

Company

7 September 2010 | 69 pages

The Not-So-Amazing Race

BMC wins the race on the management software treadmill

- **We are initiating coverage of the management software industry and the two largest companies, CA Technologies (2M, \$20 pt) and BMC Software (1M, \$45 pt).** The sector is countercyclical and currently out of favor, as investors chase growth. We believe, given relative valuation at recent extreme and some company-specific drivers, investors should buy BMC Software at current levels to round out software portfolios as we move into more uncertain 2011.
- **Company-specific differences drive our stock views.** Our Buy rating on BMC is based on our view that the company's growth / margin targets are prudent and achievable with upside likely. Also, in the near term, 20% latent sales capacity should enable growth in the ESM business without additional hiring. With the best product story in the sector, successful ramp of this capacity could drive an up-tick in growth above historical levels. Our Hold on CA is based on concerns that the company is likely to over-invest for growth over the next several years as well as the composition of the product portfolio, which is spread thinner, and thus lessable, to achieve critical mass.
- **Sector has always traded at a discount to software.** Historical valuation discount vs. the software sector has been due to slower growth and historically heavy reliance on M&A to keep pace with change and new technologies in the underlying IT infrastructure that is managed. We don't see this changing for the sector overall and this discount is embedded in our price targets.
- **More strategic yet more competitive.** With new entrants to the systems business (Cisco and Oracle), we believe management software is ultimately necessary for these players to own as they put together full data center offerings. We view BMC as more "right sized" as an acquisition target. While not a reason to own the stock in isolation, this puts a floor on the shares as BMC takeout could happen at levels 35-60% above current levels based on mid-cap software and management software take-out multiples. Parallel to this, software platform vendors such as Microsoft and VMware continue to add value to their "stacks," which commoditize some of the value standalone players such as CA and BMC provide. While the cloud may be an emerging opportunity for management, like software platforms, we expect cloud providers will also embed a baseline of management technology.

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Ticker	Rating		Target Price		Current Year Earnings Estimates		Next Year Earnings Estimates	
	Old	New	Old	New	Old	New	Old	New
BMC	NA	1M	NA	US\$45.00	NA	US\$2.95	NA	US\$3.20
CA	NA	2M	NA	US\$20.00	NA	US\$1.90	NA	US\$1.99

See Appendix A-1 for Analyst Certification, Important Disclosures and non-US research analyst disclosures.

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Executive Summary

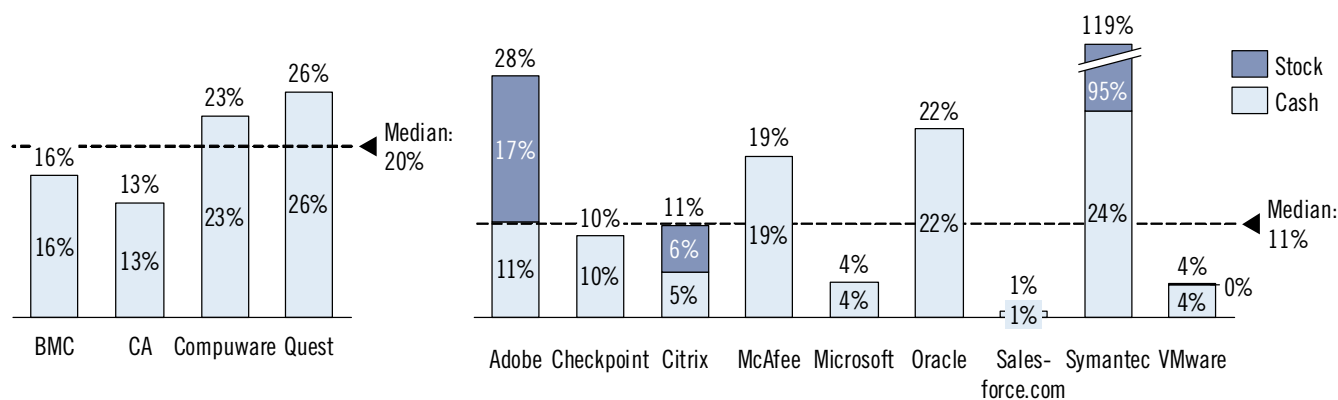
The management software treadmill: Management software an important driver to reduce IT spending, but companies must spend to keep pace with change

The cost of IT hardware has come down significantly over the last several decades at the same time that labor costs have increased. This has resulted in operational costs (mostly people) making up an increasing percentage of IT spending. Organizations have become more reliant on their IT systems and consequently the cost of system downtime has increased. At the same time, there are pressures to cut IT spending. The only way to accomplish all these goals is to leverage software and process to improve the consistency of service delivery and also enable IT infrastructure to grow without adding headcount. This has driven demand for management software, which we estimate was a \$13B market in 2009.

CA appears to be running faster on the treadmill, but it's expending a lot of energy

Another dynamic the management software vendors must contend with is the fact the underlying IT infrastructure is constantly changing. While this continues to extend the opportunity for management tools as enterprises adopt this new technology, it also results in shorter product lifecycles as the more mature products are commoditized and a need to constantly invest in internal R&D and acquisitions to keep pace with change. Over time, this elevated volume of M&A, which is a use of valuable capital and a source of execution risk has largely been a headwind to shareholder returns in management software. Going forward, due to its outlined growth strategy, we believe CA Technologies will fall into the treadmill trap more so than BMC Software, feeling the need to invest fairly heavily in M&A and internal development that, while necessary to create better heterogeneous capabilities, will take some time to pay off. We don't believe investors should buy the stock at current levels in what could be the early stages of an investment phase.

Figure 1. 2005-2009 M&A spend as percentage of market cap on December 31, 2009



Source: Citi Investment Research and Analysis, Bloomberg, FactSet

Heterogeneous management is the key differentiator in a world where computing platforms are encroaching on software's turf

Management software is becoming more important. At the same time, we are seeing computing platforms increasingly build a robust baseline of functionality embedded in the platform to help differentiate the platform from competitors and bring increased value to the customer. This pressure has been benign in the mainframe and Unix environments that dominated before the last ten years. Mainframe still represents a large market for management software vendors and while long-term growth is slow and steady, we do see some incremental reason for excitement as mainframe capacity should start to grow in the September quarter for the first time in six quarters as IBM (IBM.N; US\$127.58; 1M) ships its new zEnterprise platform. Beyond the mature mainframe and Unix platforms, the Windows server platform has been increasingly embedding management over the last decade while newer entrant VMware has become much more aggressive in this regard in the last several versions of its flagship vSphere product. Just this past week, VMware announced a more robust management software roadmap at its annual user conference and also announced two acquisitions in the management space.

BMC has valuable heterogeneous assets in key markets, which should deliver above-market growth...

The above dynamic drives value towards heterogeneous management, which becomes more valuable and where we expect management software vendor revenue to be concentrated. We see a handful of markets today that are truly defensible including change control and automation, application performance management (APM) and identity and access management (I&AM). CA and BMC have positions in these markets, although we see BMC's position in change control and automation as able to generate the most growth and also most strategically valuable. We believe the concentration of BMC's revenue in this market should enable the company to deliver growth at or slightly ahead of the software market over the medium-term.

...and makes it a more attractive acquisition candidate, in our view

We believe it is likely that one of the newer entrants into the enterprise systems market (Oracle (ORCL.O; US\$22.92; 1L) and Cisco (CSCO.O; US\$21.05; 1M)) are ultimately likely acquirers in the management software arena. BMC is the more attractive target given 1) its traction in the strategic change management and server automation areas and 2) the relative absence of co-mingled mainframe contracts. Valuations have averaged 4x revenue for large-cap software transactions >\$2B and 5x revenue for management software >\$300M.

With the emergence of cloud-based services, there may be an unmet need for management tools that manage various cloud environments (SaaS / PaaS / IaaS) directly as well as managing enterprise workloads hosted by SaaS providers for compliance with service-level agreements. With SMBs driving much of the growth in the cloud, we don't see as urgent of a requirement around management software for this customer segments. Also, cloud providers are concentrators of demand and extract significant discounts in volume license agreements. Thus these new markets are somewhat uncharted. We do expect that enterprises will continue to need a robust suite of management software products as they manage hybrid workloads and need application-level visibility even for workloads running in the cloud.

In all, we view the evolutions in IT platforms as pressuring management software vendors, but also a likely driver of some consolidation.

Figure 2. Comparable software & management software transactions

Software transactions >\$2B						Management software transactions >\$300M					
Date announced	Target	Acquirer	Value (\$M)	EV/LTM Revenue	1-day premium	Date announced	Target	Acquirer	Value (\$M)	EV/LTM Revenue	1-day premium
12/16/2004	VERITAS Software	Symantec	11,664	5.9x	22%	7/25/2006	Mercury Interactive	HP	4,517	5.2x	34%
3/28/2005	SunGard Data Systems	Private equity	10,845	3.1x	44%	7/23/2007	Opsware	HP	1,591	14.7x	NA
12/13/2004	PeopleSoft	Oracle	8,876	3.3x	75%	1/29/2007	Altiris	Symantec	839	3.7x	40%
8/19/2010	McAfee	Intel	7,680	3.8x	57%	3/17/2008	BladeLogic Inc	BMC Software Inc	724	11.6x	22%
1/16/2008	BEA Systems	Oracle	7,097	4.8x	24%	12/21/2005	Micromuse	IBM	705	4.4x	38%
5/12/2010	Sybase Inc	SAP AG	5,323	4.4x	35%	4/27/2006	LANDesk	Avocent	416	5.0x	NA
10/7/2007	Business Objects	SAP	5,034	3.5x	18%	5/23/2006	Softricity	Microsoft	400	NA	NA
11/11/2007	Cognos	IBM	4,598	4.0x	9%	12/19/2002	Precise Software Solutions	Veritas Software	396	5.5x	37%
7/25/2006	Mercury Interactive	HP	4,517	5.2x	34%	1/5/2006	Wily Technology	CA	375	7.1x	NA
2/9/2004	NetScreen Technologies	Juniper Networks	3,732	13.6x	57%	9/19/2005	Peregrine Systems	HP	367	1.9x	37%
9/12/2005	Siebel	Oracle	3,705	2.8x	17%	10/6/2004	Netegrity Inc	CA	363	4.6x	36%
1/25/2007	UGS	Siemens	3,500	2.9x	NA	3/10/2010	Nimsoft Inc	CA	350	10.9x	NA
4/18/2005	Macromedia	Adobe	3,055	7.0x	25%	4/1/2004	Candle	IBM	350	1.6x	NA
2/28/2007	Hyperion	Oracle	2,816	3.4x	21%	4/7/2005	Concord Communications	CA	342	3.1x	71%
3/15/2007	WebEx	Cisco	2,746	7.2x	22%	6/29/2004	Inet Technologies	Tektronix	326	3.1x	17%
6/30/2006	RSA Security	EMC	2,125	6.3x	22%	4/27/2006	NetIQ	Private equity	316	1.7x	2%
3/14/2004	UGS PLM Solutions (EDS)	Private equity	2,050	2.4x	16%	8/5/2007	Princeton Softech	IBM	300	5.0x	NA
			Median	4.0x	23%				Median	4.8x	36%
			Mean	4.9x	31%				Mean	5.6x	33%

Source: Bloomberg, FactSet, Citi Investment Research and Analysis

Multiples unlikely to expand, but we believe numbers could move higher for BMC as it outgrows the market at large

Historically, management software has been a tough sector for investors to make money in

We do not view valuation as a reason to own management names, despite low earnings and cash flow multiples relative to the market. The current trading environment favors growth names, and virtually all value names are out of favor, not just management.

Figure 3. Management Software Comparable Company Valuation

(In Millions, Except per Share Data)

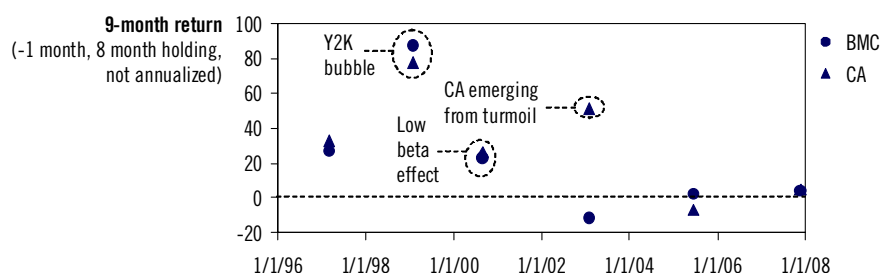
COMPANY	CIRA RATING	TARGET PRICE	PRICE 9/3/10	ENTERPRISE VALUE	REVENUE GROWTH '09A - '10E	ENTERPRISE VALUE AS MULTIPLE OF REVENUE		ENTERPRISE VALUE AS MULTIPLE OF FCFF		P/E	
						CY10E	CY11E	CY10E	CY11E	CY10E	CY11E
BMC	1M	\$45.00	\$38.34	\$6,069	5%	3.0x	2.9x	NA	8.4x	13.3x	12.2x
CA	2M	\$20.00	\$19.09	\$9,137	3%	2.0x	2.0x	NA	6.3x	10.2x	9.7x
Management Software and Related Companies											
CPWR	NR	--	\$7.70	\$1,656	-1%	1.8x	1.7x	NA	NA	16.8x	12.7x
MICRO-GB	1H	\$4.50	\$3.16	\$725.05	18%	1.6x	1.5x	NA	NA	5.6x	5.1x
NTCT	NR	--	\$17.44	\$675	8%	2.4x	2.2x	10.4x	NA	18.8x	16.0x
QSFT	NR	--	\$22.46	\$1,761	9%	2.3x	2.2x	10.7x	8.8x	16.5x	14.3x
SWI	NR	--	\$15.08	\$752	28%	5.1x	4.1x	11.7x	10.7x	21.6x	18.1x
CTXS	2M	\$49.00	\$61.94	\$10,858	13%	5.9x	5.4x	21.2x	18.0x	32.8x	28.6x
SYMC	2M	\$15.00	\$13.98	\$10,280	0%	1.7x	1.6x	7.7x	7.4x	10.2x	9.4x
ARST	NR	--	\$37.34	\$1,202	24%	5.8x	4.9x	28.0x	18.2x	48.7x	42.3x
CVLT	NR	--	\$25.86	\$990	11%	3.4x	3.0x	15.9x	13.0x	36.4x	30.3x
Large Cap Technology											
EMC	1M	\$25.00	\$19.91	\$37,323	20%	2.2x	2.0x	9.6x	8.9x	16.1x	13.8x
HPQ	1M	\$65.00	\$40.34	\$101,037	9%	0.8x	0.8x	9.7x	8.5x	8.7x	7.8x
IBM	1M	\$150.00	\$127.51	\$183,158	3%	1.9x	1.8x	8.6x	8.1x	11.2x	10.0x
MSFT	1L	\$31.00	\$24.29	\$185,988	9%	2.8x	2.6x	8.6x	8.3x	10.8x	9.7x
ORCL	1L	\$28.00	\$22.92	\$115,194	22%	3.7x	3.2x	11.4x	9.8x	12.4x	10.9x
NTAP	1H	\$50.00	\$44.05	\$13,115	22%	2.8x	2.4x	14.1x	10.4x	22.4x	18.0x
Mean						2.9x	2.6x	12.9x	10.3x	18.4x	15.8x
Median						2.4x	2.2x	10.7x	8.8x	16.1x	12.7x
Software Group Mean						3.3x	2.9x	17.8x	15.0x	26.4x	22.7x
Software Group Median						2.8x	2.5x	13.5x	12.3x	21.8x	19.1x
S&P 500						13.0x 11.3x					

Source: FactSet, Citi Investment Research and Analysis

Mainframe cycle is a net positive but not “money in the bank”

Ever since Y2K, management software has been a consistent underperformer relative to software and the broader market, and we believe the sector will continue to underperform due to slower growth and the constant necessity to reinvest in the business. Investors looking for alpha from the IBM mainframe cycle have shown mixed results historically, although buying ~1 month before a new mainframe shipment and selling ~8 months later has maximized returns. Correlation has diminished over time. We note that BMC trades in line with the market, whereas CA trades at a discount.

Figure 4. Dispersion of excess returns from profit maximizing trading strategy



Source: Citi Investment Research and Analysis, FactSet

We believe BMC has a higher potential to beat numbers

BMC has significant latent sales capacity after a period of restructuring and investment. The company stands to benefit from stability and the 20% up-tick in tenured quota-carrying sales reps in FY11. We believe this sales capacity will drive upside the number, and we believe it is possible that double-digit growth in ESM could be sustainable beyond FY11. Coupled with relatively low numbers in Street consensus, we believe BMC could turn in several quarters of results above expectations.

We favor BMC in this race on the treadmill

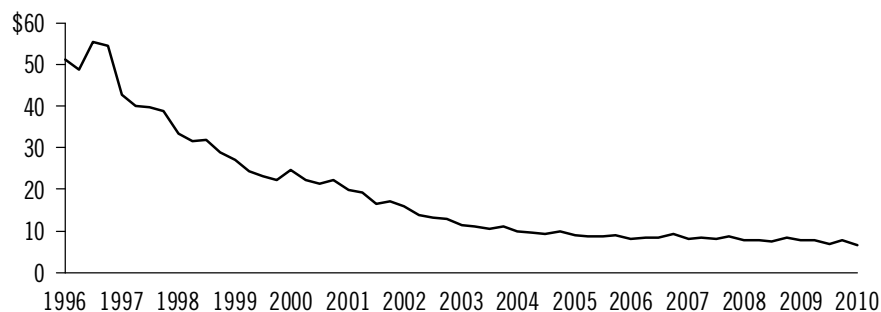
Although the management software sector overall is a tough market, we believe that BMC is currently better positioned due to 1) a better strategic position with its products, which should drive above-market growth and increase the its attractiveness in an M&A scenario and 2) some structural investment in its sales force that should bear fruit this year and could drive upside above consensus. CA could benefit from some sector trends such as the current IBM mainframe cycle (as could BMC), but we believe investments in growth are in the early stages and unlikely to produce short-term results. Longer term, the initiatives could pay off, but unless the company does transformational deals (i.e. contrary to its stated strategy), our modeling shows that M&A will be a smaller driver of value creation than the organic business.

The economics of hardware and IT is making management software more important

Falling hardware prices...

For the last several decades, companies and other organizations have looked to IT systems to automate their businesses. Applications such as ERP, supply chain and customer relationship management have enabled significant gains in business productivity. Servers are the basic unit of computing power that underlies applications and these associated productivity gains. The first mainframe computer, introduced in 1952, was priced in the range of \$2+ million and had a fraction of the computing power of some of today's embedded devices. Over the last several decades, Moore's Law (doubling of transistor density every 18 months) has driven down the price of computing power. The demand elasticity of computing power has accelerated the deployment of applications to automate various business processes.

Figure 5. Server Average Selling Prices, in Thousands

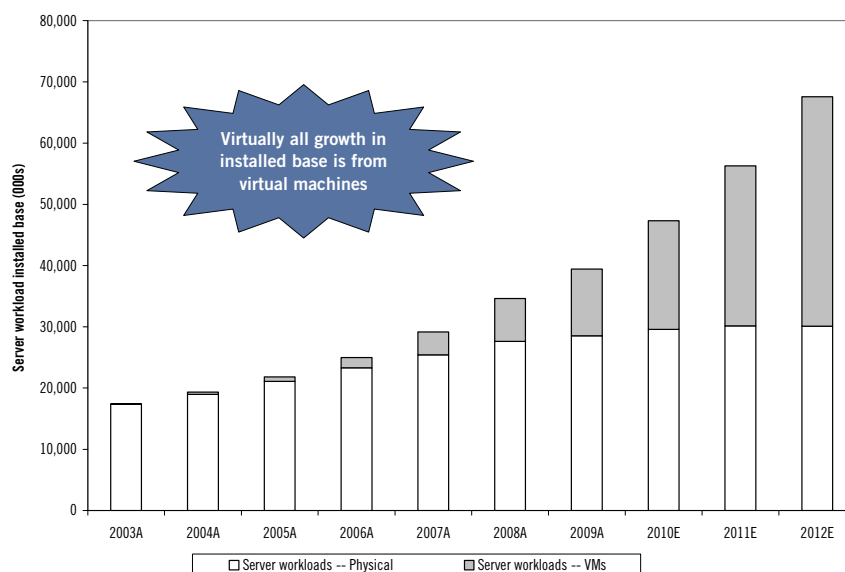


Source: IDC Server Tracker

...and increased server virtualization...

In the last decade, there has been a dramatic shift towards deploying servers based on industry-standard components that has steepened the cost curve, thereby accelerating the growth in application deployments. In the last five years, the deployment of server virtualization has further lowered the up-front cost of putting a new workload into production and yet again accelerated the pace of application deployment.

Figure 6. Virtualization has Accelerated Server Workload Growth

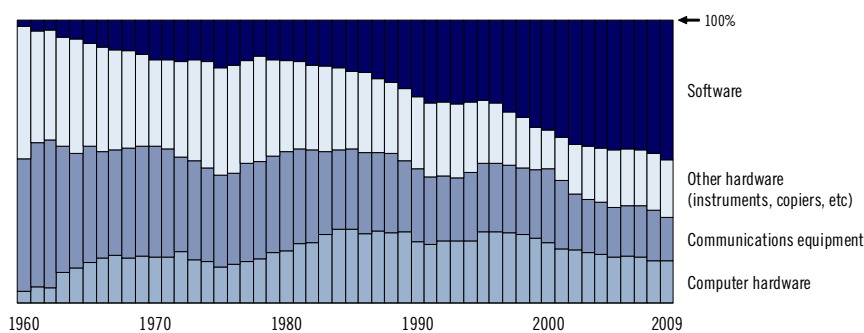


Source: Citi Investment Research and Analysis

...has resulted in a shift away from hardware toward software on the capex side...

The result of all these trends has been a relative flat-lining of spending on hardware products such as computers, peripherals and communications equipment. We would argue that while IT organizations are always looking to cut costs, the reduction in hardware costs has already played out and is not going to deliver an incremental order of magnitude in cost efficiency that it has over the last two decades.

Figure 7. Investments in Private Fixed Assets – Information processing equipment and software



Source: Bureau of Economic Analysis

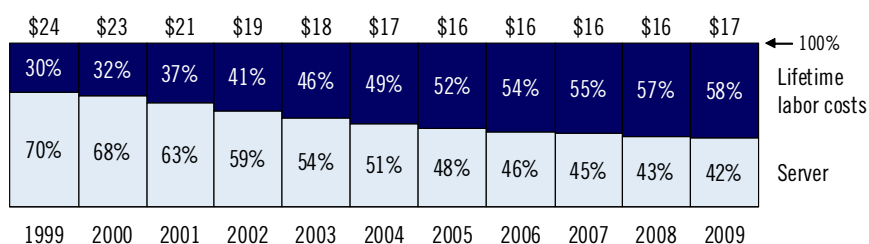
At the same time that hardware spending has succumbed to the forces of Moore's law and commoditization, labor continues to increase proportionate to IT spending. Citi's latest CIO survey suggests labor is between 29-34% of overall IT spending and this proportion has actually increased from the 20% range over the last five years. In the current environment our IT survey work suggests a very modest 1-2% IT budget growth after a decline in 2009. As a result, labor must become an incremental source of economic efficiency in order to enable a slightly growing IT budget to keep pace with growth in underlying business metrics such as transactions and customers.

...and toward labor costs on the opex side.

Server costs have migrated dramatically towards labor over the last 10 years

Over the last ten years, the average cost of a server has been reduced from \$16,759 to \$6,969. At the same time, we estimate that the prevailing level of wage inflation has driven the average IT systems administrator salary up by 34% (3% annually). Thus ten years ago, the up-front acquisition cost of a server represented 70% of the total cost of this server over its lifetime (4-years), while the labor costs of managing the server was 30%. Fast forwarding to today, with server price declines and wage inflation, the overall cost of managing the server has now become the clear majority of the lifetime costs of a server. We believe the same math likely pertains to other IT elements such as desktops and networking and storage devices.

