CONSTELLATION SOFTWARE INC.

TO OUR SHAREHOLDERS

We had a 1% quarterly decline in Revenue in Q4 compared to Q3, but our profitability improved. The year over year Q4 growth rate in Revenue was 20%, which was composed of approximately 1% Organic Growth and 19% acquired growth. Contraction in our Private Sector Revenue, especially within our software businesses involved in the building products and housing industries, continued to depress our overall Organic Growth rates. The deterioration in the acquired Revenue growth rate was a function of the reduction in our acquisition activity during much of the latter part of 2006. In early March 2007, we closed the acquisition of PG Govern. We expect that it will contribute significantly to our acquired growth in 2007.

While the economic slow-down in housing and building products may account for deteriorating Organic Revenue growth rates in our Private Sector Segment, it doesn't explain why our Public Sector Segment experienced only 5% Organic Revenue Growth in Q4. My sense is that, Constellation-wide, we are experiencing a secular change. We first broke out our Organic Growth Initiatives from our Core operating businesses in 2003. Many of our Initiatives have since experienced rapid Revenue growth, but most of them have required more investment than was originally forecast. Not surprisingly, we are now investing less in the creation of new Initiatives than we did when we first started tracking them. The likely consequence of lower investment levels, is that we will not keep pace with our historical (2002-2005) Organic Revenue Growth rate of 12%. Achieving an Organic Revenue Growth rate of between 5% and 10% for the January 1, 2006, through December 31, 2010, period is more realistic. This is lower than originally contemplated, and we intend to make up the short-fall by increasing our Revenue growth from acquisitions. Theoretically, shifting investment from Organic Growth to acquired growth should generate higher operating margins and Adjusted Net Income margins.

The table below incorporates a number of CSI metrics which we like to use to monitor the performance of our businesses. We have explained how most of these metrics are calculated in our previous quarterly reports to shareholders, but have also included a summary in Schedule A hereto. We have added one new metric: "Tangible Net Assets / Net Revenue", which is explained below.

	Q1 2005	Q2 2005	Q3 2005	Q4 2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006
	($ millions, except percentages)							
Revenue	37.5	40.7	42.6	44.6	51.2	52.2	53.8	53.5
Net Revenue	34.5	37.0	39.0	39.8	46.0	47.3	48.4	48.6
Net Maintenance Revenue	19.3	20.7	21.7	23.0	26.0	26.9	28.1	29.6
Adjusted Net Income	3.8	4.1	5.2	4.1	5.1	5.1	6.8	9.0
Net Income / (Loss)	1.1	(3.5)	2.1	0.8	(8.7)	1.3	2.3	3.8
Net Revenue Growth (Y/Y)	62%	51%	47%	35%	33%	28%	24%	22%
Net Maintenance Growth (Y/Y)	72%	57%	48%	52%	35%	30%	30%	29%
Organic Net Revenue Growth (Y/Y)	22%	18%	22%	13%	14%	12%	5%	3%
Average Invested Capital	96	100	105	109	114	119	125	135
Tangible Net Assets / Net Revenue	(76%)	(71%)	(67%)	(66%)	(57%)	(55%)	(54%)	(54%)
ROIC (Annualized)	16%	16%	20%	15%	18%	17%	22%	27%
ROIC + Organic Net Revenue Growth	38%	34%	42%	28%	32%	29%	26%	30%

In Q4 2006, our Net Revenue increased to $48.6 million compared with $48.4 million in Q3 2006 and to $39.8 million in the Q4 2005 period. The Q4 Net Revenue growth rate year over year was 22%. The Net Revenue growth rate has declined for 8 successive quarters, primarily for the reasons outlined above.

Net Maintenance Revenue continued to grow in Q4 2006 at a rate of 29% compared to Q4 of 2005. Measured versus Q3 2006, the annualized growth rate in Q4 2006 Net Maintenance Revenue was 22%. As we have mentioned previously, we believe that Net Maintenance Revenue is one of the best indicators of the intrinsic value of a software company. Despite the decline in Revenue for Q4, we are comforted that Net Maintenance Revenue continues to increase at an attractive rate.

Adjusted Net Income is derived by adjusting GAAP net income for the non-cash amortization of intangibles and charges related to the appreciation in common shares eligible for redemption (a charge that is no longer incurred now that Constellation's common shares are publicly traded). We use Adjusted Net Income for this shareholders' report because it is usually a better measure of cash flow than GAAP Net Income, and it is closely aligned with the calculation of Net Income that we use for bonus purposes. In Q4, our Adjusted Net Income was $9.0 million. It increased from $6.8 million in the Q3 2006 period, and from $4.1 million in Q4 2005. The Q4 Adjusted Net Income Growth rate was 117% versus Q4 of last year.

Due to our improved Adjusted Net Income, our annualized ROIC + Organic Net Revenue Growth metric continued at acceptable levels despite our declining Organic Growth.

