold as a percentage of sales to decrease slightly next year. In the future, costs are expected to continue to increase in line with revenue, keeping COGS as a percentage of sales constant. We projected COGS as a percentage of sales to remain at its current level, based on management expectations. To account for unforeseen increases in cost of revenues, we projected COGS as a % of sales to be slightly higher than its current level in the base case and downside scenarios.

SG&A expenses as a % of sales have declined in recent years. Management anticipates this trend to continue in the coming years while acknowledging that unforeseen costs of continued research and development and legal disputes may limit their ability to keep expenses low. Our scenario analysis assumes a substantial decrease in SG&A as a % of sales over the next five years in the management case, a modest decrease in the base case, and a slight decrease in the downside case.

Capital expenditures required to meet increasing demand are expected to rise as ServiceNow expands its data-warehouse capacity. Our management case assumes a steady increase in capital expenditures based on historical expenditures and growth expectations for the company as a whole. Our base case and downside case assume that ServiceNow will incur higher than expected capital expenditures in order to keep pace with increasing demand.

Operating Assumptions						
<u>Revenue Growth</u>		<u>P1</u>	<u>P2</u>	<u>P3</u>	<u>P4</u>	<u>P5</u>
	1 Management Case	36.0%	33.5%	28.0%	25.0%	18.5%
	2 Base Case	36.0%	33.5%	27.0%	23.0%	18.0%
	3 Downside Case	36.0%	33.5%	25.0%	22.0%	17.0%
<u>COGS %</u>		<u>P1</u>	<u>P2</u>	<u>P3</u>	<u>P4</u>	<u>P5</u>
	1 Management Case	22.5%	22.5%	22.5%	22.5%	22.5%
	2 Base Case	23.0%	23.0%	23.0%	23.0%	23.0%
	3 Downside Case	23.0%	23.0%	23.0%	23.0%	23.0%
<u>SG&A %</u>		<u>P1</u>	<u>P2</u>	<u>P3</u>	<u>P4</u>	<u>P5</u>
	1 Management Case	80.0%	77.0%	74.0%	70.0%	65.0%
	2 Base Case	80.0%	78.0%	75.0%	72.0%	66.0%
	3 Downside Case	80.0%	79.0%	77.0%	73.0%	68.0%
<u>Capex</u>		<u>P1</u>	<u>P2</u>	<u>P3</u>	<u>P4</u>	<u>P5</u>
	1 Management Case	134.6	163.0	207.9	234.6	250.1
	2 Base Case	138.6	169.0	213.9	240.6	256.1
	3 Downside Case	138.6	175.0	219.9	246.6	262.1

APPENDIX J: CAPITAL STRUCTURE SCENARIOS

Capital Structure Assumptions

Case	1	2	3	Active Case 3
<i>Description</i>	<i>No deal</i>	<i>Refinance w/ \$600.0 Convertible, \$100.0 Sr Sub</i>	<i>Refinance w/ \$600.0 Convert. Notes, \$0.0 High Yield</i>	<i>Refinance w/ \$600.0 Convert. Notes, \$0.0 High Yield</i>
Sources of Funds				
Excess Cash	0.0	0.0	0.0	0.0
New Sr. Convertible Notes	0.0	100.0	600.0	600.0
New Revolver	0.0	0.0	0.0	0.0
New Term Loan	0.0	0.0	0.0	0.0
New Sr. Sub. Notes	0.0	600.0	0.0	0.0
Total Sources	0.0	700.0	600.0	600.0
Uses of Funds				
Fund Cash Blc.	0.0	679.0	582.0	582.0
Repay Revolver	0.0	0.0	0.0	0.0
Repay Term Loan	0.0	0.0	0.0	0.0
Repay Sr. Sub. Notes	0.0	0.0	0.0	0.0
Repay Sr. Sub. Notes	0.0	0.0	0.0	0.0
Term Loan Fee	0.0	0.0	0.0	0.0
Sr. Sub. Fee	0.0	18.0	0.0	0.0
Sr. Convertible Fee	0.0	3.0	18.0	18.0
Total Uses	0.0	700.0	600.0	600.0
Check	0.000	0.000	0.000	0.000
Triggers				
Term Loan Financing Fee	2.5%	2.5%	2.5%	2.5%
Sr. Notes. Financing Fee	3.0%	3.0%	3.0%	3.0%
Sr. Convertible Financing Fee	3.0%	3.0%	3.0%	3.0%
Term Loan Rate	8.5%	8.5%	8.5%	8.5%
Sr. Subs. Coupon	11.0%	11.0%	11.5%	11.5%
Sr. Convertible Coupon	1.0%	1.0%	1.0%	1.0%

APPENDIX K: OTHER KEY ASSUMPTIONS

CREDIT RISK

Negative EBIT and EBITDA for the past five years.

EBIT projected to be negative until 2020 (management case)
These lead to higher cost of capital due to higher risk of ServiceNow's current cash flows

DEBT SCENARIOS

Current Convertible Debt is due November 2018.

Therefore, the model shows a capital restructuring in year 2018 (P2). We assume the risk profile of the company will only allow for convertible debt, or possible senior subordinate notes. We believe that ServiceNow will not be able to refinance with a **Term Loan** because of their negative EBITDA/Interest ratio and their negative EBITDA less CAPEX/ Interest. ServiceNow has no need to draw on any **Revolver** because they have a substantial amount of cash on hand, which is evident from their negative net debt.

Equity Cost of Capital	
Market Return	10.1%
Risk-Free Rate (10yr)	2.6%
Beta	1.67
R(e)	15.1%
WACC	
R(e)	15.1%
R(d)	6.8%
Tax Rate	40%
Market Value in Millions	14,520
Net Debt in Millions	(391.6)
WACC	15.4%

TERMINAL GROWTH

ServiceNow's terminal growth rate was 3%. IT cloud services are expected to grow at a compound annual rate of 15.1% from 2014 to 2019 (Forbes), so we assumed that ServiceNow would exceed those rates prior to their terminal stage in 2042. Based on Forbe's industry outlook, we assumed that ServiceNow's terminal growth rate or 3% is justified when looking at the sensitivities, which allow for some degree of error in the terminal growth rate should we be initially incorrect.

OPERATING CASE USED

Aside from the varying DCF valuations, the Management Case was always used. Because of the SaaS nature of ServiceNow and the upsell and renewal rates, we are of the opinion that the Management Case is the most likely operating scenario to occur. Thus, the management case was always shown in the Appendices and always given the greatest weight when valuing ServiceNow.