Figure 8. Composition of server costs,* totals in \$ thousands

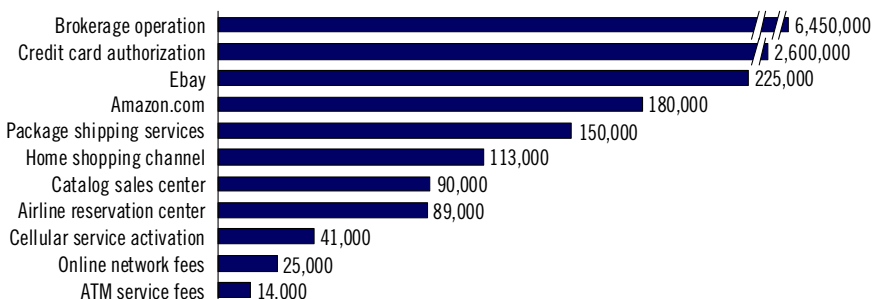


Source: Citi Investment Research and Analysis, Gartner

* Assumes 3% annual wage inflation, 35 servers per administrator, 4 year life

In this math, we have not considered other factors beyond the simple management costs of a server. For example, more and more mission-critical business functions are relying on software applications to automate their business processes. These applications architectures are becoming more complex and manual administration of these environments increasingly exposes the organization to the risk of human error, which can result in system outages and ultimately interruption to the business. This is analogous to assembly lines which automated the manufacturing process in the automotive industry. The cost of rectifying a problem in a later stage of a manufacturing process can be more expensive than manufacturing the good in the first place. More extreme than the manufacturing scenario, in IT, there are instances where the cost of downtime can have much graver implications than just being costly. For example, the cost of Amazon.com's systems going down the week before Christmas would not be just the lost revenue from that important week, but also damage to the company's brand and reputation.

Figure 9. Cost per hour of downtime



Source: Contingency Planning Research (survey conducted in 2000)

As a result, best practices such as six sigma were introduced to take costs out of the manufacturing process by removing the root cause of defects and minimizing variability through standardization of process. In modern IT management process frameworks such as ITIL have been introduced that are similar with to six sigma. While the ultimate goal is to lower costs, along the way, process must be standardized to remove to causes of downtime and minimize variability to drive economies of scale. This trend overall has driven the need for management software.

IT headcount costs must be addressed to cope with likely future budget pressures

For IT to become more efficient, organizations must increasingly address the costs of headcount and focus on means of scaling IT capacity without scaling headcount. This general need has caused a number of dynamics within the broader landscape including the increased use of offshore labor, the use of collocated data center facilities, enterprise interest in cloud-based applications (software as a service) as well as cloud-based development platforms (platform as a service). Fundamentally though, these dynamics drive the demand for management software technologies.

The opportunity to help customers address operational costs has already attracted the attention of larger IT vendors. These vendors such as IBM, HP (HPQ.N; US\$40.34; 1M), Cisco, Oracle, Accenture (ACN.N; US\$38.58; 1H) and the like see this longer-term, strategic partnership opportunity as a potentially lucrative opportunity to become a more strategic partner to their enterprise customers. We believe this will drive a subset of these companies to build out more robust product offerings in the management software area. Additionally, beyond the strategic imperative, we also view a subset of these companies as likely to turn to management software as a new market to enter to drive growth, in a similar fashion that they have entered new markets over the last several years (Cisco into servers, HP into networking, Oracle into hardware, etc.).

Overall, we believe this represents both a challenge and an opportunity for independent software vendors in the management software space such as CA and BMC.

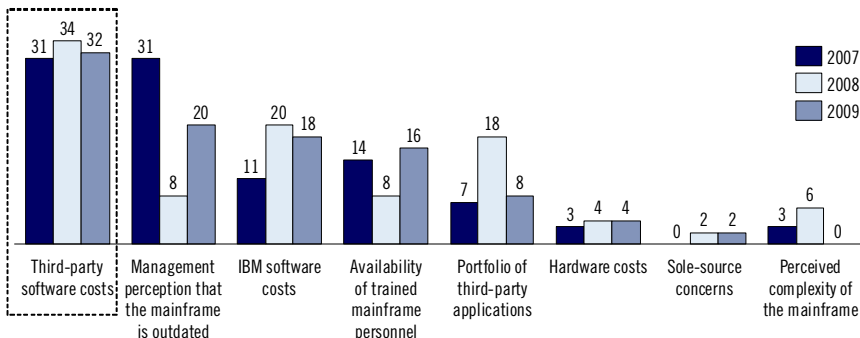
Computing platforms are increasingly evolving to embed management

We have argued above why we believe there is a fundamentally unmet need in the market for the software which brings automation and consistency to the management of IT systems. At the same time this unmet need has resulted in a subtle evolution of computing platforms towards embedding more management capability in each successive generation. This has created a different competitive dynamic than exists in most markets.

The Mainframe is a friendly environment for third-party management products

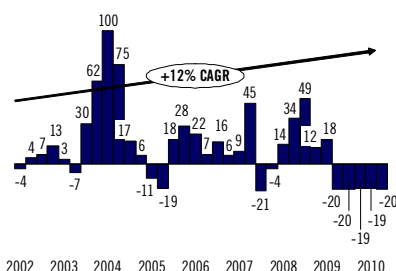
This process has been evolutionary. The earliest IT systems, mainframes, relied on third-party management software from independent software vendors to provide a host of management, automation and other ancillary functions. Even though mainframe buyers consistently point out the high costs of third-party software as an inhibitor to further mainframe adoption, this robust ecosystem of independent software has existed for some time. Over the last two decades, the market has consolidated considerably, but mainframe management remains a large and profitability business for those that have scale, with IBM, CA and BMC being the most notable.

Figure 10. Largest inhibitors to mainframe growth (Percentage of respondents)



Source: Gartner Data Center Conference polling

Figure 11. Quarterly IBM MIPS shipments, Y/Y growth



Source: IBM, Citi Investment Research and Analysis

We are bullish on the mainframe business from an investment perspective. There is scarce growth in this market, but also the mainframe revenue stream is relatively sticky. During the year 2000 systems migration process, many customers moved workloads off the mainframe; however, after this date, we believe those customers that stayed with the mainframe essentially re-committed to the platform. Mainframe processing capacity measured in millions of instructions per second (MIPS) continues to grow at a steady pace, although with periods of volatility. The economic downturn of 2008-9 may have somewhat reset the capacity needs of some of the larger customers. We expect over the medium and long-term, growth in total MIPS capacity to be inline with history.

In the last five years, we have seen an acceleration in adoption of IBM's "specialty engines" that enable companies that are already invested in the mainframe platform to leverage this investment into running non-traditional mainframe work on the z-series platform. As a result, we estimate that specialty engines represent anywhere from one-quarter to one-third of shipped capacity on a quarterly basis. This specialty capacity is not monetized at the same rate as traditional "general purpose" capacity. Over time, as specialty engines grow faster than traditional workloads, this will represent a modest headwind to the mainframe management software tools market. Factoring in capacity growth, specialty engines and pricing trends, we believe low single digit growth in mainframe management tools is likely based on 8-10% growth in general-purpose MIPS.

In July 2010, IBM announced its next-generation mainframe system dubbed the "zEnterprise". The platform, which is shipping imminently, will have the typical price / performance improvements that customers have come to expect from successive generations of mainframes. New to the zEnterprise will be the ability to run the system as a platform for IBM Unix workloads (AIX) as well as Windows workloads on x64. Our industry inputs suggest that performance enhancements should be the primary driver of product sales. We expect that the new platform will be the key catalyst for a return to Y/Y growth in MIPS shipments, which have declined for the last 5 quarters. We believe it will take some time for enterprise customers to adopt the zEnterprise platform as a consolidated system for processing workloads in various operating environments, especially Windows. Some have suggested that if IBM heavily plays up the benefits of workload consolidation, it could result in longer evaluation cycles for zEnterprise versus prior platforms. We expect that IBM will err on the side of articulating the simple value proposition around zEnterprise, in order to get MIPS growth moving in the right direction.

In the near term, we see several favorable market dynamics working in the favor of mainframe software from an investment perspective.

1. **Bigger book of business:** Mainframe bookings in the June quarter for both CA and BMC were soft by historical measures. Both management teams have commented that the portfolio of renewal business will improve in the second half. This should help drive bookings, which are a significant focus of investors.
2. **Better pricing environment:** CA has put in place a 5% price increase, effective July 1st, which should help to buoy mainframe results long-term. It is unlikely the entire 5% increase will flow through bookings and revenue but we expect this price hike will contribute to overall market stability. The company skipped a price increase in 2009 and raised price in 2008 by less than the typical rate due to the tough macro-economic environment. We expect when the #2 player in the market (CA) lifts price, it is a sign of favorable pricing for vendors overall and we'd expect that other vendors (including BMC), would follow suit, although less overtly.

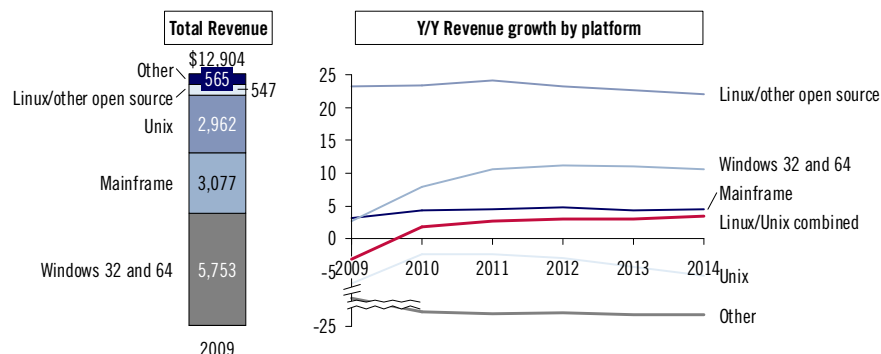
3. **zEnterprise:** IBM released its new z-series hardware on July 22, 2010. This follows five quarters of declining capacity shipments by IBM. While we note little to no short-term correlation between IBM's mainframe capacity shipments and the mainframe or total bookings of BMC and CA, we believe a reversal in momentum around MIPS shipments is important for two reasons. First is that a resumption of growth proves to investors that the platform remains viable and may return interest to this group. Although past mainframe cycles did contribute some alpha in CA and BMC, the relationship is relatively weak when factoring in broader sector trends and company-specific issues. Second, while we believe there is no near-term correlation between MIPS and mainframe software bookings, we do believe that long-term growth in MIPS in the mid-teens range is required to support the low single-digits growth in mainframe software. As a result of five quarters of declines, we believe we need to see growth over the next four quarters in order to return long-term capacity growth to historic trend line.
4. **Downside hedge:** Lastly and less tangible, the economy is showing signs of at worst a double dip or at a minimum convergence with a "new normal" growth rate. We'd expect that if the worldwide economy enters a full-fledged downturn, mainframe software revenue would remain more stable than overall software and as a result the stocks would outperform the software industry. For more detail on this point, see page 25, where we discuss historical valuation trends in the management software market.

We believe these trends in the mainframe business are likely to benefit both CA and BMC; however, we expect because of one key difference in the two companies business model's we would expect a greater near-term boost to BMC cash flow, which is a closely watched metric for both companies. BMC generally monetizes mainframe contracts up-front, either collecting from the customer on typically short-term payment or using outside financing agents to provide credit for customers with large contracts. This differs from CA which uses its own balance sheet to enable the customer to pay over time. As a result, a near-term acceleration in contract momentum for BMC tends to have a meaningful impact on the companies cash flow, where CA sees this dynamic more smoothed over time.

Unix didn't embed management, but is a declining market

Other proprietary systems, even leading up to the proliferation of Unix in corporate data centers in the late 1990s, continued to evolve without addressing fundamental management challenges. This has continued to drive a robust third-party ecosystem of tools with the evolution of each platform. Unix has ceased to be a growth platform, with HP essentially out of the market and Oracle working to stabilize the Sun business. Thus while there is a need for management of Unix platforms, the unit growth in the market is negative, driving little incremental purchase for products here.

Figure 12. Management software market size by platform

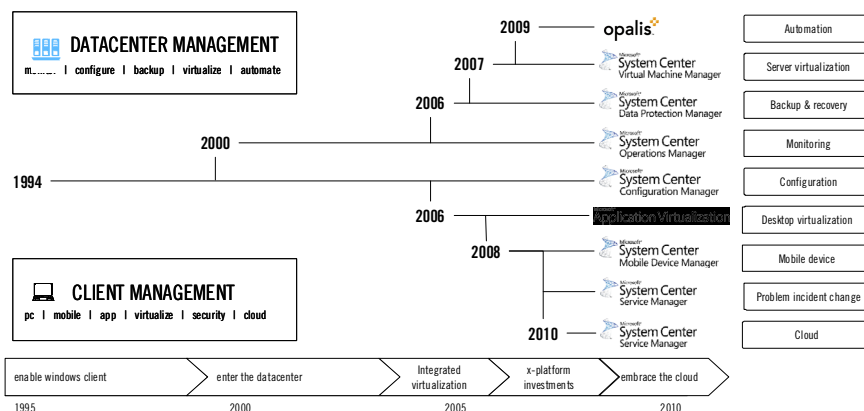


Source: IDC

Microsoft began embedding management as far back as 2000

In 1993, Microsoft released Windows NT, the first enterprise-ready version of Windows server. In subsequent years and releases, Microsoft's server-based solution matured (Windows 2000, Windows 2003, etc.) and along the way, Microsoft began adding management tools with the OEM of Operations Manager from NetIQ in 2000. In the last ten years, the company has pushed management functionality out into the product groups and developed models that all products must follow to be manageable by Microsoft's own stable of management tools. Fast forwarding to the current day, Microsoft has a robust portfolio of System Center management tools, generating on the order of \$500M in revenue which provides nearly all an enterprise needs to manage an end-to-end Windows environment. Effectively, Microsoft has significantly diminished the market for third-party management tools around Windows server.

Figure 13. Microsoft management products have proliferated



Source: Microsoft

VMware has embedded management much earlier in the evolution of its platform

In 2003, VMware's ESX emerged on the scene and was quickly taken up by enterprise customers. With VI3 in 2007, VMware technology decisively moved into the production side of IT (from test and development) and with it came the need for more robust management tools. VMware has more aggressively embedded management capability into its platform and in recent years, and we believe the company has become more aggressive in adding value on the management side. We believe VMware is partially responding to the market demand, as some customers are insisting that in order to adopt a new operating platform, the platform must have a better cost profile (i.e. management capability) than other platforms. While VMware accomplishes much of this through savings in hardware, enabling better management its systems also appears to have become a more important goal of VMware with subsequent releases of its platform, now called vSphere.

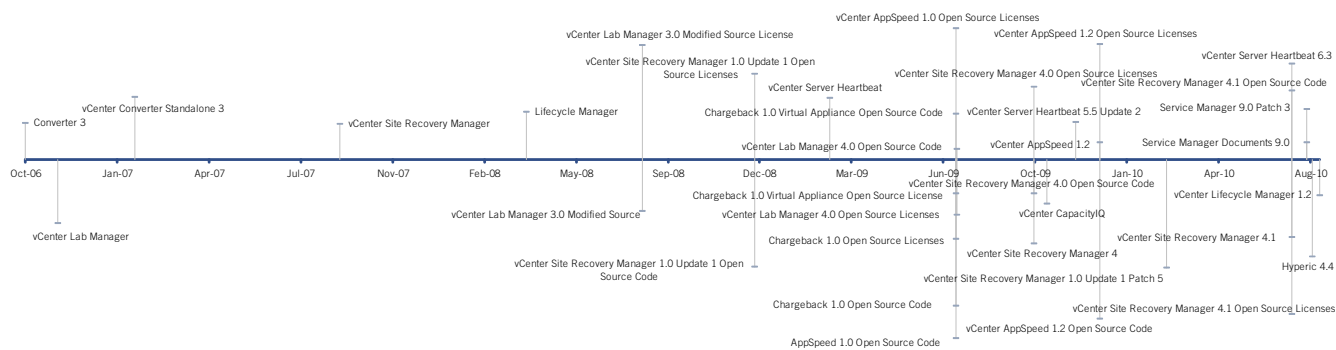
Figure 14. VMware has continuously added new functionality

ESX 2.5	ESX 3.0	ESX 3.5	ESX 4 / vSphere
<ul style="list-style-type: none"> ■ Support for scripting from 3rd party management tools 	<ul style="list-style-type: none"> ■ Enablement of monitoring through industry CIM standard ■ More robust system health information ■ Threshold alerting on VM system health ■ Enhanced 3rd party agent support – HP 	<ul style="list-style-type: none"> ■ Improved image / template management ■ More robust VM provisioning (across data centers) ■ Automated patching (ESX host and select Windows and Linux VMs) ■ Cisco Netflow support 	<ul style="list-style-type: none"> ■ Improved vCenter search, reporting, charting and consolidated view, scalability ■ Faster provisioning of VMs (host profiles), ■ vApps – application dependency and resource allocation ■ Improved alarm and fault consolidation and display for VMs and hosts, including hardware alerts ■ Consolidation optimization tool ■ vCenter Orchestrator – work flow solution for executing automated, configurable processes within infrastructure

Source: VMware.com

Beyond VMware's motivation to differentiate its platform through inherently better management, we believe VMware also views ancillary markets to its core platform (such as management) as growth opportunities in the future. This is no different than moves other IT vendors have made into adjacent markets in order to drive growth in an increasingly mature IT landscape. Examples include HP's entry into networking, Cisco's entry into the server market and Symantec's entry into the NAS appliance market.

Figure 15. Velocity of VMware's management product refreshes has accelerated



Source: VMware press releases, Citi Investment Research and Analysis

In our view, VMware's foray into management limits to some degree the ability of third-party vendors, such as CA and BMC to position themselves in the way they were able to in mainframe and Unix eras. It is a possible scenario that a VMware environment looks more like a Windows environment, in that there is substantially less value to add in management as compared to more mature platforms like the mainframe and Unix. VMware is the most high-profile example of management being increasingly embedded within a platform and provided as an add-on by the platform, but it is by no means the only example. Red Hat (RHT.N; US\$36.98; Not Rated) is in the early stages of bringing to market a set of management software products focused on Linux. Cisco has increased its investment in management software (but has primarily pursued a partnership strategy), and in our view Cisco is just several meaningful acquisitions away from having a more robust management software offering. Like most IT vendors, we believe the motivation of Cisco is not only to become more strategic to its customers (by enabling them to run more efficient IT operations, but also to drive growth in an increasingly mature IT market).

Increasing competition from platform players can cause a variety of outcomes

We don't believe increasing interest in management by platform players is all bad for the management software companies. In commodity areas of the market such as simple element management, the encroachment by platform players has likely already pressured the market. At this level, the management software vendors have become accustomed to competing with the platform vendors and in a sense, nothing is new here.

VMware's desire to add management capability to the platform has accelerated the company's appetite for acquisition over the last two years. We believe this increased appetite for acquisition in the management software market could spread beyond VMware to emerging platform companies like Oracle and Cisco. While VMware's acquisition moves have been small in size, Oracle has a history of making larger, more decisive moves into new markets and Cisco has done this in the past (although less consistently).

In looking at BMC and CA as acquisition targets, we believe BMC is the more likely target for a number of reasons noted below:

1. BMC is a smaller company and is therefore easier to digest
2. CA has a larger mainframe business and one that is more co-mingled with its distributed side. We don't view mainframe as strategic to either Oracle or Cisco and is in fact somewhat of a deterrent to acquisition. We'd expect either would tolerate owning a mainframe management business as the margins on the business are high and the cash flow generation is steady or we might expect a transaction with a private equity firm as a way to dispose of the mainframe business. Clearly, contracts that are not co-mingled are a prerequisite for PE interest.
3. BMC's product portfolio is a better match for both Cisco and Oracle. This is due to the fact it has more revenue concentration in fewer areas of the distributed market.
4. BMC has less customer concentration than CA.

Thus we expect that BMC shares could continue to have a strong bid in the market as a result of the potential eventuality that the company is acquired.

Cloud services may reduce the demand for management

The next architectural shift in IT is around customers employing cloud-based services that either deliver applications or even full platforms (development tools, operating system, database, application infrastructure). There are parallels here to on premise platforms, where VMware is embedding more management at an earlier stage in its solution. There are also new dynamics at play as these platforms literally migrate IT infrastructure (software, hardware, people, etc.) off the customer premise and into a shared facility.

Over the last five years, enterprise customers have adopted software as a service applications (SaaS) in lieu of on-premise software in order to automate certain business functions. SaaS applications essentially embed all elements of the underlying platform into a solution, including management software. SaaS adoption is in the early stages and is mostly isolated to non-mission critical areas of the business such as CRM and ancillary HR applications (talent management, recruiting). As these areas are not mission critical, they generally don't have stringent uptime requirements and therefore the attach rate of management tools (to ensure uptime) has been relatively low. If SaaS adoption continues to increase and encroaches on traditional, mission critical application areas such as ERP and eCommerce applications, this could pressure the market for management tools that are sold to ensure the uptime and performance of these applications. To be fair, there is still a need for management tools when a SaaS application is deployedx. However, the requirement is much simpler.

Further out on the horizon, emerging cloud platforms such as Microsoft's Azure, Salesforce.com, Google's AppEngine and Amazon's Web Services have the potential to see significant adoption. Like SaaS, part of the value of moving applications to the cloud and on to one of these platforms is that all the complexity of the underlying platform (including the infrastructure management) is handled by the cloud provider. Again like SaaS, if a significant proportion of custom-developed applications move to the cloud, there is less need for enterprise customers to buy infrastructure management software for their traditional role. This is especially true for the more commodity areas of management software such as the management below the application stack. However, we have come across early examples where mission critical applications are moving to the cloud and in this scenario, the management at the application level is still critical, as business executives must have real-time visibility into their business service (which is dependent on this application).

There is an opportunity to sell software to the cloud providers (trust.salesforce.com utilizes a Gomez tool – owned by Compuware (CPWR.OQ; US\$7.59; Not Rated)). However, many of these cloud providers may either build their own capability or will exercise significant volume purchasing capabilities such that the dollars per unit of capacity spent on management tools will be lower than what is typical for enterprise customers.

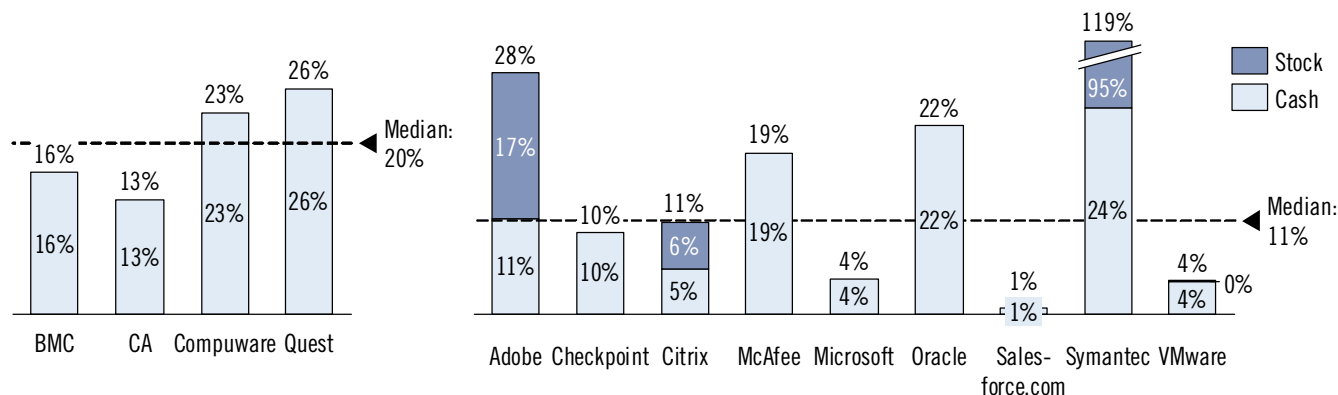
Shorter product lifecycles and pace of innovation in IT requires constant investment in the business

Over the last several decades, there have been non-stop waves of innovation in underlying enterprise IT platforms that have impacted the management software market. Each successive platform has required a re-tooling of infrastructure management in order to support the characteristics of the new platform. At the same time, the constant pace of change has resulted in shorter product lifecycles in the management software arena (generally 3-10 years) than we've seen in areas such as enterprise applications, operating systems, databases or other areas of infrastructure software. The constant rate of change in the infrastructure causes higher churn and displacement transactions among the larger competitors in the market as compared to the 10+ year lifetime of other elements of infrastructure and application software.

As a result of this constant pace of change in the underlying market, incumbent management software vendors have had to invest meaningfully in developing and acquiring product to address these new opportunities. While this platform evolution does ultimately contribute to the growth opportunity in the management software market, incumbent vendors are chasing a moving target.

The present time is no different. We discussed above the potential opportunities and challenges presented to management software vendors by recent platform evolutions around virtualization and cloud-based platforms. These areas represent another area that management software vendors must invest in such that their overall offering can be competitive. The result has been a constant level of acquisition, as well as R&D to organically develop and integrate acquired product. Alternatively, some companies have chosen not to integrate their products, resulting in product confusion and sub-scale software franchises that are not profitable.