We calculate Tangible Net Assets or "TNA" by taking Total Assets for GAAP purposes, and subtracting 1) Intangible assets, 2) cash, and 3) all customer, trade and government liabilities that do not bear a coupon. In our last quarterly report to shareholders, we maintained that ROIC + Organic Net Revenue Growth was a reasonable proxy for the IRR that we are generating on our Shareholders' Invested Capital. The addition of Organic Growth to this equation assumes that we do not require additional TNA to generate Organic Growth. If this assumption is wrong, and we instead require significant TNA to generate Organic Growth, then Organic Growth becomes much less attractive. As you can see from the table, TNA expressed as a percentage of Net Revenues is negative, which is what we had assumed in the ROIC + Organic Net Revenue Growth discussion. Unfortunately, TNA is not as negative as it used to be, so we need to be wary that our asset intensity is increasing.

We have previously stated that our objective is to grow, on average, the Net Revenues per share and Adjusted EBITDA per share of Constellation by 20% per annum from January 1, 2006 to December 31, 2010. We continue to believe that our objective is achievable, but we now believe that a higher proportion of that growth will need to come from acquired growth than we had originally anticipated.

Forward Looking Statements

Certain statements herein may be "forward looking" statements that involve known and unknown risks, uncertainties and other factors that may cause the actual results, performance or achievements of Constellation or the industry to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. These statements reflect current assumptions and expectations regarding future events and operating performance and speak only as of the date hereof. Forward looking statements involve significant risks and uncertainties, should not be read as guarantees of future performance or results, and will not necessarily be accurate indications of whether or not such results will be achieved. A number of factors could cause actual results to vary significantly from the results discussed in the forward looking statements. These forward looking statements are made as of the date hereof and Constellation assumes no obligation to update any forward looking statements to reflect new events or circumstances.

Non-GAAP Measures

Net Revenue, Net Maintenance Revenue, Adjusted Net Income, Organic Net Revenue Growth, Average Invested Capital, Tangible Net Assets and ROIC are not recognized measures under GAAP and, accordingly, shareholders are cautioned that such measures should not be construed as alternatives to revenue or net income determined in accordance with GAAP as an indicator of the financial performance of the Company or as a measure of the Company's liquidity and cash flows. The Company's method of calculating Net Revenue, Net Maintenance Revenue, Adjusted Net Income, Organic Net Revenue Growth, Average Invested Capital, Tangible Net Assets and ROIC may differ from other issuers and, accordingly, may not be comparable to similar measures presented by other issuers.

Mark Leonard
President
March 7th, 2007

SCHEDULE A

PERFORMANCE METRICS

"Net Revenue" means Revenue for GAAP purposes less third party and flow-through expenses. We use Net Revenue since it captures 100% of the license, maintenance and services revenues associated with Constellation's own products, but only includes the margin on our lower value-added revenues such as commodity hardware or third party software.

"Net Maintenance Revenue" is derived from GAAP Maintenance Revenue by subtracting third party maintenance costs. We believe that Net Maintenance Revenue is one of the best indicators of the intrinsic value of a software company and that the operating profitability of a low growth software business should correlate tightly to Net Maintenance Revenues.

"Adjusted Net Income" is derived by adjusting GAAP net income for the non-cash amortization of intangibles and charges related to appreciation in common shares eligible for redemption (a charge that is no longer incurred now that Constellation's common shares are publicly traded). We use Adjusted Net Income because it is generally a better measure of cash flow than GAAP net income and it is closely aligned with the calculation of net income we use for bonus purposes.

"Average Invested Capital" is based on the Company's estimate of the amount of money that our shareholders had invested in Constellation. Subsequent to that estimate, each period we have kept a running tally, adding Adjusted Net Income, subtracting any dividends, adding any amounts related to share issuances and making some small adjustments, including adjustments relating to our use of certain incentive programs and the amortization of impaired intangibles.

"Tangible Net Assets / Net Revenue" provides a measure of our Tangible Net Assets as a proportion of Net Revenue. Tangible Net Assets is calculated by taking Total Assets for GAAP purposes, and subtracting (i) Intangible assets, (ii) cash, and (iii) all customer, trade and government liabilities that do not bear a coupon.

"ROIC (Annualized)" represents a ratio of Adjusted Net Income to Average Invested Capital.

"ROIC + Organic Net Revenue Growth" provides a historical measure of the effectiveness of our capital allocation.

Constellation Software Inc.

TO OUR SHAREHOLDERS

In Table 1, we've updated the Constellation Software Inc. ("CSI") metrics with the 2013 results. We've shortened up the period presented to 10 years. A long term review is worthwhile, but CSI is a much larger business than it was 10 years ago, so it is easy to question the relevance of the older data. The definitions of Adjusted net income ("ANI"), Average Invested Capital, ROIC, Net Revenue and Maintenance Revenue appear in the Glossary at the end of this document. Unless otherwise indicated, all dollar amounts are expressed in U.S. dollars. Several of the statements included below constitute forward looking statements and should not be read as guarantees of future results. See "Forward Looking Statements".

Table 1

	Adjusted Net Income (a.)	Average Invested Capital	ROIC	Organic Net Revenue Growth (YoY)	ROIC + Organic Net Revenue Growth
2004	13	84	15%	9%	24%
2005	17	101	17%	18%	35%
2006	26	123	21%	8%	29%
2007	33	154	22%	1%	23%
2008	54	195	28%	5%	33%
2009	62	256	24%	-3%	21%
2010	84	325	26%	-2%	24%
2011	140	394	36%	7%	43%
2012	172	491	35%	2%	37%
2013	207	585	35%	4%	39%

a. Historical figures restated to comply with revised definition.
Note: 2010 and subsequent year information is presented in accordance with IFRS

ANI increased 20% in 2013. Cash Flow from Operating Activities per Share (see Table 3) grew far faster, so we were less concerned with "quality of earnings" than we were in 2012. The shareholders' Average Invested Capital grew 19%. This was insufficient to finance the acquisitions that we made, so we resorted to using increasing amounts of bank debt - more about this later. The high ROIC achieved over the last decade suggests that we have very good businesses. If ROIC starts to erode significantly, then either we've damaged our existing businesses, or our new acquisitions are less attractive than those that we have made in the past. ROIC isn't one of those metrics that is necessarily subject to "reversion to the mean". Some businesses seem to be able to widen their moats at reasonable cost.

Organic Net Revenue Growth and Organic Maintenance Revenue Growth (see Table 2) are good cross-checks of our business health. You can't easily get this information from audited financial statements. CSI's Organic Net Revenue Growth was 4% in 2013, below our long-term average but better than GNP. We'd like our Organic Net Revenue Growth to be slightly higher. Growing organically while generating a high ROIC is, to my mind, the toughest task in the software business.

We achieved a near-record combined ratio (the sum of ROIC and Organic Net Revenue Growth) of 39% in 2013. If we had to pick a single metric to reflect the performance of our businesses, this is the one that we'd choose.

Maintenance Revenue grew an impressive 42% in 2013. We wouldn't want to do that every year. Growth in Maintenance Revenue due to acquisitions was 34%, and acquiring that maintenance revenue consumed all of our free cash flow for the year, and then some. As of March 31st 2014 we had $485 million outstanding on our debt facilities. We continue to seek longer-term capital to defuse the fundamental mismatch inherent in buying permanent assets with short-term debt. We have not dismissed the idea of cutting the dividend should other attractive sources of capital not be available.

Table 2

	2006	2007	2008	2009	2010	2011	2012	2013
Maintenance Revenue (US$MM)	**116**	**148**	**193**	**252**	**337**	**417**	**510**	**725**
Growth from:								
Acquisitions	17%	11%	21%	27%	26%	15%	15%	34%
Organic Sources								
a) New maintenance	15%	9%	9%	7%	8%	8%	8%	10%
b) Price increases	5%	8%	8%	3%	6%	6%	5%	5%
c) Attrition - Lost Modules	-2%	-2%	-3%	-3%	-3%	-2%	-2%	-2%
d) Attrition - Lost Customers	-4%	-4%	-4%	-4%	-4%	-3%	-4%	-5%
Total Organic Growth	14%	11%	10%	3%	8%	9%	7%	8%
Total Maintenance Growth	31%	23%	31%	31%	34%	24%	22%	42%

The Total Organic Growth in Maintenance Revenue was 8% in 2013, a slight increase from 2012. Our favourite businesses are those that are growing just slightly faster than their markets, gradually adding market share and customer share (i.e. "share of wallet"), while generating a good return on the capital that they have invested to produce organic growth. Small market share gains are much less likely to trigger a scorched earth competitive response that erodes pricing and triggers wildly unproductive R&D and S&M binges. We believe that we have struck that balance at many of our businesses.

Attrition increased in 2013, up more than 1% during the year, but as you can see in Table 2, this was more than offset by organic increases in Maintenance. That is encouraging, but bears monitoring. Over the last few years we have purchased a number of software businesses (usually SaaS) that have a much higher "churn" in their client bases because of factors inherent in their industry. By high churn, we mean that they acquire a greater proportion of new clients each year, and lose a higher percentage of existing accounts, than our average business. Sometimes the higher churn is because the clients' switching costs are low. Sometimes the higher churn is because lots of new potential clients are being created, and old ones are going bankrupt and merging. If it is the latter, these software businesses may be very attractive. If it is the former, then the software businesses are likely to be unpleasant, requiring tremendous effort to stay in much the same place. When we analyse the attrition and customer acquisition economics at the individual business unit level, the jury is still out on whether our high churn businesses are as attractive as our low churn businesses.

A note of caution with regard to the organic and acquired Maintenance Revenue growth numbers… while the analysis in Table 2 is materially the same as our reported Maintenance Revenue for financial reporting purposes, the individual components reflected in this table are generated by examining and categorising thousands of records. This analysis isn't perfect, but we believe it is a fair illustration of the trends in our maintenance base and, ultimately, the trends underlying the intrinsic value of our business.

A few years ago we added some GAAP/IFRS metrics to our regular letters to shareholders. We've updated them in Table 3.

In 2013, revenue per share increased 36% and Cash Flow from Operating Activities per Share ("CFO/Shr") increased 52%. We don't aspire to grow revenue per share at this sort of rate in the future. The growth in 2013 CFO/Shr was wonderful, but really reflects a catch up after a very disappointing 2012.