Figure 16. 2005-2009 M&A spend as percentage of market cap on December 31, 2009



Source: Citi Investment Research and Analysis, Bloomberg, FactSet

The manifestation of the above-mentioned trend of management software requiring significant investment is that chances of an incumbent company (BMC and CA) doing a dilutive deal is higher than we see in other industries. We've seen this in the recently with both BMC acquiring BladeLogic and CA acquiring a handful of companies in the cloud management space (Nimsoft, NetQoS, 3Tera). Going forward, a tangible risk for both companies is the chance of more acquisitions that cause meaningful dilution. Ultimately a dilutive acquisition may be the right move (like BMC/BladeLogic), but the short-term implication for investors is negative.

Managing heterogeneous environments is increasingly where the value lies

We see several ways to add value in the infrastructure management software space in the short and medium-term. Tools that are focused on various platforms have a market opportunity that is dictated by the specific characteristics of the platform. For example, we expect the management tools on the mainframe to be a large opportunity into the foreseeable future, as the mainframe platform is very sticky within a well-defined large customer base. On the other hand, while we see Windows Server growth, we expect the Windows management tools market will be relatively flat for the foreseeable future as customers take advantage to tools offered by Microsoft. Overall, we expect the broad trend around tools close to the underlying platform is that they will be commoditized (at varying rates) by the platform vendor.

Figure 17. Overview of management software by platform

Platform	Size Dominant (2009, \$B) providers	Positive drivers	Negative drivers	Overall assessment
Network	\$1.5 HP OpenView, IBM Netcool, CA NSM	Network growth, converged services (data, voice, video), new carrier services (wireless data)	Cisco is dominant network provider	Increasingly commoditized as underlying network performance has improved.
Mainframe	\$3.0 IBM, CA, BMC, CPWR	Few vendors of scale = stable pricing	Few new installations	Cash cow business for those that have scale
Unix	\$3.0 IBM, CA, BMC, HP		Secular declines in platform, simple customer requirements	Declining business
Windows	\$5.8 MSFT, QSFT, SYMC	Secular growth in Windows / x86	MSFT playing a larger role	Tough market for anyone but Microsoft
Linux	\$0.5 Fragmented	Secular growth in Linux / x86	Many deployments are not mission critical, free OS makes it hard to charge for management	Not a big enough market to make a business
Virtualization	Too early to VMW, MSFT, size Fragmented	Secular growth	Platform players heavily invested	False hopes of a large market
Cloud	Too early to Fragmented size	Secular growth	Platform vendors likely to provide robust management baseline	Too early to tell, likely opportunity at the highest levels (application performance)

Source: Citi Investment Research and Analysis, IDC, and Gartner

A roll-up strategy in management is difficult on the treadmill as obsolescence is pervasive

As is the case in most markets, there are multiple strategies that can deliver long-term value. A roll-up strategy whereby a diversified collection of assets are acquired, costs are cut, the portfolio is selectively invested in and maintenance contracts are “milked” can drive attractive medium-term returns, as in the case in most software markets. The challenge is (as previously noted) that we believe the product lifecycles in many areas of the management software market are shorter than in others areas where this strategy has been quite successful (enterprise applications for example).

Heterogeneous management is the more sustainable source of competitive advantage

Unique to the management software market, we believe a growth strategy in this market can only come from building a sizeable franchise around heterogeneous management. We expect the company’s that create the most value in this market will be those that are able to deliver products that enable improved operational process and lower costs as well as higher up-time that transcends the underlying platform. After all, enterprises are trying to ensure they are delivering the highest level of service to their customers at the lowest cost. Thus the role of IT (and increasingly management software) is to look across a business service and manage the IT infrastructure at this level.

Scarce positions in the management software market that are truly defensible

As is the case in any market, there are a few scarce strategic positions and we believe infrastructure management is no different. As enterprise customers look to reduce costs and at the same time improve the performance of their IT infrastructure, there are a few key critical components in management software that exist across platform to enable this business optimization problem to be solved. These areas both offer significant value to the business and at the same time solve problems across platforms, making these areas more defensible from platform competition.

Figure 18. Overview of key “defensible” management software markets

	Market size (\$B)	BMC share	BMC assets	CA share	CA assets	Attractiveness to stack vendors	Defensibility	Overall growth potential	Synergies with other management businesses
Change and control management	\$4.1	8.3%	Atrium, Remedy, BladeLogic	2.9%	CA Service Desk Manager, CA Software Change Manager, CA CMDB	Very high - Key source of differentiation for stack vendors	High - Companies tend to implement corporate standards	High - New platforms, heterogeneity/complecity will persist	High - Many touch points with other management software
Application performance management	\$5.0	>2%	BMC AppSight	>10%	Wily	Medium - Attractive to software stack vendors (Oracle, Microsoft)	Low - Tends to be deployed in isolation for single applications	High - Significant area of investment and ROI	High - Many approaches to APM, touches network, monitoring areas
Identity and access management	\$3.4	0.8%	BMC Remedy Identity Management	9.2%	CA SiteMinder, CA Identity Manager	Low - Key stack vendors (Oracle, IBM, Microsoft) already have solutions	Very high - Arduous process to integrate into single sign-on solution	Medium - Many apps do not have federated IAM	Low - Some synergies with security for CA

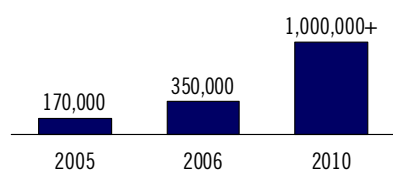
Source: Citi Investment Research and Analysis, IDC

Change control and automation

The dynamic nature of IT infrastructure is a key aspect of what makes it complicated to manage. Put another way, things that do not change are not hard to manage. As more and more business processes have been automated, the role of applications has become critical as they are now the lifeblood of the business. At the same time application architectures have become more complex as standard-based interfaces have enabled integration of previously disparate elements. The implication here is that risk around making a change to underlying IT infrastructure is much higher due to the increasing dependency. Also many companies increasingly have interaction directly with customers through Internet storefronts. This necessitates the ability to make changes in a much shorter cycle. The result is a greater requirement for frequent change within IT and at the same time more serious negative implications if a change goes wrong.

Orthogonal to this has also been a requirement to put more structure around change control in order to satisfy compliance requirements such as Sarbanes-Oxley, which require greater accountability within the business. This translates into being able to produce audit reports that account for and justify any change to nearly any IT system. Also, industry initiatives such as ITIL have gained momentum as a standard influencing management practices. This has furthered the role of the CMDB as an authoritative store of configuration information.













Figure 19. ITIL certifications



Source: EXIN

There are many standalone products in the management software area that tie into this notion of change control and automation. We don't believe ultimately it will be one vendor that provides them all; however we believe a leadership market in one of more of the individual markets will likely be an important contributor to being able to drive additional revenue from this market. We believe there are three important individual product markets are services desk, server automation and service cataloguing / dependency mapping.

Figure 20. Vendor capabilities in key change and control management areas

	Service Desk	Server Automation	Service catalog/ Dependency mapping
BMC			
CA			
HP			
IBM			
Others	ServiceNow, Frontrange, Numara Track IT	Microsoft, Symantec, Tripwire, Novell	Fragmented

Source: Citi Investment Research and Analysis

Due to the high degree of integration between various products in this area of the market, we believe a strong position in one or more of the above-noted areas will enable outsized market share in the area of change control and automation more broadly. We expect that change control and automation will be a robust growth opportunity within the management software market for some time in the large enterprise. We continue to hear significant use of home grown and decade-old commercial products in many of the areas noted above. The gating items for looking at the change control and automation market more holistically include IT maturity and budgetary pressure. Nevertheless, we view the change control and automation market to be the most attractive meaningful growth opportunity within the management software market. We also view the product area as sticky, as companies generally standardize here on one platform and benefit from buying multiple products from a single vendor.

BMC is the leader in this market and in our view it had a reasonably wide margin of leadership, having begun its consolidation in this market in 2002 with the acquisition of Remedy. The company's Remedy service desk product is the market leader, while its BladeLogic automation product is the market leading product in the server automation space. The company's Atrium CMDB is ahead of the competition as an enterprise CMDB, although the product is not generally sold standalone and instead is a component of the solution provided to customers that adopt adjacent products. The company also has a strong position in dependency mapping, leveraging Atrium technology as well as relying on several acquisitions here. Others such as CA, HP and IBM all have capabilities in these markets, but are either behind BMC or have invested less over the last several years.

Application performance management

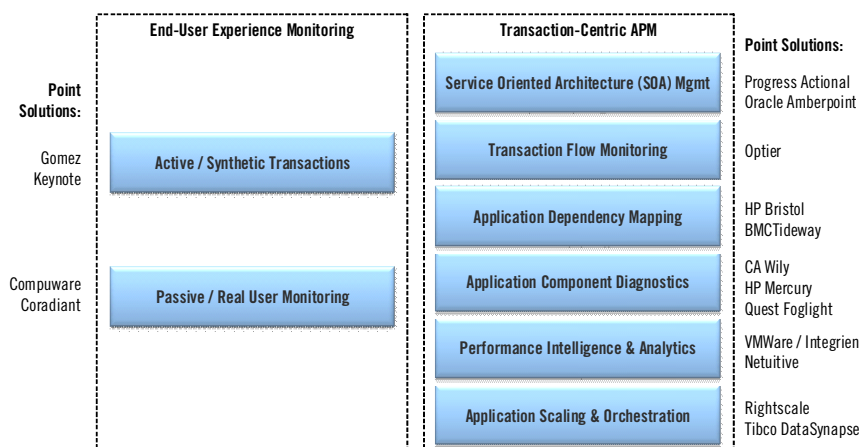
As noted above, software applications are becoming more important to businesses in almost every industry. At the same time, consumer web experiences are enabling a robust level of self service and an expectation of 100% uptime. This has demanded enterprises to mirror this in their internal and customer-facing applications. Also, the complexity in the underlying IT infrastructure is increasing and in many environments, infrastructure is shared across many applications making problem isolation and resolution more challenging.

These dynamics are focusing the attention of IT on application performance management (APM). The approach to APM has changed over the last decade from a focus on bottom's up management of the various IT elements (routers, switches, servers, databases, middleware, etc.) to an orientation from the top-down starting with the application from the end-users perspective.

With IT infrastructure in general and application architecture specifically growing in terms of complexity, the challenges around managing application performance are not trivial. Most companies today are simply focused on being able to shrink the amount of time it takes to isolate and identify the root cause of an outage in order to be able to remediate the problem quickly and restore application performance to an acceptable level.

There are many technical approaches to application performance management. Ultimately, we believe vendors that are serious contenders in this market will have to have multiple technologies.

Figure 21. Technical approaches to Application Performance Monitoring (APM)*



Source: AppDynamics, which has technology across transaction-centric APM

Thus far, no vendor dominates this market, as the problems around application performance have proven to be very hard to solve. Instead, different products are better suited for specific application architectures, resulting many times in different solutions being chosen by different lines of business or departments of large companies. As a result, there is often no corporate standard in this area, which is different than change control and automation.

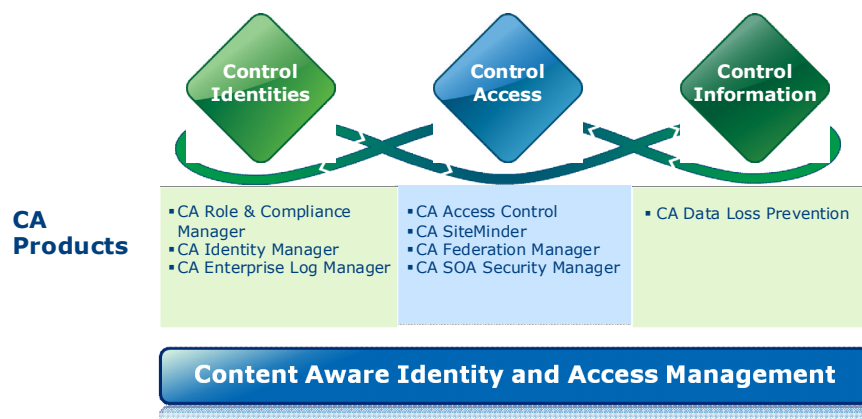
CA is the leader in the APM market. However, inline with fragmented technology, nearly all the other large systems management companies are in this market, along with a number of start-ups. This fragmented landscape and specifically the fact that many APM deployments are not enterprise-wide makes it difficult for CA to leverage its relatively strong position in APM into leadership in other IT management markets.

Identity and access management

As compliance considerations up-ticked around 2003, the market for identity and access management (I&AM) began to accelerate as well. This product area has helped many companies to cut the amount of time it takes to provision new user access, put through a change in user system access and also ensure that old accounts are deleted in a timely fashion. Over the last five years, the access and identity management market has consolidated to the point there are only a handful of credible players in the market. The consolidators in the market also many times have strong positions in the application platform market. Most notably, IBM and Oracle made acquisitions here and leverage their position with Websphere (IBM) and WebLogic (Oracle) middleware. CA is also a leader in this market, although does not have a position in the application “stack” market. This has necessitated CA have the strongest product portfolio on the market, something the company has accomplished through significant internal investment and also half a dozen acquisitions over this five-year period.

I&AM software is quite sticky as these products touch nearly all enterprise applications, generally involve significant customer development of application integrations and workflow and many times become integral to HR and other business processes. There are also many homegrown solutions still in place in many large companies, leaving ample growth opportunity.

Figure 22. CA's I&AM product line



Source: CA Technologies

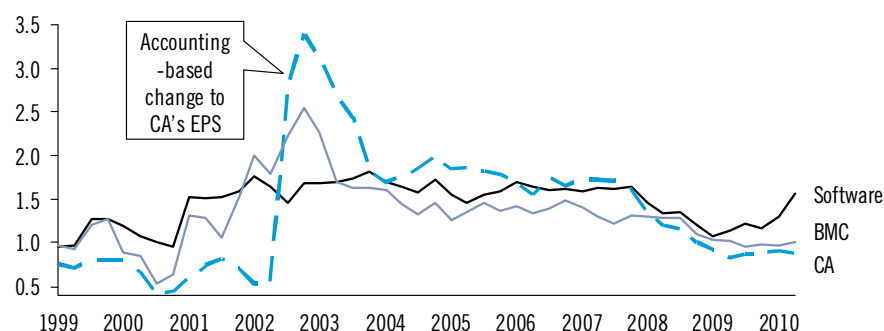
The main challenge we see in this market is many times to a different buying center, namely the security department. This is different than the market where most other management software is sold (IT operations buyer). Thus while deal sizes can be large, there can be significant add-on deals within a customer and the solutions are sticky once implemented, we believe it can be difficult to leverage sales of I&AM into other markets.

It Has Historically Been Difficult for Investors to Make Money in this Sector

We've highlighted a number of growth opportunities in the management software market. Offsetting this, management software is under increasing pressure from platform vendors. At the same time, product lifecycles are shorter than software markets such as enterprise applications, so there is a continuous requirement to innovate with new products through internal R&D and acquisitions. As a result, the sector has generally traded at a discount to the overall software market. We expect that this situation will persist.

Management has generally traded at a discount to the broader software sector historically

Figure 23. Quarterly P/E relative to S&P 500

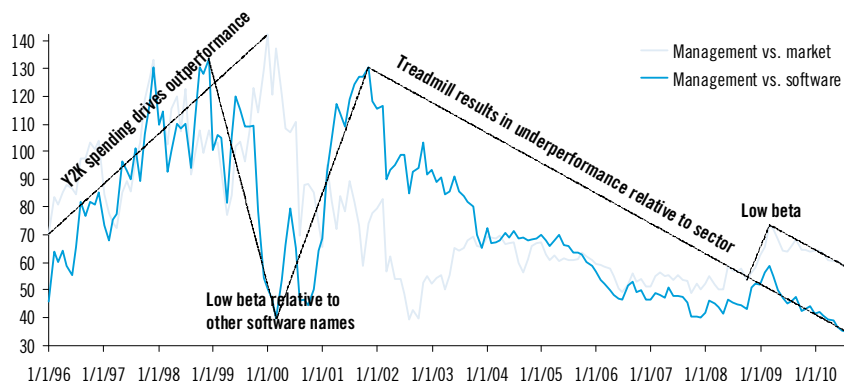


Source: Citi Investment Research and Analysis, FactSet

Management software stocks have underperformed broader software market

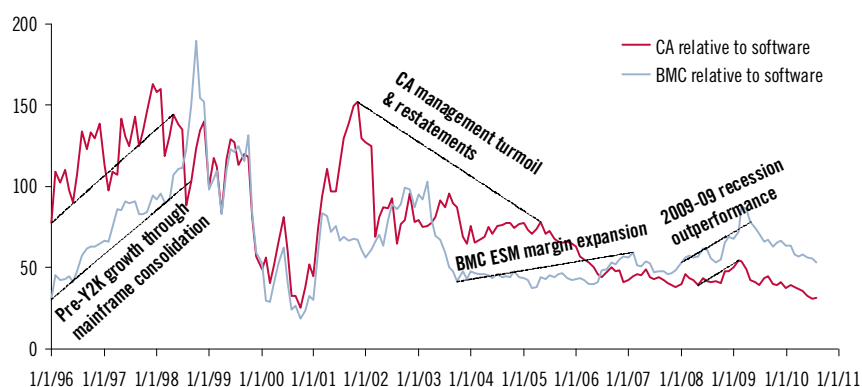
Historical performance has largely been driven by 1) the low beta of the larger cap management names (CA and BMC, thanks to the mainframe business), 2) the relatively unattractive investment treadmill, and 3) Y2K effects. Since 1996, there has been only one period of outperformance for our index of management software—the period leading up to Y2K. In the period around the dot-com crash, we saw beta-driven gains/losses relative to both the market and the broader software index. Since 2002, management software has underperformed relative to software, which we believe is a result of the investment treadmill necessary to keep up with heterogeneous environments. As noted above, management companies spent heavily on M&A during this period of underperformance.

Figure 24. Performance of management software stocks vs. broader market (1999=100)



Source: Citi Investment Research and Analysis, FactSet

Figure 25. Stock performance of CA and BMC shares relative to software index (1999 = 100)

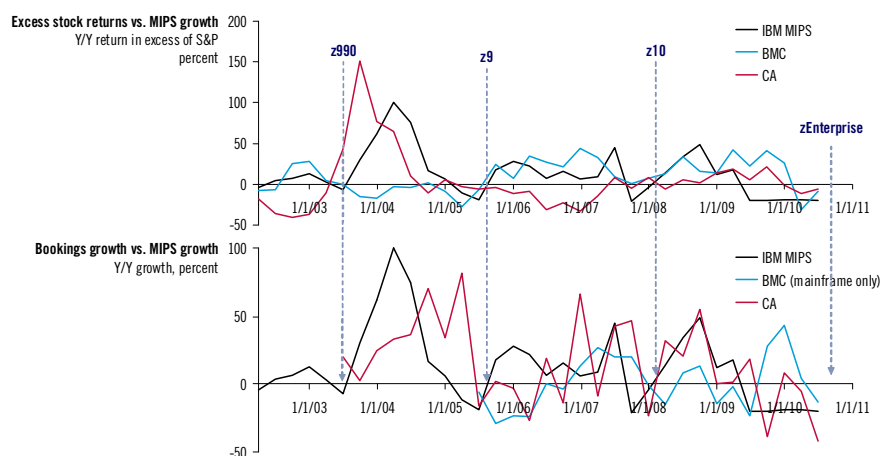


Source: Citi Investment Research and Analysis

Timing the mainframe cycle won't guarantee outperformance

Although much is made of the mainframe cycle and the potential impact on CA and BMC, the past several mainframe releases show inconsistent results. Correlations with the mainframe cycle are actually inverted for BMC (0 correlation with stock, -0.1 correlation with bookings) when sampling annual MIPS growth vs. annual excess stock returns. CA performed well during the z990 cycle, but this outperformance could be attributed to company-specific factors, as CA bounced back from devastating management and accounting issues.

Figure 26. Excess stock returns and bookings growth compared to IBM mainframe cycles



Source: Citi Investment Research and Analysis, IBM, FactSet, company reports

Historically, the best timing for the mainframe trade has been to buy ~1 month before the mainframe ship date (which is August 2010 for zEnterprise) and sell ~8 months afterwards, as shown from the heatmap below of average returns in excess of the S&P. We note that this sets up well for owning the shares now with the zEnterprise shipping imminently.

Figure 27. Heatmap of average CA & BMC excess returns by entry point and holding period for mainframe trading strategy for past 6 mainframe cycles (1997 – 2008)

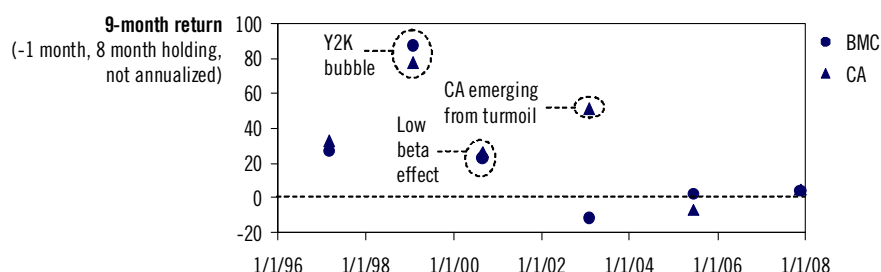
		Holding period (months)															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Entry point (month relative to ship date)	-4	8%	3%	1%	5%	6%	21%	23%	22%	26%	23%	26%	27%	18%	21%	26%	23%
	-3	-2%	-5%	0%	1%	13%	15%	16%	19%	17%	18%	20%	12%	16%	21%	17%	22%
	-2	-1%	3%	3%	18%	21%	20%	24%	21%	24%	26%	15%	19%	24%	21%	26%	17%
	-1	5%	7%	20%	22%	22%	27%	24%	27%	29%	19%	22%	26%	23%	27%	20%	22%
	0	0%	15%	16%	15%	19%	17%	19%	21%	11%	14%	18%	15%	19%	13%	-4%	6%
	1	18%	19%	16%	21%	19%	21%	21%	12%	13%	19%	17%	21%	15%	-2%	8%	0%
	2	2%	2%	5%	3%	5%	6%	-1%	2%	5%	3%	7%	1%	-12%	-4%	-9%	-4%

Source: Citi Investment Research and Analysis, FactSet

Recent returns for the mainframe trading strategy have not been very attractive and going forward we believe the correlation will diminish further.

However, if investors follow this strategy, the dispersion of returns is fairly wide, and as discussed earlier, much of the outperformance could be attributed to other company specific or macro factors such as Y2K. While timing the cycle might be a popular trading strategy, recent returns for the mainframe trading strategy have not been very attractive for CA and BMC. Going forward, with both CA and BMC investing more heavily away from the mainframe business in the ESM / distributed management areas, we believe any mainframe cycle correlation will diminish further.

Figure 28. Dispersion of excess returns from profit maximizing trading strategy



Source: Citi Investment Research and Analysis, FactSet

Valuation isn't a clear reason to own or not own CA and BMC

Expect trading to remain counter-cyclical

The current market clearly favors companies with distinguished, above-market growth. Furthermore, companies that have been anointed “secular winner” status by the consensus view have been recognized with a significant valuation premium. The management software market does not fit either the above-market growth or secular winner profile and therefore valuation has remained inline with the bulk of software peers.