Table 3

	Total Revenue per Share	YoY △	Cash Flow from Operating Activities per Share	YoY △	Total Share Count (000's)
2003	4.16	29%	0.74	72%	19,428
2004	5.49	32%	0.59	-20%	19,891
2005	8.11	48%	1.21	106%	20,392
2006	10.01	23%	1.36	12%	21,065
2007	11.47	15%	1.62	19%	21,192
2008	15.60	36%	2.96	83%	21,192
2009	20.67	32%	3.85	30%	21,192
2010	29.92	45%	5.06	32%	21,192
2011	36.49	22%	6.49	28%	21,192
2012	42.05	15%	6.83	5%	21,192
2013	57.13	36%	10.40	52%	21,192
CAGR		30%		30%	

Note: 2010 and subsequent year information is presented in accordance with IFRS

Having had the chance to review the tables, we hope you'll join us in thanking the CSI employees for a wonderful decade.

Ideally, we'd like CSI's stock price to appreciate in tandem with our fundamental economics. At any point in time, we'd prefer the price to be high enough to discourage a takeover bid and low enough so that our sophisticated long term oriented investors are not tempted to sell. It takes lots of time and effort to attract and educate competent shareholder/partners. The last thing we want them to do, is sell.

If a stock is over-priced and sophisticated investors sell, they are generally replaced by unsophisticated investors who are ultimately disappointed. This may lead to a stock price that over-corrects and in turn precipitate either a takeover bid, or more insidiously, a significant and predatory share buyback. Buybacks are tempting to management and boards: they tend to improve the lot of managers and insiders, while being applauded by the business press. I think they are frequently a tolerated but inappropriate instance of buying based upon insider information. Instead of shareholders being partners, they become prey.

In addition to our long term sophisticated investors, we also have a second constituency of less financially oriented long-term investors, including some of our employee shareholders. Our employee bonus plan requires that all employees who make more than a threshold level of compensation invest in CSI shares and hold those shares for an average of at least 4 years. In practice, their average hold period has been much longer. We feel an enormous obligation to protect our non-professional investor constituency. One way we can do that is by trying to making sure that the stock price stays in a fair range at all times.

CSI's stock price has appreciated something like 68% per annum over the last two years while our revenue per share and CFO/Shr have increased by only 25% and 27% per annum respectively. The divergence between the appreciation in the stock price and the fundamentals prompted us to do an experiment to see if the multiple expansion could be rationalized (revenue per share and ANI per share multiples have roughly doubled during that period).

We contacted 8 analysts from the investment banks and brokerage firms that cover CSI and asked them for their discounted cash flow valuation ("DCF") models. The analysts also use peer comparisons, market multiples and other methods as part of their valuation process, so their DCF results don't entirely explain their valuations for CSI. Nevertheless, the analysts' models do tend to highlight their underlying assumptions about the company. When we examined the average of the analysts' assumptions for organic growth, acquired growth, acquisition pricing, cost of capital, margins, tax rates, and terminal growth rates, we found that we felt reasonably comfortable with most of their assumptions. The assumptions with which we felt least comfortable were the future cash tax rates and terminal growth rates (both of which seemed low to us). We adjusted for these changes to create a DCF model consisting of the average of the analysts assumptions plus a couple of CSI tweaks, which I'll call the "Consensus Model". The Consensus Model generated a stock price that was at a slight premium to the current share price, though without the margin of safety that we would seek when investing CSI's capital. The upshot of the exercise was that one could mathematically justify the current stock price based on assumptions similar to those achieved by the company in the past.

The more interesting part of the experiment was using the Consensus Model to do some sensitivity analysis and to look at alternative strategies. In all of the following examples, we assume that only one variable changes. In reality, our businesses are dynamic and changing one variable has an impact throughout the business.

Varying the organic growth assumption has a tremendous impact on the intrinsic value of a CSI share. Add in another 2.5% organic growth to the base line assumption and you get more than double the intrinsic value. Subtract 2.5% from the base line organic growth assumption and you lose almost half the intrinsic value of the stock. You can see why so many software company CEO's are growth junkies.

For anyone who's studied the industry, it is difficult to imagine a 5% perpetual swing in organic growth that doesn't have an offsetting impact upon operating margins. That said, there's still tremendous valuation and strategic leverage if organic growth can be increased with reasonable levels of investment. If managers have the discipline to monitor the IRR's on their investments in organic revenue growth, then they've taken a critical step towards understanding the most powerful lever in software. Some of our managers are there. I suspect others are using crude heuristics like "make 20% EBITA, and you can invest the rest". I dislike the latter approach, but many managers change their hard-won beliefs at glacial speed.

If we assume that CSI makes no further acquisitions, the Consensus Model calculates an intrinsic value that is roughly half of the current price. The magnitude of this valuation change surprised me, and suggests that our stock price could suffer very significantly if our acquisition activities slow down or the acquired businesses perform poorly. In the early days of CSI, I assumed that shareholders would be somewhat ambivalent between receiving all of CSI's free cash flow as a dividend, and having us invest a portion of it in acquisitions. According to the model, that is resoundingly not the case.

Another scenario that we tried in the Consensus Model was doing large TSS style acquisitions, at prices similar to that which we paid for TSS. The underlying assumptions continued to be that we are able to get these larger acquisitions to generate operating margins and growth equivalent to the small acquisitions. Not surprisingly, the Consensus Model forecasts that making large acquisitions adds significant intrinsic value, but not as much as doing "many small" acquisitions at lower purchase price multiples. It also confirms our belief that if we can't make more small acquisitions, then doing the occasional large one seems to make sense.