Figure 29. Management Software Comparable Company Valuation

(In Millions, Except per Share Data)

COMPANY	CIRA RATING	TARGET PRICE	PRICE 9/3/10	ENTERPRISE VALUE	REVENUE GROWTH '09A - '10E	ENTERPRISE VALUE AS MULTIPLE OF REVENUE		ENTERPRISE VALUE AS MULTIPLE OF FCFF		P/E	
						CY10E	CY11E	CY10E	CY11E	CY10E	CY11E
BMC	1M	\$45.00	\$38.34	\$6,069	5%	3.0x	2.9x	NA	8.4x	13.3x	12.2x
CA	2M	\$20.00	\$19.09	\$9,137	3%	2.0x	2.0x	NA	6.3x	10.2x	9.7x
Management Software and Related Companies											
CPWR	NR	--	\$7.70	\$1,656	-1%	1.8x	1.7x	NA	NA	16.8x	12.7x
MCR0-GB	1H	\$4.50	\$3.16	\$725.05	18%	1.6x	1.5x	NA	NA	5.6x	5.1x
NTCT	NR	--	\$17.44	\$675	8%	2.4x	2.2x	10.4x	NA	18.8x	16.0x
QSFT	NR	--	\$22.46	\$1,761	9%	2.3x	2.2x	10.7x	8.8x	16.5x	14.3x
SWI	NR	--	\$15.08	\$752	28%	5.1x	4.1x	11.7x	10.7x	21.6x	18.1x
CTXS	2M	\$49.00	\$61.94	\$10,858	13%	5.9x	5.4x	21.2x	18.0x	32.8x	28.6x
SYMC	2M	\$15.00	\$13.98	\$10,280	0%	1.7x	1.6x	7.7x	7.4x	10.2x	9.4x
ARST	NR	--	\$37.34	\$1,202	24%	5.8x	4.9x	28.0x	18.2x	48.7x	42.3x
CVLT	NR	--	\$25.86	\$990	11%	3.4x	3.0x	15.9x	13.0x	36.4x	30.3x
Large Cap Technology											
EMC	1M	\$25.00	\$19.91	\$37,323	20%	2.2x	2.0x	9.6x	8.9x	16.1x	13.8x
HPQ	1M	\$65.00	\$40.34	\$101,037	9%	0.8x	0.8x	9.7x	8.5x	8.7x	7.8x
IBM	1M	\$150.00	\$127.51	\$183,158	3%	1.9x	1.8x	8.6x	8.1x	11.2x	10.0x
MSFT	1L	\$31.00	\$24.29	\$185,988	9%	2.8x	2.6x	8.6x	8.3x	10.8x	9.7x
ORCL	1L	\$28.00	\$22.92	\$115,194	22%	3.7x	3.2x	11.4x	9.8x	12.4x	10.9x
NTAP	1H	\$50.00	\$44.05	\$13,115	22%	2.8x	2.4x	14.1x	10.4x	22.4x	18.0x
Mean						2.9x	2.6x	12.9x	10.3x	18.4x	15.8x
Median						2.4x	2.2x	10.7x	8.8x	16.1x	12.7x
Software Group Mean						3.3x	2.9x	17.8x	15.0x	26.4x	22.7x
Software Group Median						2.8x	2.5x	13.5x	12.3x	21.8x	19.1x
S&P 500										13.0x	11.3x

Source: FactSet, Citi Investment Research and Analysis

We believe the relative valuation situation for both CA and BMC is reliant on overall technology spending and macroeconomic conditions. With comparably steady mainframe demand, we'd expect signs of weakening IT spending would drive investors towards the relatively counter-cyclical mainframe exposure. Thus we'd expect shares of both CA and BMC to outperform in a “double dip” scenario, even though such market conditions would likely expose both companies to negative earnings revisions.

Given current macro uncertainty impacting indicators such as worldwide GDP (recent deceleration in many geographies) and IT spending outlook (Q2 CIRA survey showed a downtick in growth), we believe some countercyclical software exposure is a prudent part of any software portfolio. For this we favor BMC.

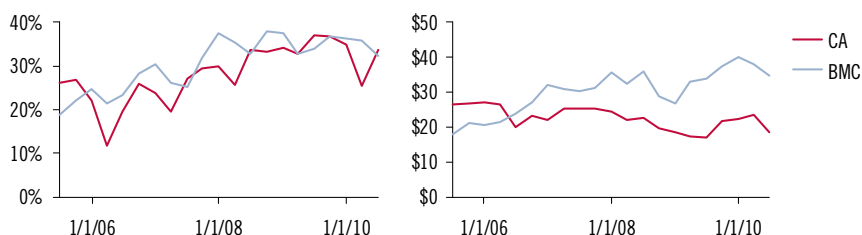
Relative valuation beginning to look extreme

Our plotting of valuation of CA and BMC suggests relative valuation is biasing towards extreme conditions versus the overall software market. We've seen outlying conditions persist in software through more of this year, thus relative valuation on its own is not a reason to own these stocks. For example, high-growth software and Internet stocks entered this year biased towards the expensive side and this disparity has continued to widen all year, fueling a rally in shares of VMware and Salesforce.com. Nevertheless, it is worth noting that BMC trades at a ~35% discount to the software market on a P/E multiple basis. This is at the high-end of the last five year discount.

Drivers of multiple expansion: sustained growth or M&A possibilities

Given the long trading history and relatively consistent business models, we believe it is difficult to argue that either CA or BMC shares see a meaningfully different earnings or cash flow multiple than has historically been assigned. Both names have always been viewed as "value" investments and at best, the stocks have outperformed while operating margins have expanded (or cash flow has accelerated). We expect that margins can drift higher for both stocks, but we aren't expecting incremental margin expansion to approach what we saw during the 2006-2009 time period.

Figure 30. CA & BMC non-GAAP operating margins (left) and share prices (right)



Source: Citi Investment Research and Analysis

Thus we see three drivers that could impact the multiple that investors are likely to pay for both names going forward.

1. The first is operating margins. Margins should creep higher for both companies as revenue scales modestly. There is more near-term risk of investments for growth disrupting this margin progression at CA rather than at BMC.
2. Second is ability to drive growth beyond historical levels. It is unlikely mainframe growth rates will change versus historical levels. On the ESM / distributed side, we have more confidence in BMC's ability to drive consistent above-market growth. If FY11 ESM growth is clearly double digit and this double digit growth can be sustained into FY12 (with at least level margins), we believe the stocks multiple would see a boost.

3. Lastly, we believe any up-tick in M&A speculation around either shares would drive the multiple higher, as both stocks are trading below the takeout valuations of peers. For software M&A >\$2B, transaction multiples have averaged around 4x revenue and for management software, and for management software M&A >\$300M, the multiples have been ~5x revenue. As we note in subsequent discussion, we believe BMC is the more likely take-out candidate. At the current time, we believe very little is embedded in either stock from take-out. The market is embedding premiums in the shares of security and storage companies following the acquisitions of McAfee by Intel, the bidding war over 3Par and stories in the business press that security vendor ArcSight may be for sale.

Our conclusion from a valuation perspective is that while it is difficult to count on either CA or BMC seeing meaningful multiple expansion, shares trade at the low-end of historical multiple range and thus are unlikely to contract further versus the market. We see potential drivers of multiple expansion more likely at BMC than CA, centered around growth and M&A. This is part of the reason we favor BMC shares over CA shares at current levels. We assign a 14x FY11 earnings multiple to BMC in our price target vs. 10x for CA.

How to Evaluate the Financial Performance of Management Software Companies

The fundamental characteristics of the mainframe ecosystem have a significant impact on the financial results of CA and BMC and introduce some dynamics into these results that are unique as compared to other software companies in our coverage universe.

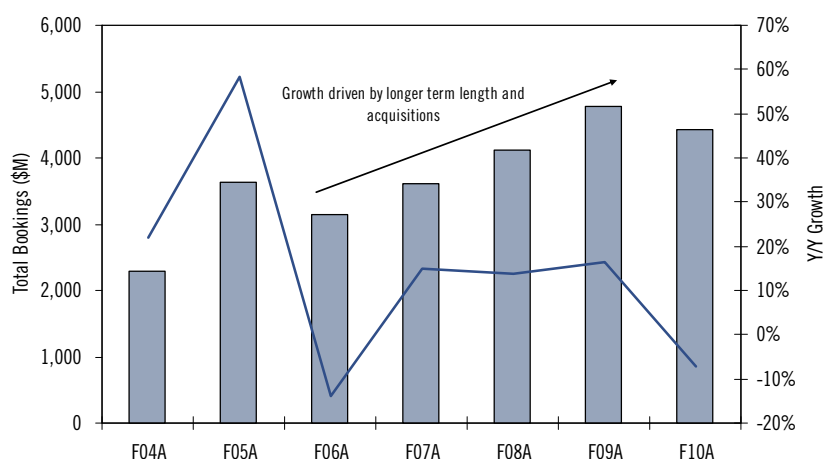
Mainframe contracts are large and generally involve longer-term commitments made up-front as compared to other software purchases. Deals in the \$10 million range are common and multi-year, all-encompassing transactions with very large customers can at the extreme be worth over \$500 million. This inherent lumpiness can have a very volatile impact on the business and the accounting treatment of the revenue from these transactions can also have a significant impact on the income statement.

As a result of the above-mentioned dynamic with large transactions, both CA and BMC give a significant amount of visibility into their underlying businesses, including many metrics that other software companies do not provide. As these metrics are not common, many investors are not familiar with how to factor them into evaluating the performance of the business. While difficult to prove, we believe this leaves significant short-term inefficiencies in the market around the trading of these two stocks. In the medium and long-term, as believe the market is efficient and tends to factor in differences in underlying performance into the shares.

A Baseline on Important Metrics

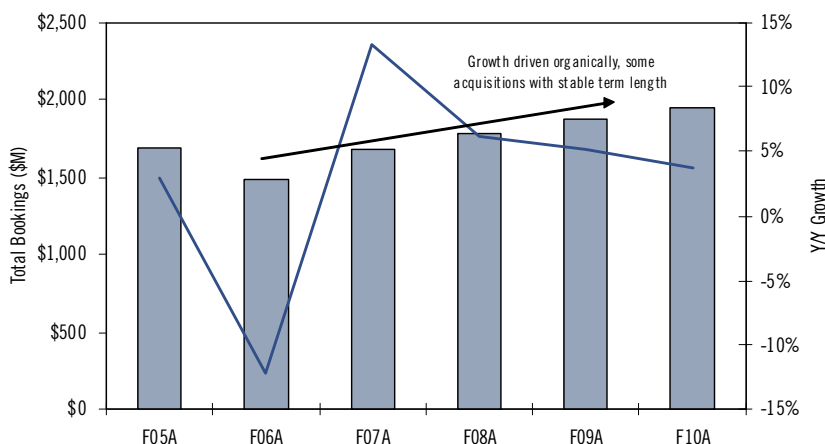
Bookings: Represents the total value of contracts signed by the company during a period. This metric is reported without respect to the length of the contract or the term of payment of the contract. Bookings drives contracted backlog, which turns into revenue and billings in future periods. Evaluating bookings growth trends on a year-over-year basis can be difficult as large, multi-year contracts can distort year over year growth. We believe evaluation of bookings over the medium term (1-3 years) is generally best done on an annualized basis (see “annualized bookings” below). If bookings are not evaluated in the annualized context, the possibility that bookings growth can be over-estimated due to extension of term length or underestimated if term length shortens.

Figure 31. CA Bookings



Source: Citi Investment Research and Analysis

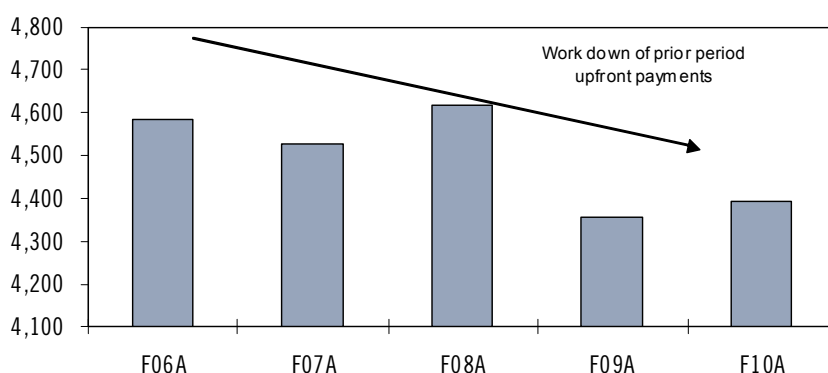
Figure 32. BMC Bookings



Source: Citi Investment Research and Analysis

Billings: Represents the aggregate amount invoiced to customers in a given period. For BMC, the correlation between bookings and billings is simple, as contracts that are signed are generally invoiced in the next 90 days, with long-term payment terms arranged with a financial institution instead of the company using its balance sheet to finance these transactions. For CA, trends in billings are driven by the aggregate contracted payment schedule for business that was booked in prior periods as well as the invoicing from contracts that are booked during the current period. Over the long-term, there should be a correlation between bookings (value of contracts signed) and billings (invoicing from these contracts). Focusing too much on billings in the short-term can cause undue influence by payment terms. Billings can be impacted positively by CA structuring payments on contracts with more of an up-front weighting, although over the last several years, this dynamic has had little influence on the financial statements. For purposes of constructing a cash flow statement for CA, we use the direct method (vs. indirect reconciliation from net income) and use the billings metric as the top-line basis for this analysis (much like revenue is the top-line basis for the income statement).

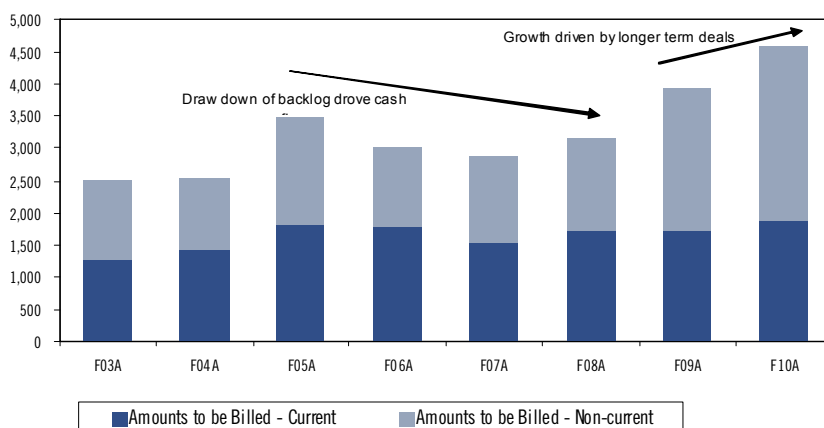
Figure 33. CA Billings



Source: Citi Investment Research and Analysis

Contracted backlog: Contracted backlog comes in two forms. The first is related to revenue. Contracts are signed and then the value of these contracts is recorded in deferred revenue (if the contract has been billed or collected) or in unearned revenue yet to be billed. For CA, as the company does not bill all contract up-front, both of these revenue backlog metrics are reported. For BMC, the model is simpler and the only relevant metric is the deferred revenue recorded on the balance sheet. The company breaks out license deferred revenue in order to be able to track backlog in this area. This is separate from the deferred revenue on the balance sheets of most software companies that is comprised of maintenance. The other form of backlog is billings backlog, which only applies to CA. The company reports “amounts to be billed” both current (within the next year) and non-current (outside of a year). We view growth in the current “amounts to be billed” account as an important indicator of future cash flows. We believe the non-current portion of “amounts to be billed” is much less important as it is difficult to discern the length of time over which these amounts will be billed.

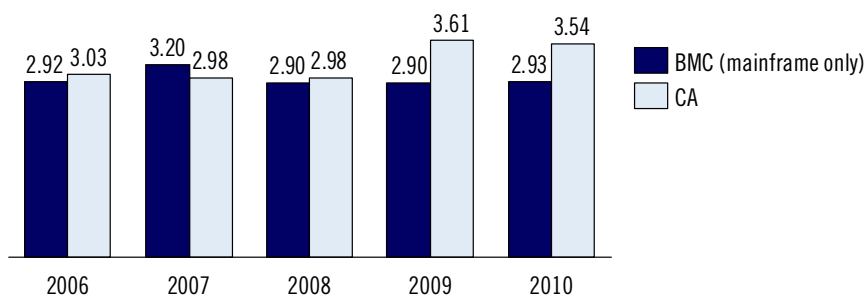
Figure 34. Amounts to be billed (\$M)



Source: Citi Investment Research and Analysis

Contract term length: Both CA and BMC report a measure of average contract length. We believe this is one of the more important metrics reported, as it helps to put bookings into context. For example, A large bookings number as compared to expectations on the surface appears strong, but if term length extends more than bookings was expected to grow, then bookings on a normalized basis is no better than what was expected. Mainframe contracts tend to have a longer term length than distributed or ESM contracts. This is especially true for BMC where most customer contracts between mainframe and ESM have been separated. For CA, many of the contracts for distributed products have overlap with the mainframe products, which keeps term length higher.

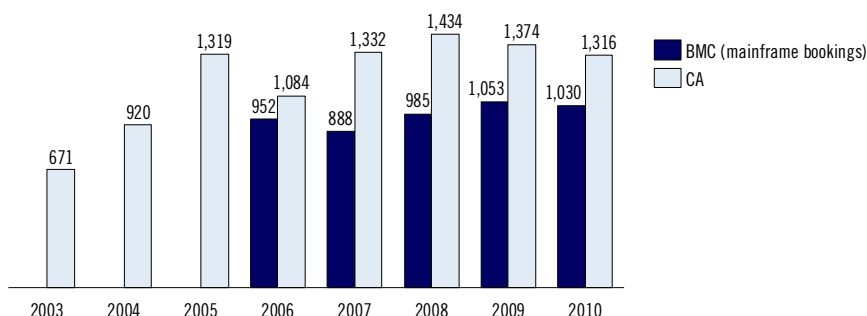
Figure 35. Weighted-average contract term length (years)



Source: Citi Investment Research and Analysis

Annualized bookings: As noted above, by dividing total bookings by contract term length, we arrive at annualized bookings. We believe evaluating this metric yields the best insight into underlying business trends.

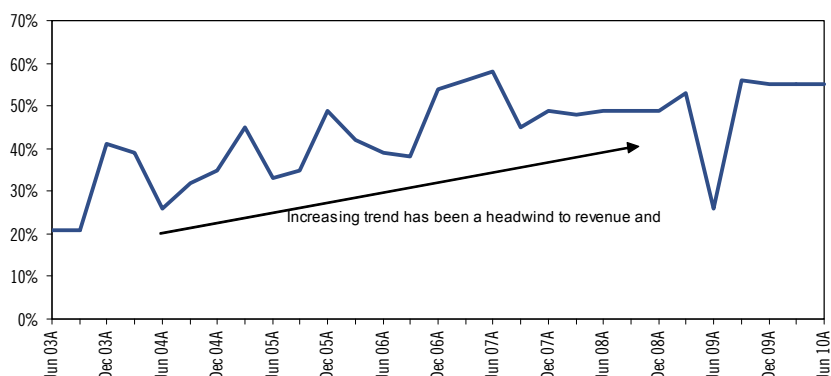
Figure 36. Annualized bookings (fiscal year, in \$ millions)



Source: Company reports, Citi Investment Research and Analysis

Ratable mix: Software revenue recognition rules (SOP 97-2) require three main conditions to be satisfied in order for revenue recognition to occur. While we aren't going to go into an in depth discussion, software contracts in the management software area many times do not satisfy these conditions. The result is that revenue must be recognized ratably over the term of the contract. In the mainframe area, many of the contracts involve term licenses (customer rents the use of the software) and thus these are automatically ratable. In the distributed area, increasingly complex transactions are taking place, in which multiple products are bundled and many times rights to future versions are included. These conditions drive transactions to go to ratable revenue recognition and we are seeing this become increasingly common in the management software transactions. The result is a rise in ratable mix as a % of bookings. An increasing ratable mix stunts reported revenue growth, as more of what is booked in customer sales goes first to the balance sheet and then over time is recognized as revenue on the income statement. Over the long-term, ratable revenue doesn't have a lasting impact on the volume of recognized revenue (vs. bookings) or the reported growth rate of the business. However in the near term, oscillations in ratable mix have a significant impact on reported revenue and revenue growth. As a result, we believe it is very important to understand the impact of this dynamic. For CA, there is very little impact as nearly 100% of software revenue is ratable. A small but growing volume of perpetually licensed product (reported under "Software fees and other") is having a positive impact on revenue recognition. We'd expect this percentage to increase modestly over time, acting as a tailwind to recognized revenue. For BMC, the ratable mix has increased significantly over the last five years from just below 20% in FY03 to just over 50% in FY10. This has acted as a headwind to revenue growth, although over the long-term we have seen this trend start to stabilize.

Figure 37. BMC Ratable Mix as % of Total Bookings

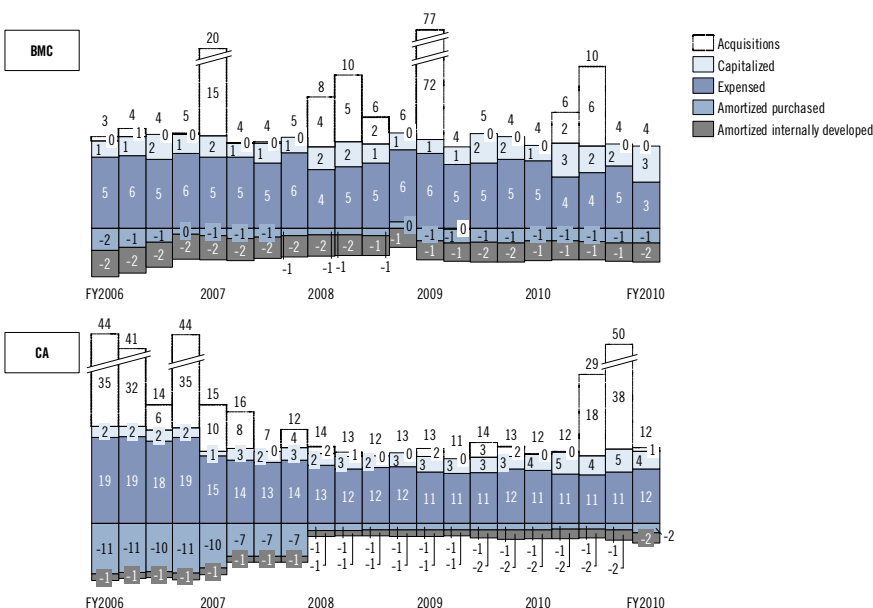


Source: Citi Investment Research and Analysis

Capitalized software development costs: Accounting rules require software companies under most circumstances to expense research and development costs immediately through the income statement. This is always the case for “research” like activities where there is no clear cut future value of the work. There are certain instances though, when R&D activity is identified as “development”, when the money spent here is capitalized on the balance sheet and expense after the product ships. Without going into the accounting specifics, this generally occurs when a project is close to completion with product shipment date and other specifics already fixed. Management software companies frequently capitalize R&D as regular releases are large and yet predictable and have a history of this accounting treatment. The result of capitalization is that R&D expense that would traditionally hit the income statement right away is instead put on the balance sheet and flows through cost of revenue over time. This tends to understate R&D expense (but also understate gross margin) over time and also can cause short term fluctuations in operating margins.

There is significant quarter-to-quarter volatility in R&D expense, but total R&D spend (including capitalized) is easier to predict

Figure 38. Comparison of total technology spending for BMC and CA (% of revenue)



Source: Company reports, Citi Investment Research and Analysis

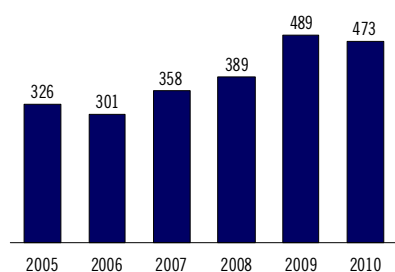
Focus on long-term annualized bookings trends in mainframe and license bookings growth in ESM / distributed

The unique revenue models and multitude of metrics make it easy for investors to become distracted in evaluating the financial results of CA and BMC. We believe things can be simplified to focusing on two main dynamics, one for each side of the business.

In the mainframe area, this business is likely to grow inline with IBM's mainframe hardware revenue (low single digits) and at a discount to capacity growth (mid-teens for overall and 8-10% for general purpose). We believe the most important aspect of this business is preserving the long-term value of the annuity revenue stream. Since the business is lumpy on a quarterly and even annual basis and term length is a major driver, annualized bookings growth, looked at over a multi-year period is the best way to determine whether the annuity is being sustained (or modestly grown). We don't believe drawing a distinction between mainframe license and maintenance revenue is important, as the goal is maximization of revenue potential in the contract portfolio, not revenue growth.

BMC reports mainframe bookings and contract length specifically in the MSM business, making the calculation of annualized bookings in mainframe easy. CA does not report mainframe bookings and thus we must assume that overall bookings trends (and contract terms length) is dominated by mainframe trends (as we estimate mainframe contributes 60% of product bookings).

Figure 39. BMC ESM bookings (fiscal year, in \$ millions)



Source: Company reports, Citi Investment Research and Analysis

For ESM / distributed, we focus on license bookings as it captures new business with customers and is a proxy for growth. We focus on bookings vs. revenue as it normalizes for the ratable trends. Also, we believe while annualizing bookings is important, ESM / distributed contracts tend not to have term length volatility and thus focusing on the annualized number is generally unnecessary. While maintenance revenue is important as well, we believe a focus on license is important for a growth business. If we didn't believe the ESM / distributed business had growth potential, we would advocate focusing on total bookings and have expectations of much higher operating profit margins. BMC reports metrics that enable us to evaluate the performance in the ESM business on a standalone basis. We understand the CA will be in a position to report greater granularity of revenue in the coming quarters. This granularity is facilitated by the company's installation of SAP worldwide during FY08 and FY09.

Will Lightning Strike? M&A Possibilities in Management Software

The management software market has undergone considerable consolidation over the last decade and has been one of the more active sectors from an M&A perspective.

A large concentration of the major acquisitions (\$300M+) have been done by players that are incumbents in the market. We believe this activity will continue as incumbents (BMC, CA, HP and IBM) continue to broaden their product portfolios. At the same time, we believe there is a new dynamic at play that could expand the number of larger IT companies with a strategic interest in this market.

Broader than the management software market, there is a significant battle heating up between larger enterprise IT players for control and revenue share of enterprise data centers. This competitive dynamic has been compounded by a maturation of the enterprise IT market, in which IT budgets are growing at low single-digit rates. The result has been a convergence of competition in markets where various enterprise IT incumbents have not generally competed. There are many examples of this including Cisco's entry into the computing market (Unified Computing System -- UCS product), HP's acquisition of 3Com and entry into enterprise networking and also Oracle's acquisition of Sun and entry into the hardware market.

We believe these moves have broadened the number of potential acquirers for management software companies. Specifically, we believe two new possible buyers, Cisco and Oracle, may now have a greater interest in this market than in years past due to their escalating presence as a strategic vendor into the enterprise data center. We expect that Dell (DELL.O; US\$12.59; 1M) has an interest in management as well, although Dell's financial resources are not as deep. Dell has acquired some low-end assets (Kace) and thus far partnered with many management players in its OpenManage framework. We believe heightened interest by many of these larger enterprise IT players has already manifested itself in several of the M&A waves that have happened over the last several years.

This increased interest in management software by the larger enterprise IT vendors has already resulted in some relatively high multiples for assets in this sector. In management software transactions greater than \$300M, transactions have averaged 5x revenue compared with 4x for large-cap software transaction and a meaningfully higher 1-day premium.

Figure 40. Comparable software & management software transactions

Software transactions >\$2B						Management software transactions >\$300M					
Date announced	Target	Acquirer	Value (\$M)	EV/ LTM Revenue	1-day premium	Date announced	Target	Acquirer	Value (\$M)	EV/ LTM Revenue	1-day premium
12/16/2004	VERITAS Software	Symantec	11,664	5.9x	22%	7/25/2006	Mercury Interactive	HP	4,517	5.2x	34%
3/28/2005	SunGard Data Systems	Private equity	10,845	3.1x	44%	7/23/2007	Opsware	HP	1,591	14.7x	NA
12/13/2004	PeopleSoft	Oracle	8,876	3.3x	75%	1/29/2007	Altiris	Symantec	839	3.7x	40%
8/19/2010	McAfee	Intel	7,680	3.8x	57%	3/17/2008	BladeLogic Inc	BMC Software Inc	724	11.6x	22%
1/16/2008	BEA Systems	Oracle	7,097	4.8x	24%	12/21/2005	Micromuse	IBM	705	4.4x	38%
5/12/2010	Sybase Inc	SAP AG	5,323	4.4x	35%	4/27/2006	LANDesk	Avocent	416	5.0x	NA
10/7/2007	Business Objects	SAP	5,034	3.5x	18%	5/23/2006	Softricity	Microsoft	400	NA	NA
11/11/2007	Cognos	IBM	4,598	4.0x	9%	12/19/2002	Precise Software Solutions	Veritas Software	396	5.5x	37%
7/25/2006	Mercury Interactive	HP	4,517	5.2x	34%	1/5/2006	Wily Technology	CA	375	7.1x	NA
2/9/2004	NetScreen Technologies	Juniper Networks	3,732	13.6x	57%	9/19/2005	Peregrine Systems	HP	367	1.9x	37%
9/12/2005	Siebel	Oracle	3,705	2.8x	17%	10/6/2004	Netegrity Inc	CA	363	4.6x	36%
1/25/2007	UGS	Siemens	3,500	2.9x	NA	3/10/2010	Nimsoft Inc	CA	350	10.9x	NA
4/18/2005	Macromedia	Adobe	3,055	7.0x	25%	4/1/2004	Candle	IBM	350	1.6x	NA
2/28/2007	Hyperion	Oracle	2,816	3.4x	21%	4/7/2005	Concord Communications	CA	342	3.1x	71%
3/15/2007	WebEx	Cisco	2,746	7.2x	22%	6/29/2004	Inet Technologies	Tektronix	326	3.1x	17%
6/30/2006	RSA Security	EMC	2,125	6.3x	22%	4/27/2006	NetIQ	Private equity	316	1.7x	2%
3/14/2004	UGS PLM Solutions (EDS)	Private equity	2,050	2.4x	16%	8/5/2007	Princeton Softech	IBM	300	5.0x	NA
			Median	4.0x	23%				Median	4.8x	36%
			Mean	4.9x	31%				Mean	5.6x	33%

Source: Bloomberg, FactSet, Citi Investment Research and Analysis

Despite some of our fundamental concerns around the management software industry, namely competition from platform players as well as historically below average multiples, we believe the M&A dynamic will work in the favor of companies in this sector. We believe this is especially true for the smaller companies, which require less financial resources to acquire and less management attention to integrate.

We believe this bodes well for BMC, which is a smaller company and also has a concentration of revenue in areas of the market that are most strategic in our view (change control and automation). We view CA as a less attractive acquisition candidate. CA has a more disparate collection of management software assets and while it is strong in a number of areas, the company is earlier in the stage of integrating the various assets it has acquired. Also, the company overall is larger than BMC and also CA's less strategic mainframe business is 2.5x larger than BMC's. See page 49 where we discuss CA in more detail.

Company Focus

Initiation of coverage ☒

Buy/Medium Risk	1M
Price (03 Sep 10)	US\$38.34
Target price	US\$45.00
Expected share price return	17.4%
Expected dividend yield	0.0%
Expected total return	17.4%
Market Cap	US\$6,849M

Price Performance (RIC: BMC.O, BB: BMC US)



BMC Software, Inc. (BMC)

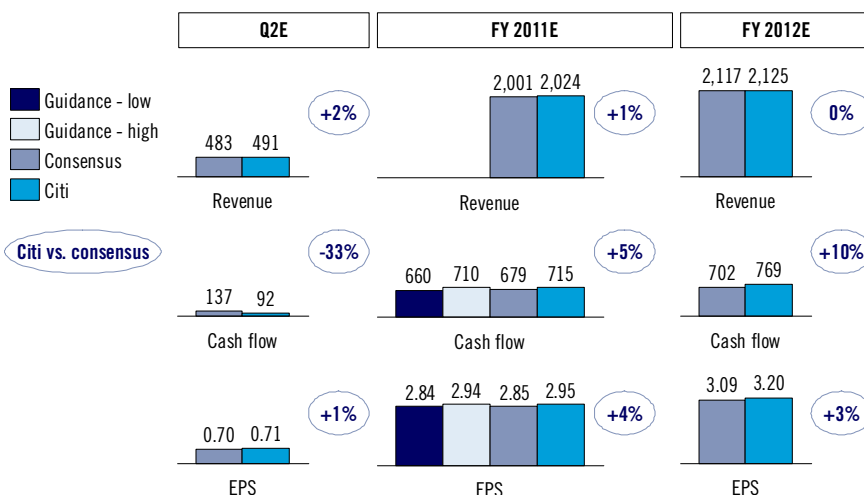
Product Position, Stability and Growth are all Underappreciated

- **Initiating coverage with Buy (1M) rating and \$45 price target** — Shares are mostly viewed as defensive and as a result are out of favor. Our \$45 price target factors in our above consensus numbers, a multiple inline with history (versus market).
- **Mainframe business drives stable revenue/ cash flow and could improve near-term** — Mainframe-driven cash flow is stable and should benefit in FY11 from both industry and company-specific tailwinds. IBM's new mainframe should reverse 6 quarters of capacity shipment declines and reinvigorate the base medium and long-term. BMC's renewal portfolio is up 10% Y/Y, which underpins our 11% cash flow growth in FY11.
- **Momentum in ESM likely more sustainable than consensus view** — The company has the best product story in management software. We expect a major ESM product refresh this month will reinforce this view. The sales organization has churned for the last two fiscal years but entered this year with 20% latent capacity which should become productive over the next 12 months, driving accelerating ESM growth.
- **Pragmatic margin and growth targets** — We don't see above-market growth in management software. BMC is investing appropriately given this reality. As a result, we believe the company is unlikely to disappoint FY targets.
- **Strategic and right size asset ripe for consolidation** — There is little doubt enterprise IT will continue to consolidate as large companies enter new markets. We believe BMC's management software portfolio is increasingly relevant and the company is the right size for potential acquirers such as Cisco and Oracle. Takeout premiums in management software and small and mid-cap software have been in the 4-5x trailing revenue, which would value BMC at \$42-52.
- **Our estimates** — Our numbers are above consensus. We are modeling EPS of \$2.95 in FY11 (vs. \$2.87 consensus) and \$3.20 in FY12 (\$3.10 consensus) and cash flow of \$715M in FY11 (vs. \$679M consensus) and \$769M in FY12 (vs. \$702M consensus).

Fiscal year end 31-Mar	2009	2010	2011E	2012E	2013E
Valuation Ratios					
P/E adjusted (x)	16.9	14.4	13.0	12.0	10.9
EV/EBITDA adjusted (x)	6.4	6.7	5.9	5.5	4.9
P/BV (x)	7.0	5.2	4.8	4.1	3.6
Dividend yield (%)	0.0	0.0	0.0	0.0	0.0
Per Share Data (US\$)					
EPS adjusted	2.27	2.66	2.95	3.20	3.52
EPS reported	1.25	2.17	2.34	2.50	2.78
BVPS	5.51	7.43	8.07	9.27	10.76
DPS	0.00	0.00	0.00	0.00	0.00
Profit & Loss (US\$M)					
Net sales	1,872	1,911	2,024	2,125	2,221
Operating expenses	-1,386	-1,369	-1,417	-1,482	-1,535
EBIT	486	542	607	643	686
Net interest expense	10	-5	-16	-14	-13
Non-operating/exceptionals	-131	-32	-37	-33	-33
Pre-tax profit	364	504	554	596	640
Tax	-126	-98	-129	-158	-170
Extraord./Min.Int./Pref.div.	0	0	0	0	0
Reported net income	238	406	424	438	470
Adjusted earnings	431	496	536	561	596
Adjusted EBITDA	913	886	963	1,009	1,064
Growth Rates (%)					
Sales	8.1	2.1	5.9	5.0	4.5
EBIT adjusted	44.9	-2.7	9.7	3.9	5.7
EBITDA adjusted	39.1	-3.0	8.7	4.7	5.5
EPS adjusted	15.5	17.1	11.3	8.2	10.1
Cash Flow (US\$M)					
Operating cash flow	577	635	715	769	819
Depreciation/amortization	183	176	184	199	208
Net working capital	11	-60	-11	9	15
Investing cash flow	-852	-159	-134	-115	-116
Capital expenditure	-28	-22	-29	-32	-32
Acquisitions/disposals	-763	-56	0	0	0
Financing cash flow	57	-159	-449	-400	-400
Borrowings	296	42	0	0	0
Dividends paid	0	0	0	0	0
Change in cash	-292	345	122	253	303
Balance Sheet (US\$M)					
Total assets	3,698	4,138	4,173	4,363	4,581
Cash & cash equivalent	1,097	1,434	1,581	1,834	2,136
Accounts receivable	218	212	282	302	319
Net fixed assets	103	95	97	94	92
Total liabilities	2,649	2,750	2,708	2,737	2,760
Accounts payable	71	61	28	19	16
Total Debt	314	341	348	348	348
Shareholders' funds	1,049	1,388	1,465	1,625	1,821
Profitability/Solvency Ratios (%)					
EBITDA margin adjusted	48.8	46.4	47.6	47.5	47.9
ROE adjusted	42.2	40.7	37.6	36.3	34.6
ROIC adjusted	75.2	54.2	56.5	58.4	65.2
Net debt to equity	-74.7	-78.8	-84.1	-91.4	-98.2
Total debt to capital	23.0	19.7	19.2	17.7	16.1

For further data queries on Citi's full coverage universe please contact CIRA Data Services Americas at CIRADatServicesAmericas@citi.com or +1-212-816-5336

Figure 41. CIRA vs. consensus for BMC Software



Source: Thomson, Citi Investment Research and Analysis

Mainframe business drives stable revenue/ cash flow and could improve near-term

BMC's mainframe business is anchor of stability for the company's cash flow. The company has run its mainframe business as a separate business for the last four years lead by SVP Bill Miller. This separation of the mainframe business, which has a much different financial profile than the growth-oriented ESM business has enabled successful execution the company's goals here. The company is the leader in the database management market, with products for the DB2 and IMS databases (Mainview) and is also a strong contender in the job scheduling market (Control M).

We see dynamics in BMC's mainframe business in FY11 as a potential positive driver of stock performance over the next 12 months. As noted in our discussion above, we see several positive drivers in the mainframe business overall that should benefit BMC specifically during the second half of the company's fiscal year (December and March quarters). The primary driver is a 10% increase Y/Y in the mainframe renewal contract portfolio. We believe strong discipline around price will enable the company to drive historical yield (mid-90s) from the FY11 renewal contract portfolio.

Additionally, our analysis suggests that BMC has historically outperformed in the twelve months following an IBM mainframe platform launch. We note there is very little short-term revenue correlation between IBM mainframe hardware revenue or MIPS (capacity metric) and BMC's mainframe software bookings, suggesting no real fundamental reason for correlation. Instead, the general excitement about the new platform and specifically early cycle IBM MIPS growth likely draw investor attention to the generally under-appreciated resilience and profitability of the mainframe revenue stream.

Overall, while we aren't recommending BMC shares solely on what we believe to be near-term positive mainframe dynamics, we believe tailwinds in this business should help BMC's financial momentum in FY11.

Momentum in ESM likely more sustainable than consensus view

We believe BMC has the best fundamental product story in the management software space, meaning the highest degree of overlap of its business in areas that we believe will drive growth in the market. A focus on streamlining the business to drive profitability over the last several years has had an added benefit of forcing the company to double down on markets where it has critical mass (change control and automation, database management and job scheduling). As a result of focus, the company has leading market share in these areas (or in job scheduling, the #1 product, but not leading share).

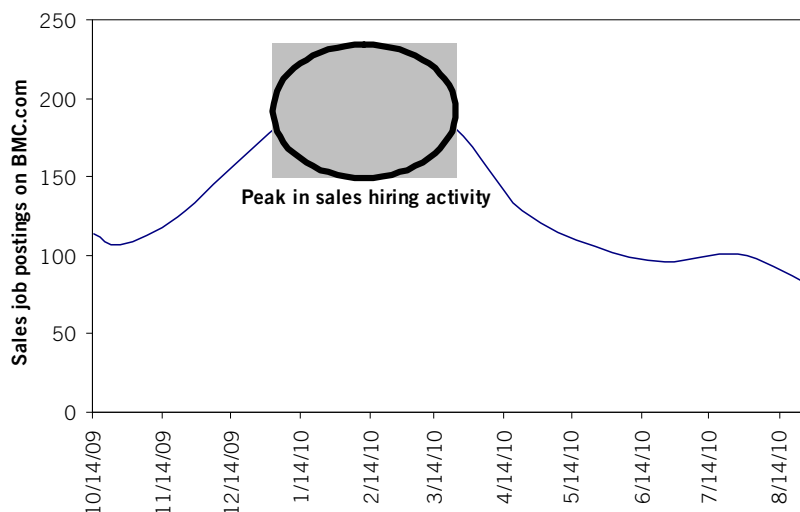
The company is set to release new versions of its flagship products across the major areas of its ESM business. We expect this release to reinforce the company's strong product position in ESM.

Some degree of this product story has been true for the last five years as BMC was out front of industry peers in focusing on "business service management", which places the emphasis on tying management of the underlying IT assets with management of the business. In 2008, the company acquired BladeLogic to round out its product portfolio in change control and automation. While the price tag was high, the benefits have been clear. Almost as important as the products BladeLogic brought was the momentum the young company was having in the market and the aggressive sales culture that was behind this momentum. Before the BladeLogic acquisition, BMC had taken evolutionary steps since the Remedy acquisition in 2002 to evolve the sales organization from one that was focused around renewals to driving new license sales. During FY07, the company split off its mainframe sales force into a different organization, which helps further this evolution. Mainframe continues to focus on preserving customer contract value and driving slight growth as customers expand mainframe capacity. From the time of the BladeLogic acquisition until late 2009, BMC made more radical changes to the sales force and endured significant turnover of personnel.

Significant Latent Sales Capacity

Entering FY10 (April 1), the company had a stable organization for the first time in two years, with the disruption post the BladeLogic acquisition (early in FY09) and the forced turnover of FY10. The company hired significantly in late 2009 and into the beginning of 2010 as it upgraded sales talent.

Figure 42. BMC Sales Hiring Activity



Source: CIRA tracking of BMC.com

We believe the company stands to benefit from increased stability and also the 20% up-tick in tenured quota-carrying sales reps in FY11. It is unlikely the benefit all comes in FY11; however, we believe a combination of a more stable macro environment and the increase in sales resources can drive ESM growth that will enable numbers to continue to creep higher. As well, we believe it is possible that double-digit growth in ESM is sustainable beyond FY11 (although we don't model this) and thus upside to numbers could be sustained.

Figure 43. Implied productivity per rep for BMC appears conservative

	FY08	FY09	FY10	FY11	FY12
ESM license bookings	\$389	\$489	\$473	\$541	\$584
<i>Y/Y growth</i>		25%	-3%	14%	8%
<i>Y/Y growth (organic)</i>		2%	-3%	14%	8%
Y/Y growth in average productive reps		8%	-10%	22%	2%
Implied productivity per rep	\$1,145	\$1,333	\$1,441	\$1,353	\$1,439
		16%	8%	-6%	6%

Source: Citi Investment Research and Analysis

Pragmatic margin and growth targets

BMC has made significant progress on expanding its operating margins over the last four years. Some of this has been general operational improvements that probably should have been addressed years ago. An additional component and one of more recent focus has been on driving profitability in the ESM business. We believe the consensus view is that the low-hanging fruit has been picked and to some degree we believe that is true, as operational discipline has improved significant versus four year ago. At the same time, we believe there are opportunities for continued operating margin expansion.

The first is in the consulting area, where the company runs a slight loss on a gross profit basis and likely greater on an operating basis. We don't believe that consulting will ever be a major profit center for the company. Instead it is an enabler to selling software, especially larger, more strategic deals. However we believe management's goal of 10-15% operating margins in this business would have a meaningful impact of about +200bp on operating margins that most investors are not expecting. The question here will be how quickly the company can achieve these higher margins.

The second and most significant opportunity is around sales productivity. With the significant displacement of sales people in FY10, the company didn't benefit from any leverage in the sales and marketing expense line in FY10. While sales and marketing as a percentage of revenue is already above average for the peer group at 27%, we estimate that outside of mainframe, there are still improvements that can be made. Our modeling suggests that the company spends between 30-35% of revenue on sales and marketing in the ESM segment, while MSM is in the low 20s. The catalyst for improvement from this low-30s ESM sales and marketing spend should come from improved productivity among the ESM reps that were only recently brought into the organization. We see roughly 50bp of improvement per year in ESM sales and marketing.

We expect that sales and marketing remains the primary variable lever for reinvestment back into the business. Productivity improvements are within reach this year as recently-hired become productive. Beyond FY11, we remain comfortable the company will add sales resources only when the company sees broad gains in sales rep productivity.

From a top-line perspective, we believe BMC has more prudent growth goals than peer CA. BMC is targeting mid-to-high single digit growth as compared to CA's high single digit target. This is despite BMC being a smaller company (smaller companies generally able to grow faster) and having a smaller mainframe business (which is less of a drag on growth).

BMC has been prudent about projecting revenue from the relationship with Cisco around its UCS platform. BMC's OEM of its BladeLogic tools into this product could be a significant driver, but is reliant on the company directly up-selling these customers. Thus we view the OEM as more of a lead-gen tool.

Strategic and right size asset ripe for consolidation

M&A had heated up in the technology and software sector once again. We believe it is difficult to know which companies will be acquired and especially impossible to predict the timing. However, as we have outlined above, we believe there are a handful of criteria that significantly increase the probability of a take-out for BMC and make the company one of the best positioned companies to be acquired by a larger systems company in our universe.

We don't believe take-out is a reason to own the stock in and of itself. At the same time, we believe the company is building shareholder value independent of an acquisition outcome. Thus any bet on a take-out is not speculative, but rather we believe it would magnify the benefits of successfully executing on the strategy we believe will drive the shares higher over the next 12 months.

Our estimates

Figure 44. Summary of CIRA estimates – BMC Software

	FY10A	FY11E	FY12E	Key assumptions for FY11 and FY12
Total revenue	\$1.9B	\$2.0B	\$2.1B	■ Growth from latent sales capacity
Y/Y growth	2%	6%	5%	
MSM revenue	\$767M	\$799M	\$836M	■ Strength from IBM mainframe cycle
Y/Y growth	3%	4%	5%	
ESM revenue	\$1,015M	\$1,079M	\$1,132M	■ Product refresh, strong secular growth in core segment of control and change management
Y/Y growth	3%	6%	5%	
Gross margins %	82%	81%	81%	■ Amortization of capitalized R&D to have bigger impact in FY11 & F12 vs. F10 due to capitalization in anticipation of product refresh
Operating expenses (non-GAAP)	\$884M	\$898M	\$943M	■ Capitalized R&D driving some delta in FY11 vs. FY10; anticipate renewed sales & marketing hiring in FY12 after ramp in late FY10
Y/Y growth	-1%	2%	5%	
Operating margin % (non-GAAP)	35%	37%	37%	■ Expect improved productivity from reps as latent sales capacity ramps
Other income / expense	-\$2M	-\$17M	-\$14M	■ 1.5% effective interest rate on debt
Tax rate	26%	26%	27%	■ In line with guidance of 26-27%
Diluted Share outstanding (in millions)	187	182	175	■ 1.25M share creep plus \$100M per quarter in buy backs
EPS (non-GAAP)	\$2.66	\$2.95	\$3.20	■ FY10 higher due to capitalized R&D; some bias to the upside if sales productivity improves
Y/Y growth	17%	11%	8%	
Operating cash flow	\$635M	\$715M	\$768M	■ Some upside vs. guidance driven by back half strength in renewal portfolio, which should be up 10% in F11
Y/Y growth	12%	6%	10%	
Mainframe bookings	\$813M	\$887M	\$847M	■ Stronger renewal portfolio; zEnterprise cycle
Y/Y growth	8%	9%	-4%	

Source: Citi Investment Research and Analysis

Figure 45. Income Statement – BMC Software, Inc. (in \$ millions unless otherwise stated)