The final scenario that we ran involves the use of non-common share capital (i.e. debt or something similar). The assumption is that we raise enough capital to maintain revenue growth rates in excess of 20%, and that we operate with a balance sheet that is not highly levered. The Consensus Model for that scenario adds hugely to shareholder value, even if we use high cost debt.

Models are only as good as the assumptions that go into them, and there's no substitute for thinking through the above scenarios on your own, with your own underlying assumptions.

The biggest surprise for me in the modeling exercise was that our multiple expansion over the last two years can be justified by our "acquisition engine". I'd rather the market was paying for our acquisition capabilities in retrospect rather than in prospect. Nevertheless, it is clear that acquisitions have added tremendous shareholder value over the years, particularly during times of economic crisis and/or recession.

Which brings us to the topic of funding. We'd like to be in a position to acquire aggressively should attractive opportunities arise. We've asked CSI's Board for permission to raise non-common share capital to replace our revolving line of credit. They've given us that mandate.

Last year I mentioned that I'd feel comfortable using debt to finance our growth if it were long term, non-callable and the interest payments could be deferred for short periods. I followed up in the letter to shareholders with an invitation to potential investors to work with us to design such an instrument. During the course of the ensuing year we've had discussions with a variety of institutions and investment bankers. And while we got past a few hurdles, we inevitably came up against the institutional imperative: no matter how logical and appealing an instrument may be, if it is novel and works, the sponsor gets a pat on the back. If it is novel and doesn't work, the sponsor loses their job.

That led us back into a dialog with our investment bankers. They began to understand what we wanted: a very long term instrument that we could issue in tranches whenever we needed, that was liquid and would trade at close to intrinsic value at all times so that our investors could get liquidity without taking a haircut, that was tax deductible for CSI as we expect to otherwise pay lots of cash tax, and that can be redeemed by CSI with reasonable amounts of notice if we are producing more cash than we can intelligently invest elsewhere. I'll refer to this as a Non-Traditional Instrument or "NTI". The novelty of the NTI was still a concern to the investment banks, but they felt that they could overcome that and sell it to retail investors if the yield were sufficiently high and the transaction fees sufficiently large. Once the first tranche of the NTI was sold, there would be a precedent trading in the market, and the investment bankers felt that the terms of subsequent NTI issues would likely be more attractive to CSI.

As our discussions progressed, the yield and the transaction fees proposed by the investment banks got higher and the terms less attractive. Based on my previous experience during the CSI IPO, I expected further concessions would be required before an offering was completed. I approached our board with an alternative: make the terms of the NTI even more attractive than those proposed by the investment banks, and market it to our existing shareholders. Any overpricing would accrue to our own investors rather than strangers and intermediaries. If our investors have appetite for an NTI issued at a discount to face value with an above average coupon by a company with a strong balance sheet, they could purchase the NTI and subsequently liquidate at close to face value whenever they choose.

My experience selling CSI shares over the years is that you can sell a novel investment to the sophisticated few, and that over time both the size of the audience and the level of trust grow. I think that will also be the case with the NTI.

Finishing on a quite different note: I'm happy if I "find" one good book to recommend to friends, family and employees each year. Currently, I'm shamelessly flogging Daniel Kahneman's <u>Thinking Fast and Slow</u>. His book is about a life (actually two) well spent. He tells the tale of his intellectual journey via a series of behavioural economics experiments. He helped me appreciate the efficiency, speed, and inherent conceit of intuitive judgment, and its infrequent but often abject failures. Understanding the major findings in behavioural economics provides profound insights into investing and managing, and this book is the most pleasant way I've found to acquire that knowledge.

We will be hosting the annual general meeting on Thursday May 1^{st}. Many of our Directors and Officers and a number of our employees will be in attendance. We look forward to talking about our business and answering your questions. We hope to see you there - perhaps with a camera.

Mark Leonard
President
Constellation Software Inc.

April 30^{th}, 2014

Glossary

Effective Q1 2008, the term ‘‘Adjusted net income’ is derived by adjusting GAAP or IFRS net income for the non-cash amortization of intangibles, future income taxes, and charges related to appreciation in common shares eligible for redemption (a charge that we no longer incur now that CSI’s common shares are publicly traded). Prior to Q1 2008, Adjusted net income was derived by adjusting GAAP net income for the non-cash amortization of intangibles and charges related to appreciation in common shares eligible for redemption. The computation was changed to include future income taxes since the majority of future income taxes relate to the amortization of intangible assets, and thus are being added back to more closely match the non-cash future tax recovery with the amortization of intangibles. All previously reported Adjusted net income figures have been restated in the table above to reflect the new method of computations. We use Adjusted net income because it is generally a better measure of cash flow than GAAP or IFRS net income and it is closely aligned with the calculation of net income that we use for bonus purposes.

“Average Invested Capital” is based on the Company’s estimate of the amount of money that our shareholders had invested in CSI. Subsequent to that estimate, each period we have kept a running tally, adding Adjusted net income, subtracting any dividends, adding any amounts related to share issuances and making some small adjustments, including adjustments relating to our use of certain incentive programs and the amortization of impaired intangibles.

“ROIC” represents a ratio of Adjusted net income to Average Invested Capital.

“Net Revenue” is gross revenue for GAAP or IFRS purposes less any third party and flow-through expenses. We use Net Revenue since it captures 100% of the license, maintenance and services revenues associated with CSI’s own products, but only the margin on the lower value-added revenues such as commodity hardware or third party software. “Maintenance Revenue” primarily consists of fees charged for customer support on our software products post-delivery and also includes, to a lesser extent, recurring fees derived from software as a service, subscriptions, combined software/support contracts, transaction-related revenues, and hosted products.

Forward Looking Statements

Certain statements in this letter may contain “forward looking” statements that involve risks, uncertainties and other factors that may cause the actual results, performance or achievements of the Company or industry to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Words such as “may”, “will”, “expect”, “believe”, “plan”, “intend”, “should”, “anticipate” and other similar terminology are intended to identify forward looking statements. These statements reflect current assumptions and expectations regarding future events and operating performance as of the date of this letter. Forward looking statements involve significant risks and uncertainties, should not be read as guarantees of future performance or results, and will not necessarily be accurate indications of whether or not such results will be achieved. A number of factors could cause actual results to vary significantly from the results discussed in the forward looking statements. Although the forward looking statements contained in this letter are based upon what management of the Company believes are reasonable assumptions, the Company cannot assure investors that actual results will be consistent with these forward looking statements. These forward looking statements are made as of the date of this letter and the Company assumes no obligation, except as required by law, to update any forward looking statements to reflect new events or circumstances. This report should be viewed in conjunction with the Company’s other publicly available filings, copies of which can be obtained electronically on SEDAR at www.sedar.com.

Non-GAAP/IFRS Measures

Adjusted net income and Organic Net Revenue Growth are not recognized measures under GAAP or IFRS and, accordingly, shareholders are cautioned that Adjusted net income and Organic Net Revenue Growth should not be construed as alternatives to net income determined in accordance with GAAP or IFRS as an indicator of the financial performance of the Company or as a measure of the Company's liquidity and cash flows. The Company's method of calculating Adjusted net income and Organic Net Revenue Growth may differ from other issuers and, accordingly, may not be comparable to similar measures presented by other issuers. Please refer to CSI's most recently filed Management's Discussion and Analysis for reconciliation, where applicable, between the IFRS, GAAP and non-GAAP/IFRS measures referred to above.

Constellation Software Inc.

TO OUR SHAREHOLDERS

Table 1 contains non-IFRS metrics for Constellation Software Inc. ("CSI"). The definitions for these metrics appear in the Glossary at the end of this document. Unless otherwise indicated, all dollar amounts are expressed in millions of U.S. dollars. Several of the statements included below constitute forward looking statements and should not be read as guarantees of future results. See "Forward Looking Statements".

Table 1

	Adjusted Net Income (a)	Average Invested Capital	ROIC	Organic Net Revenue Growth (YoY)	ROIC + Organic Net Revenue Growth
2003	22	83	26%	11%	37%
2004	13	84	15%	9%	24%
2005	17	101	17%	18%	35%
2006	26	123	21%	8%	29%
2007	33	154	22%	1%	23%
2008	54	195	28%	5%	33%
2009	62	256	24%	-3%	21%
2010 (b)	84	325	26%	-2%	24%
2011	140	394	36%	7%	43%
2012	172	491	35%	2%	37%
2013	207	585	35%	4%	39%
2014	274	739	37%	3%	40%

(a) Historical figures restated to comply with revised definition.
(b) 2010 and subsequent year information is presented in accordance with IFRS

Adjusted Net Income ("ANI") increased 32% in 2014, and average ANI growth per share over the last five years has been 36%. This is an impressive but unmaintainable performance. The ubiquitous "*Past performance is no guarantee of future results*" disclaimer really does apply in this instance.

Our shareholders' Average Invested Capital grew 26% in 2014. This, in conjunction with a slower acquisition pace, allowed us to reduce our overall debt from $477 million on Dec. 31, 2013 to $295 million on Dec. 31, 2014. I am not comfortable using short term debt or long-term debt with highly restrictive covenants to finance the parent company.

2014 ROIC, at 37%, was the highest we've ever achieved. In a well-managed, organically growing vertical market software business, less tangible assets tend to be required over time, hence you would expect to see increasing ROIC's. In CSI's case, there are a couple of countervailing factors: Our cash tax rates are likely to increase over the next few years, and we are willing to make acquisitions that generate IRR's that are much lower than 37%. Even if new acquisitions track according to plan, they will nearly always depress our overall ROIC to some degree. If we are successful in deploying large amounts of capital, ROIC could drop sharply for a time.

CSI's Organic Net Revenue Growth was 3% in 2014, below our long-term average but better than GNP growth. We'd like our Organic Net Revenue Growth to be higher.

We achieved a very high combined ratio (the sum of ROIC and Organic Net Revenue Growth) of 40% in 2014. If we had to pick a single metric to reflect the growth in the intrinsic value of our businesses, this is the one that we'd choose.