(FY: March)	F09A	Jun 09A	Sep 09A	Dec 09A	Mar 10A	F10A	Jun 10A	Sep 10E	Dec 10E	Mar 11E	F11E	Jun 11E	Sep 11E	Dec 11E	Mar 12E	F12E	F13E
License	\$709.7	\$167.0	\$174.0	\$216.1	\$201.3	\$758.4	\$171.2	\$197.1	\$235.5	\$234.4	\$838.3	\$165.4	\$209.3	\$249.7	\$248.3	\$872.7	\$923.2
% Total Revenue	37.9%	37.1%	37.7%	42.5%	41.0%	39.7%	37.1%	40.2%	44.2%	43.5%	41.4%	35.1%	40.2%	44.2%	43.8%	41.1%	41.6%
% Change Y/Y	9.6%	11.8%	-0.9%	12.1%	4.8%	6.9%	2.5%	13.3%	9.0%	16.5%	10.5%	-3.4%	6.2%	6.0%	5.9%	4.1%	5.8%
% Change Q/Q		-13.0%	4.2%	24.2%	-6.8%		-15.0%	15.2%	19.5%	-0.5%		-29.4%	26.5%	19.3%	-0.6%		
Maintenance	\$1,017.8	\$251.2	\$257.4	\$260.2	\$254.9	\$1,023.7	\$253.8	\$258.0	\$262.0	\$266.0	\$1,039.8	\$269.0	\$273.0	\$276.0	\$277.0	\$1,095.0	\$1,130.0
% Total Revenue	54.4%	55.8%	55.7%	51.2%	51.9%	53.6%	55.1%	52.5%	49.1%	49.4%	51.4%	57.1%	52.4%	48.8%	48.9%	51.5%	50.9%
% Change Y/Y	5.2%	-1.2%	0.7%	1.8%	1.0%	0.6%	1.0%	0.2%	0.7%	4.4%	1.6%	6.0%	5.8%	5.3%	4.1%	5.3%	3.2%
% Change Q/Q		-0.4%	2.5%	1.1%	-2.0%		-0.4%	1.7%	1.6%	1.5%		1.1%	1.5%	1.1%	0.4%		
Services	\$144.4	\$31.8	\$30.4	\$31.8	\$35.1	\$129.1	\$35.9	\$35.9	\$35.9	\$37.9	\$145.6	\$37.0	\$38.7	\$39.5	\$41.7	\$156.9	\$167.9
% Total Revenue	7.7%	7.1%	6.6%	6.3%	7.1%	6.8%	7.8%	7.3%	6.7%	7.0%	7.2%	7.8%	7.4%	7.0%	7.4%	7.4%	7.6%
% Change Y/Y	24.2%	-5.9%	-14.8%	-20.3%	0.3%	-10.6%	12.9%	18.0%	13.0%	8.0%	12.8%	3.0%	8.0%	10.0%	10.0%	7.8%	7.0%
% Change Q/Q		-9.1%	-4.4%	4.6%	10.4%		2.3%	-0.1%	0.2%	5.5%		-2.5%	4.8%	2.0%	5.5%		
Total revenues	\$1,871.9	\$450.0	\$461.8	\$508.1	\$491.3	\$1,911.2	\$460.9	\$491.0	\$533.5	\$538.4	\$2,023.7	\$471.4	\$521.0	\$565.2	\$567.0	\$2,124.6	\$2,221.1
% Change Y/Y	8.1%	2.9%	-1.0%	4.0%	2.5%	2.1%	2.4%	6.3%	5.0%	9.6%	5.9%	2.3%	6.1%	6.0%	5.3%	5.0%	4.5%
% Change Q/Q		-6.1%	2.6%	10.0%	-3.3%		-6.2%	6.5%	8.6%	0.9%		-12.4%	10.5%	8.5%	0.3%		
Cost of revenues																	
Cost of license revenue	(\$70.9)	(\$17.6)	(\$16.0)	(\$16.7)	(\$18.9)	(\$69.2)	(\$18.9)	(\$19.7)	(\$23.6)	(\$24.6)	(\$86.8)	(\$17.4)	(\$22.0)	(\$27.5)	(\$27.3)	(\$94.1)	(\$101.6)
Cost of maintenance revenue	(\$157.0)	(\$35.6)	(\$34.3)	(\$39.1)	(\$41.4)	(\$150.4)	(\$38.4)	(\$38.7)	(\$39.3)	(\$39.9)	(\$156.3)	(\$40.4)	(\$41.0)	(\$41.4)	(\$41.6)	(\$164.3)	(\$169.5)
Cost of professional services	(\$138.4)	(\$32.3)	(\$30.9)	(\$33.9)	(\$36.4)	(\$133.5)	(\$34.8)	(\$34.4)	(\$34.5)	(\$35.6)	(\$139.4)	(\$34.8)	(\$36.4)	(\$36.4)	(\$38.4)	(\$145.9)	(\$154.5)
Total cost of revenues	(\$366.3)	(\$85.5)	(\$81.2)	(\$89.7)	(\$96.7)	(\$353.1)	(\$92.1)	(\$92.9)	(\$97.3)	(\$100.2)	(\$382.5)	(\$92.5)	(\$99.3)	(\$105.2)	(\$107.2)	(\$404.3)	(\$425.6)
Gross profit	\$1,505.6	\$364.5	\$380.6	\$418.4	\$394.6	\$1,558.1	\$368.8	\$398.2	\$436.1	\$438.2	\$1,641.3	\$378.9	\$421.7	\$460.0	\$459.8	\$1,720.4	\$1,795.6
Gross margin %	80.4%	81.0%	82.4%	82.3%	80.3%	81.5%	80.0%	81.1%	81.8%	81.4%	81.1%	80.4%	80.9%	81.4%	81.1%	81.0%	80.8%
Selling and marketing	(\$512.7)	(\$118.8)	(\$122.6)	(\$139.5)	(\$143.7)	(\$524.6)	(\$132.6)	(\$130.1)	(\$143.2)	(\$147.6)	(\$553.5)	(\$134.9)	(\$136.1)	(\$149.0)	(\$153.6)	(\$573.6)	(\$593.2)
% Total Revenue	27.4%	26.4%	26.5%	27.5%	29.2%	27.4%	28.8%	26.5%	26.8%	27.4%	27.4%	28.6%	26.1%	26.4%	27.1%	27.0%	26.7%
Research, development and support	(\$209.1)	(\$51.3)	(\$39.5)	(\$44.7)	(\$50.0)	(\$185.5)	(\$35.9)	(\$44.2)	(\$43.5)	(\$43.5)	(\$167.0)	(\$46.9)	(\$49.0)	(\$49.7)	(\$49.0)	(\$194.6)	(\$196.7)
% Total Revenue	11.2%	11.4%	8.6%	8.8%	10.2%	9.7%	7.8%	9.0%	8.1%	8.1%	8.3%	9.9%	9.4%	8.8%	8.6%	9.2%	8.9%
General and administrative	(\$171.5)	(\$46.6)	(\$43.3)	(\$43.4)	(\$40.2)	(\$173.5)	(\$43.5)	(\$44.0)	(\$45.0)	(\$45.0)	(\$177.5)	(\$43.0)	(\$44.0)	(\$44.0)	(\$44.0)	(\$175.0)	(\$182.0)
% Total Revenue	9.2%	10.4%	9.4%	8.5%	8.2%	9.1%	9.4%	9.0%	8.4%	8.4%	8.8%	9.1%	8.4%	7.8%	7.8%	8.2%	8.2%
Total operating expenses	(\$893.3)	(\$216.7)	(\$205.4)	(\$227.6)	(\$233.9)	(\$883.6)	(\$212.0)	(\$218.3)	(\$231.7)	(\$236.1)	(\$898.1)	(\$224.8)	(\$229.1)	(\$242.7)	(\$246.6)	(\$943.2)	(\$971.9)
% Total Revenue	47.7%	48.2%	44.5%	44.8%	47.6%	46.2%	46.0%	44.5%	43.4%	43.9%	44.4%	47.7%	44.0%	42.9%	43.5%	44.4%	43.8%
Operating Profit (ex. non cash charges)	\$612.3	\$147.8	\$175.2	\$190.8	\$160.7	\$674.5	\$156.8	\$179.9	\$204.4	\$202.1	\$743.2	\$154.1	\$192.6	\$217.3	\$213.1	\$777.2	\$823.7
% Total Revenue	32.7%	32.8%	37.9%	37.6%	32.7%	35.3%	34.0%	36.6%	38.3%	37.5%	36.7%	32.7%	37.0%	38.4%	37.6%	36.6%	37.1%
% Change Y/Y	30.1%	33.3%	17.9%	4.0%	-5.1%	10.2%	6.1%	2.7%	7.1%	25.8%	10.2%	-1.7%	7.1%	6.3%	5.4%	4.6%	6.0%
% Change Q/Q		-12.8%	18.5%	8.9%	-15.8%		-2.4%	14.7%	13.7%	-1.1%		-23.8%	25.0%	12.8%	-1.9%		
Interest and other Income, net	(\$3.9)	(\$0.7)	(\$2.2)	(\$0.9)	\$1.9	(\$1.9)	(\$5.5)	(\$3.8)	(\$3.8)	(\$3.7)	(\$16.8)	(\$3.6)	(\$3.6)	(\$3.6)	(\$3.5)	(\$14.2)	(\$13.1)
Pretax profit	\$608.4	\$147.1	\$173.0	\$189.9	\$162.6	\$672.6	\$151.3	\$176.1	\$200.6	\$198.4	\$726.4	\$150.5	\$189.1	\$213.7	\$209.6	\$762.9	\$810.6
Provision for income taxes (effective)	(\$177.2)	(\$36.5)	(\$49.7)	(\$48.4)	(\$42.0)	(\$176.6)	(\$37.7)	(\$46.7)	(\$53.2)	(\$52.6)	(\$190.1)	(\$39.9)	(\$50.1)	(\$56.6)	(\$55.6)	(\$202.2)	(\$214.8)
Tax rate (%)	29.1%	24.8%	28.7%	25.5%	25.8%	26.3%	24.9%	26.5%	26.5%	26.5%	26.2%	26.5%	26.5%	26.5%	26.5%	26.5%	26.5%
Net income (ex. non cash charges)	\$431.2	\$110.6	\$123.3	\$141.5	\$120.6	\$496.0	\$113.6	\$129.4	\$147.5	\$145.8	\$536.3	\$110.6	\$139.0	\$157.1	\$154.1	\$560.8	\$595.8
Net Margin	23.0%	24.6%	26.7%	27.8%	24.5%	26.0%	24.6%	26.4%	27.6%	27.1%	26.5%	23.5%	26.7%	27.8%	27.2%	26.4%	26.8%
Shares outstanding (diluted)	190.2	187.9	187.0	186.5	185.7	186.8	183.8	182.3	180.7	179.2	181.5	177.7	176.2	174.6	173.1	175.4	169.3
Pro-forma EPS*	\$2.27	\$0.59	\$0.66	\$0.76	\$0.65	\$2.66	\$0.62	\$0.71	\$0.82	\$0.81	\$2.95	\$0.62	\$0.79	\$0.90	\$0.89	\$3.20	\$3.52

Source: Citi Investment Research and Analysis

Figure 46. Balance Sheet – BMC Software, Inc. (in \$ millions unless otherwise stated)

(FY: March)	F09A	Jun 09A	Sep 09A	Dec 09A	Mar 10A	F10A	Jun 10A	Sep 10E	Dec 10E	Mar 11E	F11E	Jun 11E	Sep 11E	Dec 11E	Mar 12E	F12E	F13E
ASSETS																	
Cash and cash equivalents	\$1,023.3	\$997.0	\$1,137.8	\$1,079.5	\$1,368.6	\$1,368.6	\$1,410.0	\$1,370.0	\$1,438.1	\$1,570.3	\$1,570.3	\$1,610.7	\$1,584.5	\$1,666.4	\$1,823.6	\$1,823.6	\$2,126.1
Marketable securities	\$73.6	\$213.8	\$74.7	\$128.0	\$65.5	\$65.5	\$10.3	\$10.3	\$10.3	\$10.3	\$10.3	\$10.3	\$10.3	\$10.3	\$10.3	\$10.3	\$10.3
Trade accounts receivable, net	\$217.8	\$134.6	\$174.6	\$208.9	\$212.3	\$212.3	\$168.4	\$242.3	\$266.2	\$281.8	\$281.8	\$182.9	\$255.7	\$286.6	\$301.8	\$301.8	\$318.8
Current trade finance receivables, net	\$99.3	\$62.5	\$85.3	\$121.7	\$117.7	\$117.7	\$71.5	\$71.5	\$71.5	\$71.5	\$71.5	\$71.5	\$71.5	\$71.5	\$71.5	\$71.5	\$71.5
Other current assets	\$146.5	\$149.4	\$148.2	\$147.6	\$140.9	\$140.9	\$128.7	\$128.7	\$128.7	\$128.7	\$128.7	\$128.7	\$128.7	\$128.7	\$128.7	\$128.7	\$118.7
Total current assets	\$1,560.5	\$1,557.3	\$1,620.6	\$1,685.7	\$1,905.0	\$1,905.0	\$1,788.9	\$1,822.8	\$1,914.8	\$2,062.6	\$2,062.6	\$2,004.1	\$2,050.6	\$2,163.5	\$2,335.9	\$2,335.9	\$2,645.4
Property and equipment, net	\$103.0	\$106.7	\$104.3	\$97.9	\$95.0	\$95.0	\$99.0	\$98.1	\$97.3	\$96.5	\$96.5	\$95.8	\$95.2	\$94.6	\$94.1	\$94.1	\$92.5
Software development costs and related assets	\$122.6	\$120.8	\$135.5	\$144.1	\$145.5	\$145.5	\$159.9	\$166.7	\$175.3	\$183.2	\$183.2	\$183.9	\$184.4	\$185.2	\$184.4	\$184.4	\$176.8
Long-term marketable securities	\$72.3	\$74.3	\$76.3	\$62.3	\$62.4	\$62.4	\$51.0	\$51.0	\$51.0	\$51.0	\$51.0	\$51.0	\$51.0	\$51.0	\$51.0	\$51.0	\$51.0
Long-term trade finance receivables, net	\$92.1	\$44.9	\$52.5	\$123.8	\$122.6	\$122.6	\$75.5	\$75.5	\$75.5	\$75.5	\$75.5	\$75.5	\$75.5	\$75.5	\$75.5	\$75.5	\$75.5
Goodwill, net	\$1,478.6	\$1,469.9	\$1,490.8	\$1,548.4	\$1,524.4	\$1,524.4	\$1,493.1	\$1,493.1	\$1,493.1	\$1,493.1	\$1,493.1	\$1,493.1	\$1,493.1	\$1,493.1	\$1,493.1	\$1,493.1	\$1,493.1
Other long-term assets	\$268.4	\$263.0	\$267.3	\$252.4	\$282.7	\$282.7	\$272.2	\$251.7	\$231.2	\$210.7	\$210.7	\$190.2	\$169.7	\$149.2	\$128.7	\$128.7	\$46.7
TOTAL ASSETS	\$3,697.5	\$3,636.9	\$3,747.3	\$3,914.6	\$4,137.6	\$4,137.6	\$3,939.6	\$3,958.9	\$4,038.1	\$4,172.6	\$4,172.6	\$4,093.7	\$4,119.5	\$4,212.1	\$4,362.7	\$4,362.7	\$4,581.0
LIABILITIES AND STOCKHOLDERS' EQUITY																	
Accounts payable and accrued liabilities																	
Trade accounts payable	\$57.2	\$55.2	\$50.1	\$34.1	\$37.5	\$37.5	\$37.0	\$33.3	\$23.3	\$16.3	\$16.3	\$16.1	\$14.5	\$10.1	\$7.1	\$7.1	\$3.1
Trade finance payable	\$13.7	\$8.0	\$13.9	\$15.1	\$23.0	\$23.0	\$10.5	\$10.6	\$11.2	\$11.4	\$11.4	\$10.7	\$11.1	\$11.8	\$12.0	\$12.0	\$12.4
Accrued liabilities	\$285.1	\$201.9	\$236.2	\$282.8	\$324.7	\$324.7	\$227.2	\$236.3	\$245.7	\$255.6	\$255.6	\$178.8	\$186.0	\$193.4	\$201.2	\$201.2	\$158.3
Current portion of deferred revenue	\$977.3	\$968.0	\$934.1	\$922.6	\$975.9	\$975.9	\$985.1	\$976.6	\$993.9	\$1,040.6	\$1,040.6	\$1,034.1	\$1,023.7	\$1,041.0	\$1,091.0	\$1,091.0	\$1,128.6
Current liabilities	\$1,333.3	\$1,233.1	\$1,234.3	\$1,254.6	\$1,361.1	\$1,361.1	\$1,259.8	\$1,256.8	\$1,274.1	\$1,323.9	\$1,323.9	\$1,239.7	\$1,235.3	\$1,256.3	\$1,311.2	\$1,311.2	\$1,302.5
Long-term deferred revenue	\$810.6	\$759.8	\$762.5	\$804.5	\$847.2	\$847.2	\$820.0	\$812.9	\$827.3	\$866.2	\$866.2	\$860.8	\$852.1	\$866.5	\$908.2	\$908.2	\$939.5
Long-term debt	\$313.6	\$311.7	\$309.8	\$340.9	\$340.9	\$340.9	\$348.4	\$348.4	\$348.4	\$348.4	\$348.4	\$348.4	\$348.4	\$348.4	\$348.4	\$348.4	\$348.4
Other long-term liabilities	\$191.5	\$196.3	\$215.7	\$210.0	\$200.7	\$200.7	\$169.4	\$169.4	\$169.4	\$169.4	\$169.4	\$169.4	\$169.4	\$169.4	\$169.4	\$169.4	\$169.4
Total liabilities	\$2,649.0	\$2,500.9	\$2,522.3	\$2,610.0	\$2,749.9	\$2,749.9	\$2,597.6	\$2,587.5	\$2,619.2	\$2,707.9	\$2,707.9	\$2,618.3	\$2,605.2	\$2,640.7	\$2,737.2	\$2,737.2	\$2,759.7
Total stockholders' equity	\$1,048.5	\$1,136.0	\$1,225.0	\$1,304.6	\$1,387.7	\$1,387.7	\$1,342.0	\$1,371.4	\$1,418.9	\$1,464.7	\$1,464.7	\$1,475.4	\$1,514.3	\$1,571.4	\$1,625.5	\$1,625.5	\$1,821.3
TOTAL LIABILITIES & EQUITY	\$3,697.5	\$3,636.9	\$3,747.3	\$3,914.6	\$4,137.6	\$4,137.6	\$3,939.6	\$3,958.9	\$4,038.1	\$4,172.6	\$4,172.6	\$4,093.7	\$4,119.5	\$4,212.1	\$4,362.7	\$4,362.7	\$4,581.0

Source: Citi Investment Research and Analysis

Figure 47. BMC Software, Inc. – Cash Flow Statement

(FY: March)	F09A	Jun 09A	Sep 09A	Dec 09A	Mar 10A	F10A	Jun 10A	Sep 10E	Dec 10E	Mar 11E	F11E	Jun 11E	Sep 11E	Dec 11E	Mar 12E	F12E	F13E
	GAAP	GAAP	GAAP	GAAP	GAAP	GAAP	GAAP	Non-GAAP	Non-GAAP	Non-GAAP	Non-GAAP	Non-GAAP	Non-GAAP	Non-GAAP	Non-GAAP	Non-GAAP	Non-GAAP
Operating cash flows																	
Net income (loss)	\$238.1	\$82.4	\$94.2	\$110.7	\$118.8	\$406.1	\$92.8	\$129.4	\$147.5	\$145.8	\$515.5	\$110.6	\$139.0	\$157.1	\$154.1	\$560.8	\$595.8
Adjustments (total)																	
Depreciation and amortization	\$182.8	\$42.8	\$42.0	\$44.5	\$46.5	\$175.8	\$44.7	\$46.4	\$46.3	\$46.8	\$184.2	\$48.6	\$49.7	\$49.6	\$50.7	\$198.6	\$207.6
Stock-based compensation expense	\$82.0	\$20.6	\$21.9	\$22.6	\$23.8	\$88.9	\$25.1				\$25.1					\$0.0	\$0.0
Gain (loss) on sale of marketable securities	\$13.4	\$0.0	\$0.0			\$0.0					\$0.0					\$0.0	\$0.0
Other non-cash charges (IPRD)	\$50.3	(\$1.2)	(\$1.4)	(\$0.3)	\$27.6	\$24.7	\$1.0				\$1.0					\$0.0	\$0.0
Changes in assets and liabilities:																	
Trade finance receivables	(\$46.0)	\$84.0	(\$30.4)	(\$105.6)	\$4.2	(\$47.8)	\$95.6				\$95.6					\$0.0	\$0.0
Trade finance payables	\$9.3	\$0.0	\$0.0			\$0.0											
Net change in other assets and liabilities	\$47.5	(\$156.5)	(\$32.9)	\$94.5	\$113.1	(\$12.3)	(\$103.7)	(\$84.0)	\$7.8	\$73.1	(\$106.9)	\$9.4	(\$85.9)	\$4.5	\$81.4	\$9.4	\$15.5
Net cash flow from operations	\$577.4	\$72.1	\$93.4	\$166.4	\$334.0	\$635.4	\$155.5	\$91.8	\$201.6	\$265.7	\$714.6	\$168.5	\$102.8	\$211.2	\$286.2	\$768.7	\$818.8
* We assume that BMC is a serial restructurer																	
Restructuring payment	\$66.3	\$20.0	\$15.0	\$5.0	\$0.0	\$40.0											
Servicing receipts from 3rd parties	(\$9.3)																
Adjusted cash flow from operations	\$577.4	\$72.1	\$93.4	\$166.4	\$334.0	\$635.4	\$155.5	\$91.8	\$201.6	\$265.7	\$714.6	\$168.5	\$102.8	\$211.2	\$286.2	\$768.7	\$818.8
Change in deferred revenue	\$0.8	(\$60.1)	(\$33.6)	\$28.2	\$96.0	\$30.5	(\$18.0)	(\$15.5)	\$31.7	\$85.6	\$83.7	(\$12.0)	(\$19.0)	\$31.7	\$91.6	\$92.4	\$68.9
Investing cash flows																	
Proceeds from marketable securities	\$194.2	\$36.0	\$193.4	\$26.8	\$110.8	\$367.0	\$68.4										
Purchases of marketable securities	(\$173.5)	(\$173.4)	(\$48.3)	(\$61.3)	(\$47.8)	(\$330.8)	(\$1.9)										
Cash paid for technology acquisitions	(\$783.7)	\$0.0	(\$24.7)	(\$67.6)	\$0.0	(\$92.3)	\$0.0										
Capitalization of software development costs	(\$67.3)	(\$12.8)	(\$27.6)	(\$22.9)	(\$17.7)	(\$81.0)	(\$30.1)	(\$23.8)	(\$25.5)	(\$25.5)	(\$105.0)	(\$20.1)	(\$21.0)	(\$21.3)	(\$21.0)	(\$83.4)	(\$84.3)
Purchases of property and equipment	(\$28.0)	(\$7.8)	(\$6.0)	(\$4.1)	(\$4.2)	(\$22.1)	(\$5.0)	(\$8.0)	(\$8.0)	(\$8.0)	(\$29.0)	(\$8.0)	(\$8.0)	(\$8.0)	(\$8.0)	(\$32.0)	(\$32.0)
Other investing activities	\$6.4	\$0.0		\$0.0	(\$0.1)	(\$0.1)	\$1.0										
Net cash flow from investing	(\$851.9)	(\$158.0)	\$86.8	(\$129.1)	\$41.0	(\$159.3)	\$32.4	(\$31.8)	(\$33.5)	(\$33.5)	(\$134.0)	(\$28.1)	(\$29.0)	(\$29.3)	(\$29.0)	(\$115.4)	(\$116.3)
Financing cash flows																	
Treasury stock acquired	(\$330.0)	(\$50.0)	(\$75.0)	(\$75.0)	(\$75.1)	(\$275.1)	(\$149.0)	(\$100.0)	(\$100.0)	(\$100.0)	(\$449.0)	(\$100.0)	(\$100.0)	(\$100.0)	(\$100.0)	(\$400.0)	(\$400.0)
Proceeds from stock options and other	\$101.8	\$17.5	\$29.9	\$20.4	\$21.4	\$89.2	\$11.2										
Proceeds from issuance of debt	\$295.6	\$0.0		\$42.0	\$0.0	\$42.0											
Excess tax benefit from stock option	\$24.1	\$1.7	\$3.7	\$4.3	\$4.0	\$13.7	\$2.9										
Payments on capital leases	(\$17.9)	(\$3.7)	(\$5.9)	(\$3.5)	(\$2.4)	(\$15.5)	(\$3.0)										
Repurchase of stock (employee tax withholding)	(\$16.2)	(\$4.9)	(\$2.4)	(\$1.1)	(\$4.6)	(\$13.0)	(\$10.7)										
Proceeds from sale-leaseback	\$0.0	\$0.0				\$0.0											
Repayment of debt acquired	\$0.0	\$0.0				\$0.0											
Net cash flow from financing	\$57.4	(\$39.4)	(\$49.7)	(\$12.9)	(\$56.7)	(\$158.7)	(\$148.6)	(\$100.0)	(\$100.0)	(\$100.0)	(\$449.0)	(\$100.0)	(\$100.0)	(\$100.0)	(\$100.0)	(\$400.0)	(\$400.0)
Effect of F/X	(\$74.6)	\$15.8	\$10.3	\$0.5	\$1.3	\$27.9	(\$9.8)				(\$9.8)					\$0.0	\$0.0
Net increase in cash & equivalents	(\$291.7)	(\$109.5)	\$140.8	\$24.9	\$319.6	\$345.3	\$29.5	(\$40.0)	\$68.1	\$132.2	\$121.9	\$40.4	(\$26.2)	\$81.9	\$157.2	\$253.3	\$302.5

Source: Citi Investment Research and Analysis

Company Focus

Initiation of coverage ☒

Hold/Medium Risk	2M
Price (03 Sep 10)	US\$19.09
Target price	US\$20.00
Expected share price return	4.8%
Expected dividend yield	0.8%
Expected total return	5.6%
Market Cap	US\$9,850M

Price Performance (RIC: CA.O, BB: CA US)



CA Inc. (CA)

Transforming the company or trying too hard to grow?

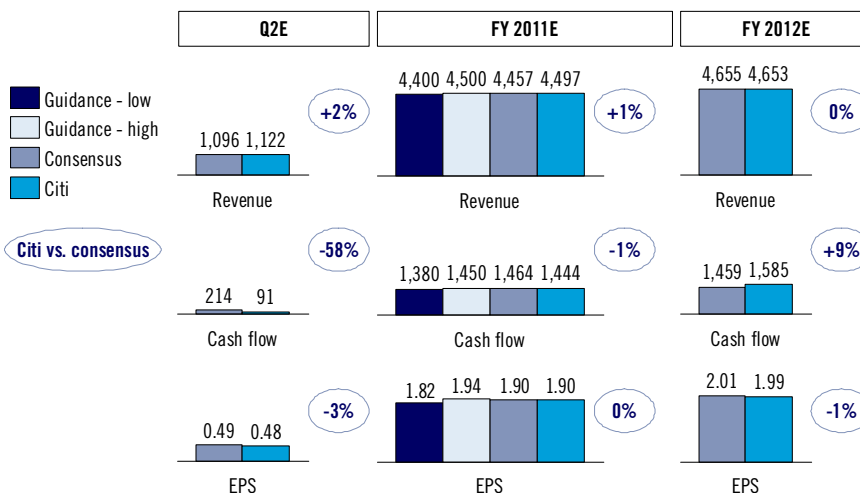
- **Initiating coverage with Hold rating (2M) and \$20 price target** — Shares are mostly viewed as defensive and as a result are out of favor. Our \$20 price target is based on 10x our F12 estimate, which is a discount to peer BMC, but in line with recent history vs. the market.
- **Stable mainframe business is a great foundation** — CA is the #2 mainframe software vendor (after IBM). IBM's new mainframe should reverse five quarters of capacity shipment declines and reinvigorate the base medium and long-term. CA faces a tailwind near-term in the renewal portfolio and while near-term oscillations here don't impact long-term value, many investors view lack of bookings growth as a sign of negative momentum.
- **Disparate product portfolio makes incremental leverage difficult** — The company is undergoing another effort to focus its product and sales organization on fewer products concentrated around five go-to-market areas. We continue to see a long-term challenge as revenue from many small products has negative profitability implications.
- **We have mixed views of recent growth ambitions** — New management is focused more aggressively on growth through investing in cloud and virtualization-oriented businesses as well as making a push down-market. We struggle with whether the company is over-investing in growth.
- **Momentum in the numbers stunted this year by M&A; long-term goals appear high** — We don't see near-term upside to numbers as M&A brings dilution and risk. Longer-term, high single-digit growth goal looks aggressive, although is not tied to any specific time-period so risk of disappointment is low.
- **Our estimates** — We are roughly in-line with Street estimates. Our EPS of \$1.90 in FY11 and \$1.99 in FY11 is at or slightly below consensus. Our cash flow estimates are roughly in line this year but higher next year than consensus.

Fiscal year end 31-Mar	2009	2010	2011E	2012E	2013E
Valuation Ratios					
P/E adjusted (x)	11.1	10.9	10.0	9.6	8.9
EV/EBITDA adjusted (x)	5.2	5.0	4.6	4.2	3.7
P/BV (x)	2.3	2.0	1.8	1.6	1.4
Dividend yield (%)	0.0	0.0	0.0	0.0	0.0
Per Share Data (US\$)					
EPS adjusted	1.73	1.75	1.90	1.99	2.14
EPS reported	1.26	1.45	1.61	1.66	1.84
BVPS	8.48	9.68	10.89	12.17	13.64
DPS	0.00	0.00	0.00	0.00	0.00
Profit & Loss (US\$M)					
Net sales	4,271	4,353	4,497	4,653	4,856
Operating expenses	-3,043	-3,040	-3,207	-3,298	-3,375
EBIT	1,228	1,313	1,290	1,355	1,481
Net interest expense	-51	-76	-48	-47	-47
Non-operating/exceptionals	-101	-66	-6	-20	-20
Pre-tax profit	1,076	1,171	1,236	1,288	1,414
Tax	-398	-400	-396	-423	-456
Extraord./Min.Int./Pref.div.	0	0	-6	0	0
Reported net income	678	771	834	864	958
Adjusted earnings	927	935	988	1,036	1,118
Adjusted EBITDA	1,806	1,829	1,910	1,975	2,049
Growth Rates (%)					
Sales	-0.1	1.9	3.3	3.5	4.4
EBIT adjusted	15.1	-0.3	0.6	4.7	6.7
EBITDA adjusted	12.6	1.3	4.4	3.4	3.8
EPS adjusted	25.2	1.6	8.5	4.6	7.7
Cash Flow (US\$M)					
Operating cash flow	1,212	1,360	1,443	1,585	1,678
Depreciation/amortization	274	301	373	364	331
Net working capital	102	82	28	261	294
Investing cash flow	-284	-888	-671	-630	-580
Capital expenditure	-83	-79	-85	-100	-100
Acquisitions/disposals	-76	-617	-393	-350	-300
Financing cash flow	-759	-705	-286	-282	-282
Borrowings	-679	-412	-3	0	0
Dividends paid	-83	-83	-82	-82	-82
Change in cash	-83	-129	413	673	816
Balance Sheet (US\$M)					
Total assets	11,241	11,838	12,431	13,393	14,508
Cash & cash equivalent	2,712	2,583	2,996	3,668	4,484
Accounts receivable	839	931	947	971	1,021
Net fixed assets	442	452	414	394	374
Total liabilities	6,879	6,855	6,856	7,141	7,485
Accounts payable	0	0	0	0	0
Total Debt	1,908	1,545	1,558	1,558	1,558
Shareholders' funds	4,362	4,983	5,575	6,252	7,023
Profitability/Solvency Ratios (%)					
EBITDA margin adjusted	42.3	42.0	42.5	42.4	42.2
ROE adjusted	23.0	20.0	18.7	17.5	16.8
ROIC adjusted	23.1	21.2	19.9	20.4	21.6
Net debt to equity	-18.4	-20.8	-25.8	-33.7	-41.7
Total debt to capital	30.4	23.7	21.8	19.9	18.2

For further data queries on Citi's full coverage universe please contact CIRA Data Services Americas at CIRADataServicesAmericas@citi.com or +1-212-816-5336



Figure 48. CIRA vs. Consensus for CA Technologies



Source: Thomson, Citi Investment Research and Analysis

Mainframe business drives stable revenue/ cash flow and could improve near-term

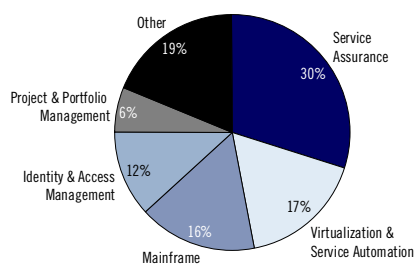
CA's mainframe business comprises ~60% of bookings, bringing a stable base of revenue, which we expect will continue. The company is #2 in the market behind IBM and has products in nearly all areas of the mainframe software market. With better execution instilled into this business over the last three years through a more rigorous contract renewal process and predictable product delivery schedule, we expect that that CA's mainframe business can grow at or ahead of the market. Part of the benefit may still be to come in terms of improvements the company has made to the management interface of its mainframe products. Dubbed "Mainframe Software Manager" (MSM), the company has spent time making the tools easier for new users to interact with and also dramatically reduced installation time. MSM was included for free with all products. The company will also shortly release a new user interface framework called "Chorus". CA has noted it will charge for Chorus although details of this have yet to be released. Historically, it has been difficult for a vendor to get paid for a new user interface and thus our expectations around Chorus as a revenue catalyst are near-zero. However we would expect that Chorus will help enable the company further demonstrate value and better enable CA to push through the 5% price increase that went into effect July 1st.

As noted in our discussion above, we see several positive drivers in the mainframe business overall that should benefit CA specifically during the second half of the company's fiscal year (December and March quarters). Additionally, our analysis suggests that CA has historically outperformed in the twelve months following an IBM mainframe platform launch. We note there is very little short-term revenue correlation between IBM mainframe hardware revenue or MIPS (capacity metric) and CA's mainframe software bookings, suggesting no real fundamental reason for correlation. Instead, the general excitement about the new platform and specifically early cycle IBM MIPS growth likely draw investor attention to the generally under-appreciated resilience and profitability of the mainframe revenue stream.

Overall, we believe near-term mainframe dynamics as a positive driver for the shares and in isolation, would be a reason to own the stock for the next 12 months.

Disparate product portfolio makes leverage difficult

Figure 49. CA's FY10 new product sales excluding Mainframe capacity



Source: Company presentation, May 2010

Of CA's \$4.2B in product revenue, we estimate about \$2.5B to be in mainframe and \$1.7B to be in distributed (non-mainframe platforms). The company's product lines in both areas have been built through decades of acquisitions. The \$1.7B in distributed revenue is spread across a number of markets and individual product areas including network management, systems management, change control and automation, application performance management, access and identity management and project and portfolio management (PPM). In mainframe, where early acquisition activity was concentrated, there is also fragmentation of the product line, although in a more subtle way. For example, the company is #1 in the enterprise job scheduling market, but has multiple products in this market that came to the company through a variety of acquisitions. With costs somewhat fixed on a per product basis, CA's share in job scheduling likely leads to margins that are lower than would be the case if there was more concentration of revenue per product. We believe this is a key reason that we estimate CA's operating margins in both mainframe and distributed to be lower than peer BMC, despite the revenue base being larger in absolute terms.

Overall, the company has made significant strides in sorting through the product line to focus on consolidating similar products and putting sub-scale products into maintenance mode. In FY11, the company has articulated a plan to move meaningful portions of R&D investment away from sustaining development on the breadth of the portfolio and into new product development. Complicating this is a relatively healthy volume of M&A that works counter to product line consolidation, bringing on new, smaller product lines that are a drag on profitability. In the end-state, despite strides by management to streamline the business, we believe the company is left with one of the more diverse lineup of products that is more expensive to support, even if done very efficiently.

From a go-to-market perspective, a diverse product line also creates some complications. The company has addressed some of this challenge by making decisions across the portfolio to focus the sales force on the most fruitful opportunities. Complicating this though is the fact that some of the distributed products are sold to different buyers (I&AM and PPM) and nearly all require some unique skill set for a sales person to be successful at selling. We believe this presents a structural challenge from the sales force that is not easily mitigated through simply optimizing the existing organization. The result is a large population of overlay sales reps, which focus on various subsets of the product line. We estimate the company has among the greatest proportion of overlay reps among our software universe. These reps need to be compensated along side traditional coverage reps, which focus on named accounts or geographic territories.

Since 2006, the company has been in the midst of a transition in sales culture in which sales reps were turned over and replaced with reps that were more adept at selling the value of solutions in the distributed management space. Along the way, the company segmented its mainframe renewal business in order to concentrate on maintaining this base, without compromising the potential growth opportunity in the distributed management space. It had been our view that the company was mostly through this process, although in the last six months, the company has further focused into “customer service units” (CSUs) in order to focus on various product segments that are related. While we are optimistic that the CSU structure can drive further efficiencies, our conclusion remains that the overall profile of the company (many products in different areas) makes it difficult to achieve the sorts of efficiencies of many of CA’s peer companies.

We have mixed views of recent growth ambitions

The company underwent a partial management transition in late 2009. We are not entirely sure of the driver of the management change; however, the result was the departure of CEO John Swainson and ultimately the departure of COO Michael Christenson. Chairman Bill McCracken assumed the CEO role on an interim basis and after an outside search, took the job on a permanent basis. Most of the tier of management below Swainson and Christenson are still with the company, although many have been moved into new roles.

Since this management transition began in late 2009, the company has embarked on an effort to increase the underlying growth rate of the business. Much of this has happened through acquisitions of companies related to cloud computing, an organic investment in developing products for virtualization and also a focus on enabling CA to move downstream towards selling into companies where the company has minimal representation today.

Figure 50. Overview of CA customer segments

Targeting Emerging Enterprises – our available market			
Customer Segment	Number of Companies WW	Total Incremental Growth of Available Market 2008-2013	
Mega-Global >\$10B Revenue	959	\$3.0B	<ul style="list-style-type: none"> Investing in Channel Partners Investing in Managed Service Providers Investing in SaaS delivery model
Global \$2B – \$10B Revenue	2,781	\$3.0B	
Emerging Enterprise \$300M – \$2B Revenue	14,325	\$4.0B	
SMB & Consumer > \$300M Revenue	6,000,000+	\$6.0B	

Source: CA Estimates

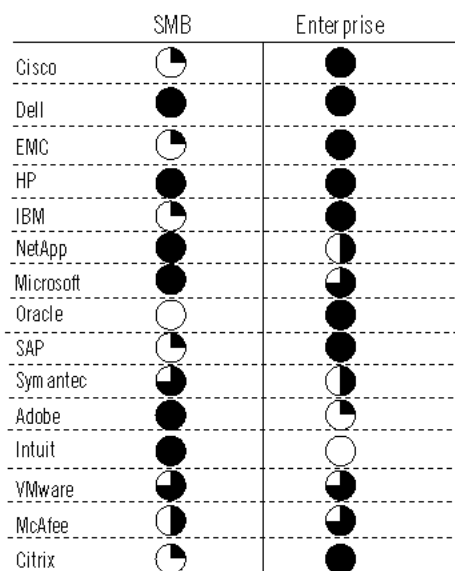
Source: Company presentation, May 2010

We have a skeptical view of the company's ability to drive accelerated growth through the investments that are under way. Under various management teams, the company has been focused on driving growth in a similar manner, but with mixed success both in new growth markets as well as down-market into smaller customers. As we alluded to above, we believe the challenges in driving meaningful growth are more cultural and structural in nature for CA. The company is attempting to overcome these historical issues by separating the cloud and channel groups into their own organizations.

The growth markets of virtualization and cloud computing bring some inherent challenges for all incumbents in the software industry. As noted above, VMware and even Microsoft are taking more than their fair share of the value traditionally provided by management software companies. Nevertheless, we believe CA needs to "virtualization-enable" its products and we view the chosen organic strategy as the right one. The cloud opportunity may be massive but like virtualization, the cloud platform providers will likely embed a high base level of management into the platform. Furthermore, we expect cloud computing to first be employed by smaller companies or companies in situations that require very dynamic IT capacity (online merchants for example). This smaller customer has not historically been CA's mainstay customer. The recent foray downstream in the market has been lead by the acquisition of Nimsoft which had a strong base of managed service provider customers. These MSPs each serve dozens to thousands of customers, mostly small businesses that don't have the resources to support an enterprise-class IT department. We believe the strategy of accessing the low-end through MSPs markets sense. However we question whether this is the highest-return investment for CA, given its historical roots in large companies and what we see as ample opportunity to drive modest growth within this customer segment. More likely, we see companies such as Solarwinds, Quest Software, Dell (Kace acquisition) and Symantec (Altiris) as best positioned to address the low end of the management software market.

We note very few technology companies that have been able to be successful with all customers types. At the extremes, Oracle has consistently noted that it is not interested in selling into the SMB market where its large direct sales force cannot efficiently operate. Likewise, Intuit lets customers outgrow its low-end "Quickbooks" solution and doesn't go up-market where it would have to hire direct sales representatives to pursue customers. In between these two, only a handful of very large companies have been truly successful at selling to all customers types.

Figure 51. Assessment of success in penetrating SMB and enterprise segments

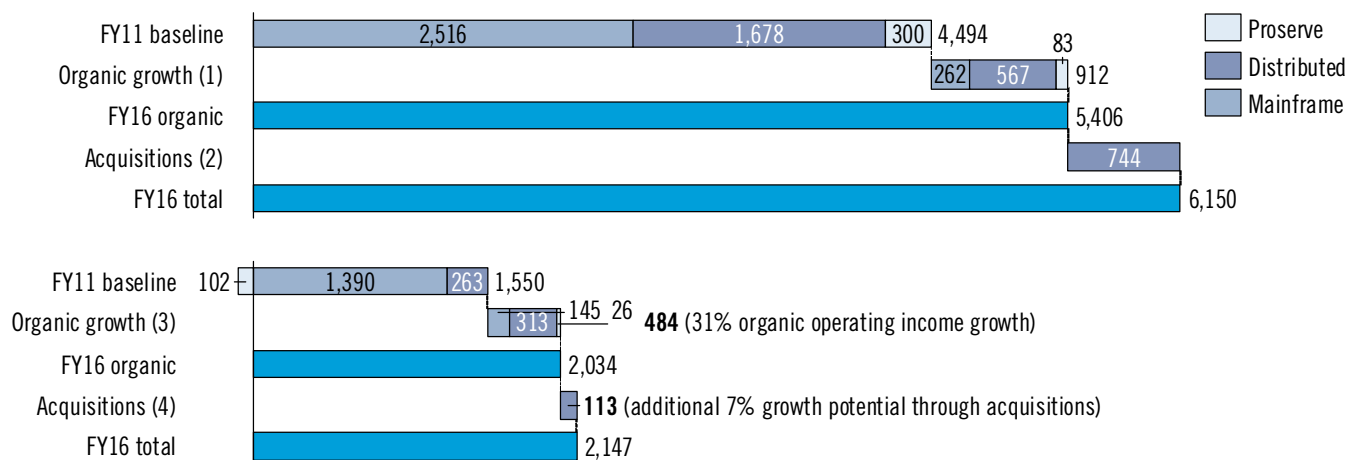


Source: Citi Investment Research and Analysis

Impact of accelerated M&A

The company has increased its M&A activity over the last year in order to accelerate entry into new markets. To be clear, the company has not articulated that it intends to continue to do M&A at an accelerated pace in FY12 and beyond. However, in order to evaluate the company's prospects of driving value with accelerated investment, particularly through M&A, we have constructed two scenarios showing the five year impact of organic growth vs. organic growth augmented with acquisition. The purpose of the exercise was to evaluate the relative contribution to operating profits of organic growth vs. the augmentation with acquisitions. We aren't suggesting that the company pursues either strategy specifically (pure organic or \$300-500M in annual M&A), but instead a blend is more likely.

Figure 52. Illustrative example of CA FY16 revenue and operating margins



Source: Citi Investment Research and Analysis

(1) Assumes 2% CAGR for Mainframe, 6% CAGR for Distributed, and 5% CAGR for Proserve

(2) Assumes 4x revenue multiple paid, \$400M spent per year through FY16, and 20% CAGR on acquired revenue.

(3) Assumes 55% operating margin for mainframe with no change from FY11-FY16, 16% operating margin for Distributed increasing to 26% by FY16, and -34% operating margin for Proserve, improving to -20%.

(4) Assumes 0% operating margin for acquired revenue, trending toward 26% operating margin over 4 years.

Our conclusion is that the company could deliver nearly \$500M in incremental operating profits in FY16 through simply organically investing in the business. Through an aggressive acquisition strategy in which smaller, faster growing (but less profitable) companies are acquired to augment the growth potential of the distributed business, we see the potential to deliver just over \$100M in further incremental profits in FY16 over FY11 levels. While incremental profits are positive, we believe the relative scale of the contribution (just over \$100M) does not justify the significant capital that must be expended to drive this incremental profit (we are assuming acquisitions are done at historical 4x revenue). Also, M&A is fraught with risk and while the company has had some notable home runs (Wily, Netegrity), the overall strategy has not thus far accelerated growth into the range that management is currently targeting.

Momentum in the numbers stunted this year by M&A; long-term goals appear high

Our CA estimates are relatively inline to slightly below the street. We project \$1.90 in EPS for FY11 vs. \$1.90 consensus and guidance of \$1.82 to \$1.94. Numbers for the company in general aren't dynamic in the short-term, as revenue comes primarily from long-term bookings and these bookings generally come from a stable portfolio of contracts that have a high degree of renewal certainty. There is some volatility in bookings from new product orders, however, due to ratable revenue accounting, even this volatility is relatively smoothed.

This relative stability of the business causes investors to look elsewhere for acceleration trends. In FY11, any momentum in the numbers is stunted by the handful of acquisitions completed during the second half of FY10 and into FY11. As a result of these dynamics in the numbers, we believe investors should look elsewhere for positive numbers revisions. Specifically, we'd prefer to play BMC as we believe it is more likely we see upward estimate revisions in FY11.

Beyond FY11, CA management has outlined a series of long-term goals to give investors a view into the long-term financial profile of the company. We understand from talking with company management these goals aren't pinned to a specific timeframe, although in our view, it would be hard to believe long term is defined as more than five years.

Figure 53. CA FY11 and long-term guidance

	FY11 Guidance	Long-Term Guidance
Total Revenue	3% - 5%*	High single digits
Non-GAAP EPS	7% - 11%*	Mid to high teens
Cash Flow from Operations	2% - 7%*	Mid to high teens
Non-GAAP Operating Margin	34% - 35%	To exceed 34%-36%
GAAP & Non-GAAP Tax Rate	33% - 34%	Low 30%

Source: Company presentation, May 2010

We believe these long-term goals are somewhat aggressive and furthermore, it appears that a significant driver of the EPS and cash flow growth is non-operational (taxes, share buybacks). As a result, we believe investors will give less credit than what is in guidance for earnings and cash flow growth.

We'd become relatively more bullish on CA with a more negative macro scenario

Management software names outperform in bear markets (post-2000 and late 2008/early 2009) because their subscription software model acts as a cushion. The lack of volatility in mainframe software revenue is a positive virtue in the face of macro instability. The financial services industry is among the largest users of mainframe technology. Even during the financial services led downturn of 2008-9 where a number of large mainframe customers (such as Freddie Mac, AIG, Merrill Lynch, Wells Fargo and Bear Stearns) were significantly disrupted, the bookings, billings and revenue stream from these customers were virtually uninterrupted. As a result, we would view significant signs of stagnation or decline of worldwide GDP as a catalyst to flock to the defensive characteristics of CA's business.