Table 2 parses our Total Maintenance Revenue Growth into organic and acquired, and further divides the organic growth into its components. We made a very large acquisition (TSS) in late 2013, which contributed to another year of rapid (40%) Total Maintenance Growth in 2014. One very important caveat about Maintenance Revenue as presented below: it is a gross number… i.e. it is not net of third party costs. For instance, if we have a business which incorporates third party databases or development tools and/or utilises third party hosting, the Net Maintenance Revenue received by CSI may be far less than the gross.

Maintenance Revenue growth due to acquisitions was 33% in 2014. Based upon the acquisitions that we completed in 2014 and those done year to date in 2015, we anticipate far slower acquired Maintenance Revenue growth in 2015.

Table 2

	2006	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
Maintenance Revenue (US$MM)	**116**	**148**	**193**	**252**	**337**	**417**	**510**	**725**	**1015**
Growth from:									
Acquisitions	17%	11%	21%	27%	26%	15%	15%	34%	33%
Organic Sources									
a) New Maintenance	15%	9%	9%	7%	8%	8%	8%	10%	10%
b) Price Increases & Other	5%	8%	8%	3%	6%	6%	5%	5%	5%
c) Attrition - Lost Modules	-2%	-2%	-3%	-3%	-3%	-2%	-2%	-2%	-3%
d) Attrition - Lost Customers	-4%	-4%	-4%	-4%	-4%	-3%	-4%	-5%	-5%
Total Organic Growth	14%	11%	10%	3%	8%	9%	7%	8%	7%
Total Maintenance Growth	31%	23%	31%	31%	34%	24%	22%	42%	40%

The Total Organic Growth in Maintenance Revenue was 7% in 2014. Lost module attrition nearly doubled in 2014, primarily due to newer acquisitions.

SaaS revenues are becoming increasingly important to us: Our 17 "SaaS'y" businesses (those where SaaS revenues are over half of total revenues and where our customers do not host their own applications) now constitute 13% of Maintenance Revenues. This is up from less than 1% of Maintenance Revenues five years ago. In addition, most of our traditional (i.e. non-SaaS'y) businesses have some SaaS offerings of add-on or core products, so I'd guess that SaaS revenues overall are now almost one fifth of our total Maintenance Revenues. The SaaS'y businesses also have higher organic growth rates in recurring revenues than do our traditional businesses. Unfortunately, our SaaS'y businesses have higher average attrition, lower profitability and require a far higher percentage of new name client acquisition per annum to maintain their revenues. We continue to buy and invest in SaaS businesses and products. We'll either learn to run them better, or they will prove to be less financially attractive than our traditional businesses - I expect the former, but suspect that the latter will also prove to be true.

A note of caution with regard to the organic and acquired Maintenance Revenue growth numbers… while the totals in Table 2 are materially the same as our Maintenance Revenue for financial reporting purposes, the individual components reflected in this table are generated by examining and categorising tens of thousands of records. The complexity of the analysis is compounded by the movements in foreign exchange and transactional revenues (which are currently categorised in "Price Increases & Other"). We are working to improve the accuracy of the underlying data so that we can better manage this critically important part of our business. For the time being, we believe that the data presented is a fair illustration of the trends in our maintenance base.

Table 3 contains some metrics that we started to present a few years ago in response to a request for GAAP/IFRS information.

In 2014, revenue per share increased 38% and Cash Flow from Operating Activities per Share ("CFO/Shr") increased 55%. We don't aspire to grow revenue per share at this sort of rate in the future nor do we think that the growth in CFO/Shr will be able to consistently outpace revenue per share.

Table 3

	Total Revenue per Share	YoY △	Cash Flow from Operating Activities per Share	YoY △	Total Share Count (000's)
2005	8.11	48%	1.21	106%	20,392
2006	10.01	23%	1.36	12%	21,065
2007	11.47	15%	1.62	19%	21,192
2008	15.60	36%	2.96	83%	21,192
2009	20.67	32%	3.85	30%	21,192
2010	29.92	45%	5.06	32%	21,192
2011	36.49	22%	6.49	28%	21,192
2012	42.05	15%	6.83	5%	21,192
2013	57.13	36%	10.40	52%	21,192
2014	78.77	38%	16.11	55%	21,192
CAGR		31%		39%	

Note: 2010 and subsequent year information is presented in accordance with IFRS

We hope that shareholders are as proud of our last decade's performance as we are.

A quick observation before we leave the discussion of Maintenance Revenues and cash flows. In assessing CSI's value, it is tempting to look at cash flows after tax, interest and capex as the "real" return on shareholders' capital. However, you should only do that if you can convince yourself that the underlying (mostly intangible) assets of our businesses are not deteriorating. The analysis of Maintenance Revenues in Table 2 is designed to give you some tools to assess the health of those intangible assets. If Maintenance Revenue continues to grow organically, there's reason to believe that our intangible assets are not deteriorating. A nice byproduct of isolating the Organic Growth in Maintenance Revenue, is that you can also see how much Maintenance Revenue has been acquired and compare that to the amount spent on acquisitions.

* * * * * * * * * * * * * * * *

Last year I asked the board to reduce my salary to zero and to lower my bonus factor. CSI had a great year, so despite those modifications, my total compensation actually increased. This year I'll take no salary, no incentive compensation, and I am no longer charging any expenses to the company.