Our estimates

Figure 54. Summary of CIRA estimates – CA Technologies

	FY10A	FY11E	FY12E	Key assumptions for FY11 and FY12
Total revenue	\$4.4B	\$4.5B	\$4.7B	■ In the range of revenue guidance for FY11
Y/Y growth	2%	3%	3%	
Subscription and maintenance	\$3.9B	\$3.9B	\$4.0B	■ Stability from prior period bookings
Y/Y growth	3%	1%	2%	
Software fees and other	\$174M	\$242M	\$290M	■ Increase in stand-alone sales (primarily acquired company revenue in off-ELA sales cycles)
Y/Y growth	23%	39%	20%	
Gross margins %	87%	87%	87%	■ Some improvement in Proserve partially offset by mix shift
Operating expenses (non-GAAP)	\$2.9B	\$3.0B	\$3.1B	■ Restructuring offset by growth in expense base due to M&A, investment in key product areas
Y/Y growth	2%	3%	3%	
Operating margin % (non-GAAP)	34%	34%	34%	■ Excludes ~\$60M/year in stock-based comp
Other income / expense	-\$41M	-\$48M	-\$47M	■ Interest expense on Senior Notes offset by \$6M/quarter in interest income
Tax rate	33.5%	33.4%	32.9%	■ Gradual improvement resulting from efforts to increase tax efficiency
Diluted Share outstanding (in millions)	533	519	521	■ 3M/quarter share creep offset by \$50M/quarter in buybacks
EPS	\$1.75	\$1.90	\$1.99	■ Some dilution from M&A deals
Y/Y growth	2%	8%	5%	
Billings	\$4.5B	\$4.7B	\$4.9B	■ Steady drawdown of backlog
Y/Y growth	4%	4%	3%	
Operating cash flow	\$1.4B	\$1.4B	\$1.6B	
Y/Y growth	12%	6%	10%	
Bookings	\$5.0B	\$4.7B	\$4.9B	■ Improvement in the renewal portfolio available for renewal starting in H2FY11
Y/Y growth	-5%	-5%	3%	

Source: Citi Investment Research and Analysis

Figure 55. Income Statement– CA Technologies (in \$ millions unless otherwise stated)

(FY End: March)	F09A	Jun 09A	Sep 09A	Dec 09A	Mar 10A	F10A	Jun 10A	Sep 10E	Dec 10E	Mar 11E	F11E	Jun 11E	Sep 11E	Dec 11E	Mar 12E	F12E	F13E
Subscription and maintenance revenue	3,772	946	973	1,000	968	3,887	961	983	1,000	987	3,931	980	1,002	1,020	1,007	4,010	4,130
% Y/Y	0.3%	-2.0%	-0.2%	8.8%	6.0%	3.0%	1.6%	1.0%	0.0%	2.0%	1.1%	2.0%	2.0%	2.0%	2.0%	2.0%	3.0%
% Q/Q		3.6%	2.9%	2.8%	-3.2%		-0.7%	2.3%	1.8%	-1.3%		-0.7%	2.3%	1.8%	-1.3%		
% of revenue	88.3%	90.1%	90.8%	88.7%	87.8%	89.3%	88.1%	87.6%	87.1%	86.9%	87.4%	86.7%	86.5%	86.1%	85.5%	86.2%	85.0%
Professional services	358	71	71	74	76	292	78	80	83	84	324	85	87	90	91	353	381
% Y/Y	-6.5%	-23.7%	-24.5%	-14.9%	-9.5%	-18.4%	9.9%	12.0%	12.0%	10.0%	11.0%	9.0%	9.0%	9.0%	9.0%	9.0%	8.0%
% Q/Q		-15.5%	0.0%	4.2%	2.7%		2.6%	1.9%	4.2%	0.9%		1.7%	1.9%	4.2%	0.9%		
% of revenue	8.4%	6.8%	6.6%	6.6%	6.9%	6.7%	7.1%	7.1%	7.2%	7.4%	7.2%	7.5%	7.5%	7.6%	7.7%	7.6%	7.9%
Software fees and other	141	33	28	54	59	174	52	60	65	65	242	65	70	75	80	290	345
% Y/Y	6.8%	13.8%	-26.3%	50.0%	55.3%	23.4%	57.6%	114.3%	20.4%	10.2%	39.1%	25.0%	16.7%	15.4%	23.1%	19.8%	19.0%
% Q/Q		-13.2%	-15.2%	92.9%	9.3%		-11.9%	15.4%	8.3%	0.0%		0.0%	7.7%	7.1%	6.7%		
% of revenue	3.3%	3.1%	2.6%	4.8%	5.3%	4.0%	4.8%	5.3%	5.7%	5.7%	5.4%	5.8%	6.0%	6.3%	6.8%	6.2%	7.1%
Total revenue	4,271	1,050	1,072	1,128	1,103	4,353	1,091	1,122	1,148	1,136	4,497	1,130	1,159	1,185	1,178	4,653	4,856
% Y/Y	-0.1%	-3.4%	-3.2%	8.3%	6.6%	1.9%	3.9%	4.7%	1.8%	3.0%	3.3%	3.6%	3.3%	3.3%	3.7%	3.5%	4.4%
% Q/Q		1.4%	2.1%	5.2%	-2.2%		-1.1%	2.9%	2.3%	-1.0%		-0.5%	2.6%	2.3%	-0.6%		
Cost of licensing and maintenance	(290)	(65)	(72)	(73)	(85)	(295)	(76)	(74)	(75)	(74)	(299)	(74)	(75)	(77)	(76)	(301)	(310)
Cost of professional services	(308)	(66)	(59)	(66)	(68)	(259)	(70)	(69)	(72)	(73)	(284)	(74)	(75)	(79)	(79)	(307)	(332)
Total cost of revenue	(598)	(131)	(131)	(139)	(153)	(554)	(146)	(143)	(147)	(147)	(583)	(147)	(151)	(155)	(155)	(608)	(642)
Gross profit	3,673	919	941	989	950	3,799	945	979	1,001	989	3,914	983	1,008	1,030	1,023	4,045	4,215
% of revenue	86.0%	87.5%	87.8%	87.7%	86.1%	87.3%	86.6%	87.3%	87.2%	87.1%	87.0%	87.0%	87.0%	86.9%	86.9%	86.9%	86.8%
Cost of Licensing and maintenance %	7.7%	6.9%	7.4%	7.3%	8.8%	7.6%	7.9%	7.5%	7.5%	7.5%	7.6%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%
Cost of Professional services %	86.0%	93.0%	83.1%	89.2%	89.5%	88.7%	89.7%	87.0%	87.0%	87.0%	87.7%	87.0%	87.0%	87.0%	87.0%	87.0%	87.0%
Sales and marketing	(1,184)	(273)	(277)	(308)	(333)	(1,191)	(292)	(297)	(300)	(305)	(1,195)	(305)	(310)	(313)	(319)	(1,247)	(1,299)
% of revenue	27.7%	26.0%	25.8%	27.3%	30.2%	27.4%	26.8%	26.5%	26.2%	26.9%	26.6%	27.0%	26.8%	26.4%	27.1%	26.8%	26.8%
General and administrative	(440)	(98)	(110)	(122)	(108)	(438)	(113)	(114)	(115)	(112)	(455)	(113)	(116)	(117)	(117)	(463)	(483)
% of revenue	10.3%	9.3%	10.3%	10.8%	9.8%	10.1%	10.4%	10.2%	10.0%	9.9%	10.1%	10.0%	10.0%	9.9%	9.9%	9.9%	9.9%
Product development and enhancements	(455)	(114)	(109)	(113)	(118)	(454)	(122)	(129)	(133)	(131)	(515)	(126)	(130)	(133)	(132)	(520)	(525)
% of revenue	10.7%	10.9%	10.2%	10.0%	10.7%	10.4%	11.2%	11.5%	11.6%	11.5%	11.5%	11.1%	11.2%	11.2%	11.2%	11.2%	10.8%
Amortization of capitalized software costs	(68)	(20)	(21)	(21)	(23)	(85)	(23)	(28)	(28)	(28)	(106)	(26)	(26)	(26)	(26)	(104)	(90)
Depreciation and amortization of other intangible asset:	(96)	(25)	(26)	(26)	(28)	(105)	(28)	(28)	(28)	(28)	(112)	(30)	(30)	(30)	(30)	(120)	(120)
Other (gains) expenses, net	1	0	(5)	(3)	(6)	(14)	(3)	0	0	0	(3)	0	0	0	0	0	0
Restructuring and other	0	0	0	0	(50)	(50)	3	0	0	0	3	0	0	0	0	0	0
Total operating expenses	(2,840)	(661)	(679)	(732)	(819)	(2,891)	(724)	(740)	(751)	(751)	(2,965)	(747)	(762)	(775)	(778)	(3,063)	(3,159)
Operating income (pro-forma)	1,431	362	367	374	257	1,462	367	382	397	385	1,532	383	397	411	400	1,590	1,698
% of revenue	33.5%	37.0%	36.7%	35.1%	25.7%	33.6%	33.6%	34.1%	34.6%	33.9%	34.1%	33.9%	34.2%	34.6%	34.0%	34.2%	35.0%
Y/Y change	18.9%	6.0%	6.8%	10.6%	-16.0%	2.2%	-5.7%	-2.7%	0.3%	35.6%	4.8%	4.3%	3.7%	3.4%	3.9%	3.8%	6.8%
Q/Q change		15.1%	1.0%	0.8%	-28.3%		29.2%	4.2%	3.8%	-3.1%		-0.6%	3.6%	3.5%	-2.6%		
Other income																	
Interest expense, net	(51)	(17)	(22)	(23)	(14)	(76)	(13)	(12)	(12)	(12)	(48)	(12)	(12)	(12)	(12)	(47)	(47)
Interest on dilutive convertible bonds	34	10	14	11	0	35	0				0					0	0
Other Adjustments																	
Total other income	(17)	(7)	(8)	(12)	(14)	(41)	(13)	(12)	(12)	(12)	(48)	(12)	(12)	(12)	(12)	(47)	(47)
Pre-tax income	1,414	382	385	384	270	1,421	354	371	385	373	1,484	371	385	399	388	1,543	1,651
Income taxes (non-GAAP)	(487)	(136)	(137)	(136)	(77)	(486)	(119)	(124)	(129)	(123)	(496)	(122)	(127)	(132)	(126)	(507)	(532)
Tax rate % (non-GAAP)	34.4%	35.6%	35.6%	35.4%	28.5%	34.2%	33.6%	33.5%	33.5%	33.0%	33.4%	33.0%	33.0%	33.0%	32.5%	32.9%	32.2%
Non-GAAP Net Income	927	246	248	248	193	935	235	247	256	250	988	249	258	267	262	1,036	1,118
% of revenue																	
Basic shares outstanding (average)	513	519	518	515	515	515	510	510	511	511	511	511	512	512	513	512	514
Diluted shares outstanding (average)	537	540	542	535	514	533	519	519	519	520	519	520	520	521	521	521	522
Diluted Earnings per share	\$1.73	\$0.46	\$0.46	\$0.46	\$0.38	\$1.75	\$0.45	\$0.48	\$0.49	\$0.48	\$1.90	\$0.48	\$0.50	\$0.51	\$0.50	\$1.99	\$2.14

Source: Citi Investment Research and Analysis

Figure 56. Balance Sheet – CA Technologies (in \$ millions unless otherwise stated)

(FY End: March)	F09A	Jun 09A	Sep 09A	Dec 09A	Mar 10A	F10A	Jun 10A	Sep 10E	Dec 10E	Mar 11E	F11E	Jun 11E	Sep 11E	Dec 11E	Mar 12E	F12E	F13E
Cash and cash equivalents	2,712	2,979	3,025	2,624	2,583	2,583	2,476	2,231	2,433	2,996	2,996	2,925	2,900	3,116	3,668	3,668	4,484
Trade and installment accounts receivable, net	839	662	718	932	931	931	638	732	898	947	947	745	756	928	971	971	1,021
Deferred income taxes – current	513	533	482	518	360	360	260	260	260	260	260	260	260	260	260	260	260
Other current assets	105	126	134	144	116	116	219	219	219	219	219	219	219	219	219	219	219
Total current assets	4,169	4,300	4,359	4,218	3,990	3,990	3,593	3,442	3,810	4,421	4,421	4,149	4,135	4,523	5,118	5,118	5,985
Installment accounts receivable, due after one year, net	128	83	84	46	46	46	0	0	0	0	0	0	0	0	0	0	0
Property, plant and equipment	442	466	462	454	452	452	438	430	422	414	414	409	404	399	394	394	374
Goodwill	5,364	5,366	5,366	5,513	5,667	5,667	5,567	5,667	5,717	5,767	5,767	5,811	5,855	5,898	5,942	5,942	6,092
Capitalized software and other intangible assets, net	725	718	722	786	1,150	1,150	1,190	1,270	1,298	1,325	1,325	1,355	1,383	1,410	1,436	1,436	1,555
Deferred income taxes – noncurrent	268	262	269	234	355	355	313	313	313	313	313	313	313	313	313	313	313
Other noncurrent assets, net	145	147	139	143	178	178	190	190	190	190	190	190	190	190	190	190	190
Total assets	11,241	11,342	11,401	11,394	11,838	11,838	11,291	11,312	11,750	12,431	12,431	12,226	12,279	12,733	13,393	13,393	14,508
Current portion of long-term debt and loans payable	621	631	643	15	15	15	15	15	15	15	15	15	15	15	15	15	15
Deferred revenue (billed or collected) – current	2,431	2,319	2,186	2,287	2,555	2,555	2,276	2,239	2,373	2,590	2,590	2,361	2,322	2,503	2,713	2,713	2,849
Deferred maintenance revenue																	
Financing Obligations																	
Deferred income taxes – current	40	47	50	50	51	51	47	47	47	47	47	47	47	47	47	47	47
Other current liabilities	935	787	812	874	967	967	700	647	729	982	982	934	870	915	1,122	1,122	1,278
Current liabilities	4,027	3,784	3,691	3,226	3,588	3,588	3,038	2,948	3,164	3,634	3,634	3,358	3,254	3,480	3,897	3,897	4,188
Long-term debt, net of current portion	1,287	1,288	1,291	1,530	1,530	1,530	1,543	1,543	1,543	1,543	1,543	1,543	1,543	1,543	1,543	1,543	1,543
Deferred income taxes – noncurrent	136	120	121	121	134	134	133	133	133	133	133	133	133	133	133	133	133
Deferred revenue (billed or collected) – noncurrent	1,000	1,113	1,065	1,006	1,068	1,068	962	915	969	1,033	1,033	941	926	973	1,055	1,055	1,108
Deferred maintenance revenue																	
Financing obligations																	
Other noncurrent liabilities	429	417	423	491	535	535	513	513	513	513	513	513	513	513	513	513	513
Total liabilities	6,879	6,722	6,591	6,374	6,855	6,855	6,189	6,051	6,322	6,856	6,189	6,488	6,369	6,642	7,141	6,189	6,189
Shareholder's equity	4,362	4,620	4,810	5,020	4,983	4,983	5,102	5,260	5,428	5,575	5,575	5,738	5,910	6,091	6,252	6,252	7,023
Total liabilities and shareholder's equity	11,241	11,342	11,401	11,394	11,838	11,838	11,291	11,312	11,750	12,431	12,431	12,226	12,279	12,733	13,393	13,393	14,508

Source: Citi Investment Research and Analysis

Figure 57. Cash Flow Statement – CA Technologies (in \$ millions unless otherwise stated)

(FY End: March)	F09A	Jun 09A	Sep 09A	Dec 09A	Mar 10A	F10A	Jun 10A	Sep 10E	Dec 10E	Mar 11E	F11E	Jun 11E	Sep 11E	Dec 11E	Mar 12E	F12E	F13E
Operating activities:																	
Net income	678	195	218	257	101	771	217	207	216	194	834	211	219	227	207	864	958
Loss from discontinued ops																	
Adjustments																	
Depreciation and amortization	274	73	73	74	81	301	89	93	95	96	373	89	91	92	93	364	331
Provision for deferred income taxes	(49)	6	62	(16)	16	68	116	0	0	0	116	0	0	0	0	0	0
Provision for bad debts	15	0	3	0	3	6	3				3						
Non-cash charge for in-process R&D																	
Share-based compensation expense	104	33	26	22	27	108	19	22	22	24	87	23	23	24	25	95	95
Shareholder litigation settlement																	
Amortization of discount on convertible debt	19		12	9	0	21	0	0	0	0	0	0	0	0	0	0	0
Charge for impairment of assets	2																
Loss/gain on sale of assets (marketable securities, et	0	1	1	1	10	13	5	0	0	0	5	0	0	0	0	0	0
Foreign currency transaction	67	0	(9)	6	(7)	(10)	(2)	0	0	0	(2)	0	0	0	0	0	0
Changes in other operating assets and liabilities																	
Increase in trade and installment accounts receivable	149	239	(49)	(177)	(4)	9	326	(94)	(166)	(48)	17	201	(11)	(172)	(43)	(24)	(50)
Increase in deferred revenue (billed or collected)	(49)	(94)	(223)	51	360	94	(310)	(85)	189	281	75	(320)	(55)	228	292	145	188
Increase in financing obligations (collected)																	
Decrease in deferred maintenance rev																	
Increase in taxes payable, net	35	(75)	(35)	110	(30)	(30)	(191)				(191)					0	0
(Decrease) increase in accounts payable, accrued ex	(87)	(20)	1	(26)	18	(27)	(4)				(4)					0	0
Increase in accrued salaries, wages and commission	(29)	(63)	19	42	27	25	(105)	20	20	25	(40)	(80)	25	20	30	(5)	(5)
Decrease in accrued restructuring charges	(13)			(7)	28	21	(34)	(10)	(10)	15	(39)	(5)	(5)	(5)	15	0	0
Changes in other operating assets and liabilities	96	(33)	21	(4)	6	(10)	(12)	(63)	72	212	210	38	(85)	31	162	145	161
Net operating cash flow	1,212	262	120	342	636	1,360	117	90	437	798	1,443	157	203	445	780	1,585	1,678
Investing activities:																	
Acquisitions (goodwill, purchased software, other inta	(76)	(3)	(2)	(198)	(414)	(617)	(9)	(200)	(100)	(100)	(409)	(88)	(88)	(88)	(88)	(350)	(300)
Settlements of purchase accounting liabilities	(3)																
Purchases of property and equipment	(83)	(25)	(17)	(15)	(22)	(79)	(25)	(20)	(20)	(20)	(85)	(25)	(25)	(25)	(25)	(100)	(100)
Purchases of marketable securities																	
Sale of marketable securities																	
Decrease in restricted cash																	
Proceeds from sale of assets and sale-leaseback trar	0						16	0	0	0	16	0	0	0	0	0	0
Capitalized software development costs	(129)	(37)	(50)	(46)	(55)	(188)	(42)	(45)	(45)	(45)	(177)	(45)	(45)	(45)	(45)	(180)	(180)
Other investing activities	7	(2)		(1)	(1)	(4)	(16)				(16)						
	(284)	(67)	(69)	(260)	(492)	(888)	(76)	(265)	(165)	(165)	(671)	(158)	(158)	(158)	(158)	(630)	(580)
Financing activities:																	
Dividends paid	(83)	(21)	(21)	(21)	(20)	(83)	(21)	(20)	(20)	(20)	(82)	(20)	(21)	(21)	(21)	(82)	(82)
Debt issuance fees																	
Purchases of common stock	(4)		(45)	(45)	(137)	(227)	(55)	(50)	(50)	(50)	(205)	(50)	(50)	(50)	(50)	(200)	(200)
Debt repayments, net	(679)	(1)	(3)	(406)	(2)	(412)	(3)	0	0	0	(3)	0	0	0	0	0	0
Exercise of common stock options and other	7		2	4	5	11											
Other	0				6	6	4	0	0	0	4	0	0	0	0	0	0
Net financing cash flow	(759)	(22)	(67)	(468)	(148)	(705)	(75)	(70)	(70)	(70)	(286)	(70)	(71)	(71)	(71)	(282)	(282)
Change in cash and cash equivalents (before F/X)	169	173	(16)	(386)	(4)	(233)	(34)	(245)	202	563	486	(71)	(25)	217	552	673	816
Effect of exchange rate changes	(252)	93	63	(15)	(37)	104	(73)	0	0	0	(73)	0	0	0	0	0	0
Change in cash and cash equivalents	(83)	266	47	(401)	(41)	(129)	(107)	(245)	202	563	413	(71)	(25)	217	552	673	816
Cash and equivalents (beginning)	2,796	2,712	2,979	3,025	2,624	2,712	2,583	2,476	2,231	2,433	2,583	2,996	2,925	2,900	3,116	2,996	3,668
Cash and equivalents (ending)	2,712	2,978	3,026	2,624	2,583	2,583	2,476	2,231	2,433	2,996	2,996	2,925	2,900	3,116	3,668	3,668	4,484

Source: Citi Investment Research and Analysis

BMC Software, Inc.

Company description

BMC Software, Inc. sells IT service management software to large enterprises with a focus on the Global 2000. Founded in 1980, BMC's software helps companies manage complex, heterogeneous, and decentralized IT environments with tasks such as workload scheduling, service desk, and change management. In the period before the year 2000, BMC acquired a number of mainframe companies in advance of Y2K remediation. Since then, BMC has expanded its solutions on distributed platforms to include its market-leading Atrium change management database, and it has also acquired key assets such as Remedy (help desk) in 2002 and BladeLogic (server automation) in 2008. BMC has a roughly 11% share of the IT management software market and is headquartered in Houston, Texas.

Investment strategy

We rate BMC a Buy / Medium Risk. We believe BMC's product portfolio, growth potential, and strategic position in management are underappreciated. The company's ESM business is the most attractive in management software, with a high degree of product integration that lets BMC drive more leverage than the typical management company on the treadmill. BMC's growth potential is strong, and the company's growth targets are pragmatic. We believe the Street does not appreciate BMC's latent sales capacity and potential to drive upside. The mainframe business should get a boost from the new IBM mainframe and provides downside protection as the macro environment remains choppy. Finally, we view BMC as the most attractive acquisition candidate to platform vendors who aspire to build out their management offerings.

Valuation

BMC trades roughly in line with the S&P. Our \$45 price target is based on 1) improving fundamentals driven by a new ESM product refresh, a larger renewal portfolio in the back half of FY2011, and a new IBM mainframe cycle and 2) an expanding multiple to take into account increased likelihood of M&A. We place a 14x price target on FY2012 earnings, which gives us a \$45 price target.

Risks

We assign BMC a Medium Risk rating. BMC's mainframe business has long-term contracts that insulate the company from short-term fluctuations in the business cycle. BMC's ESM business carries high earnings risk, since deals are large and upfront, so a handful of deals can make or break the quarter. Risks to our Buy rating and the stock achieving our target price include: delays in ESM deals, weaker bookings than its increasing portfolio of mainframe renewals would suggest, and an acceleration in dilutive M&A.

CA Inc.

Company description

CA Technologies sells software to help manage and secure IT environments. The company was founded in 1976 to sell sorting software for the IBM mainframe. Through a long string of acquisitions in mainframe and distributed platforms, CA has become the second-largest vendor of IT management software with about 13% share of the space. CA's core products include mainframe software, service assurance, service automation, and identity and access management. Most recently, the company has acquired a number of software companies in the cloud computing space. CA is headquartered in Islandia, New York.

Investment strategy

We rate CA a Hold / Medium Risk. We believe CA's mainframe annuity will provide a floor on the stock, but we are cautious on the company's recent growth efforts in cloud M&A and in "emerging enterprises." A \$300-500M M&A budget is unlikely to move the needle on operating margin, unless CA can consistently hit homeruns in the M&A game. Few tech companies have succeeded in both the enterprise and SMB spaces despite no shortage of effort, and CA's efforts there could take time. Similarly CA's focus on fewer products should gradually drive margin up, but we see no reason to buy ahead of what should be gradual improvements in a long-term product rationalization that will take years of development and years of customer traction. While we believe CA will outperform in a bear market, we prefer BMC in the management space.

Valuation

Our price target of \$20 is based on a 10x multiple on FY2012 earnings. CA is trading within historical P/E ranges, and we see no reason for a break out on either side. We take a cautious view on recent growth and margin improvement initiatives. We believe these initiatives will take time and see no near-term catalysts to drive the numbers higher.

Risks

We assign CA Technologies a Medium Risk rating. Following risks could cause the stock to outperform/underperform our target price. We believe CA has significant downside protection on revenue and earnings due to its subscription-based business model where revenue visibility is high. However, CA is increasing its risk profile with M&A in emerging areas. Our Hold recommendation has the following risks to the upside: M&A as a target, bookings strength, margin expansion from current profitability initiatives, and outperformance in a weaker macro environment due to the low beta. Risks to the downside include a continued shift away from value names and bookings weaker than the smaller portfolio of renewals would suggest.

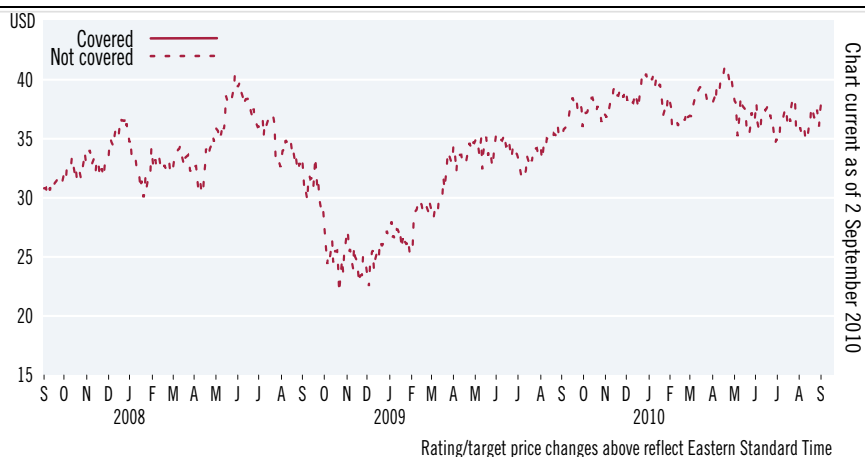
Appendix A-1

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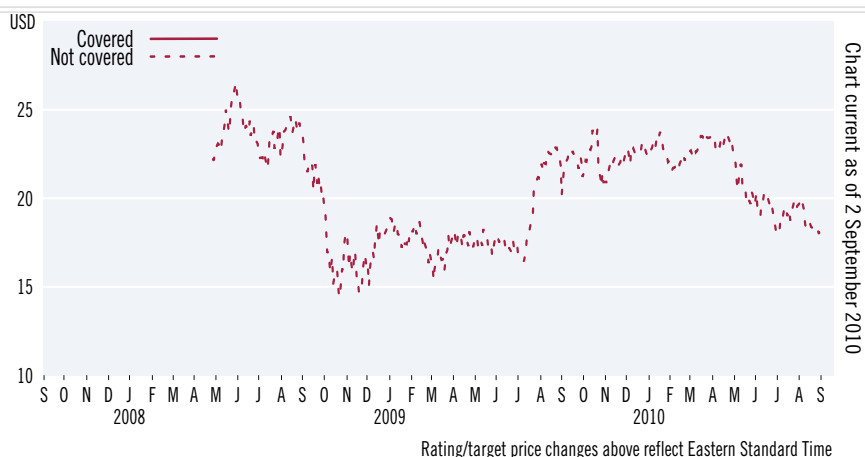
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