I've been the President of CSI for its first 20 years. I have waived all compensation because I don't want to work as hard in the future as I did during the last 20 years. Cutting my compensation will allow me to lead a more balanced life, with a less oppressive sense of personal obligation. I'm paying my own expenses for a different reason. I've traditionally travelled on economy tickets and stayed at modest hotels because I wasn't happy freeloading on the CSI shareholders and I wanted to set a good example for the thousands of CSI employees who travel every month. I'm getting older and wealthier and find that I'm willing to trade more of my own cash for comfort, convenience, and speed … so I'm afraid you'll mostly see me in the front of the plane from here on out.

I love what I'm doing, and don't want to stop unless my health deteriorates or the board figures it's time for me to go. We have an impressive board. I trust them to determine when I'm no longer adding value as the senior executive in the company.

I recognise that some of our directors, shareholders and employees have, or are going to have, misgivings about this arrangement. I'm still planning to do the work that I've always done: acquisitions, monitoring, best practice development, investor relations and financing. I'm just not going to do the weekends, all-nighters and a constant grind of 60 hour plus weeks that characterised my earlier career. Keep in mind that CSI has an unconventional organisational structure, and we seem to have prospered to date without a lot of centralised command and control. While I may not be travelling as much as before nor putting in as many hours, CSI has lots of seasoned and accomplished managers at the Operating Group level who have become far better coaches, culture bearers, and hypothesis generators than I ever was.

One of the results of this compensation change is that I get to side-step the agent-principal problem. My compensation for being president is now tied solely to my current ownership of CSI shares. In essence, I'm your partner in CSI, not your employee. I like the feel of the partner relationship a whole lot better.

I'm currently campaigning for a couple of changes in emphasis at CSI, and I'm hoping that my new "partner" status will lend me increased credibility as I make the case for those changes.

First, I'd like CSI to experiment with modifying its employee bonus program. The idea is to make any such changes totally optional from the employee's perspective, so that there is no loss of trust. My experience with long-term compensation programs is that they require many years of consistent application before employees believe in them enough to make the short-term / long-term trade-offs necessary in the software business. The objective of the compensation plan changes will be to allow our newest generation of employees to build wealth more quickly. In a zero sum game, whatever incremental compensation we deliver to these employees will come out of the hides of shareholders, mine included. The trick, of course, is to make sure that we aren't operating in a zero sum environment. There's reticence in the organisation about "fixing" an existing bonus program that isn't obviously broken. I'm trying to convince our managers and directors that pre-emptive change is worthwhile.

Second, I'd like to over-capitalise the company with reliable capital. We've had poor results with this tactic historically. In 1999, we raised a $60 million second round of equity capital. We didn't end up using the capital for several years, and eventually our investors insisted on a special dividend to return some of it. The good news was that we maintained our investment discipline despite holding "excess cash" for many years and we acquired a second institutional investor to help balance out our shareholder group. The bad news was that our employee shareholders suffered more dilution than was necessary. Why is a historically bad idea worth trying a second time? Currently, we're using debentures to build our long term capital. The debentures are less costly than our second round equity financing, and they will only be a net cost to shareholders if CSI is unable to deploy the capital at attractive returns in a reasonable time-frame. Our confidence is growing that we can compete effectively with Private Equity firms for larger vertical market software company acquisitions. This feels like a much bigger opportunity for capital deployment than the market in which we've historically played, and is not a market where we can finance the "equity" portion of transactions from our revolver. Of course, what may appear to be prudent funding when it leads to excess cash of $100 million, may appear to be foolhardy funding if it has $1 billion floating around in our coffers. And therein lie the seeds of debates that I'm sure our board will be having for years to come.

While we are on the capital raising topic, Jamal has presented our lead bank with a draft agreement for a new revolving line of credit that is more reliable: one with less restrictive covenants, and with room and flexibility enough to allow us to buy significant businesses (or pieces of businesses) during a recession. We are hopeful that our existing banks and perhaps some new ones will find the proposal attractive.

Shareholders sometimes ask why we don't pursue economies of scale by centralising functions such as Research & Development and Sales & Marketing. My personal preference is to instead focus on keeping our business units small, and the majority of the decision making down at the business unit level. Partly this is a function of my experience with small high performance teams when I was a venture capitalist, and partly it is a function of seeing that most vertical markets have several viable competitors who exhibit little correlation between their profitability and relative scale. Some of our Operating Group GM's agree with me, while others are less convinced. There are a number of implications if you share my view: We should a) regularly divide our largest business units into smaller, more focused business units unless there is an overwhelmingly obvious reason to keep them whole, b) operate the majority of the businesses that we acquire as separate units rather than merge them with existing CSI businesses, and c) drive down cost at the head office and Operating Group level.

I find that some of our shareholders confuse CSI's strategy with that of our business units. While there are terrific moats around our individual business units, the barrier to starting a "conglomerate of vertical market software businesses" is pretty much a cheque book and a telephone. Nevertheless, CSI does have a compelling asset that is difficult to both replicate and maintain: We have 199 separately tracked business units and an open, collegial, and analytical culture. This provides us with a large group of businesses on which to test hypotheses, a ready source of ideas to test, and a receptive audience who can benefit from their application. More quickly and cheaply than any company that I know, we can figure out if a new business process works. This sort of ad hoc experimentation doesn't require enormous systems or the peddling of a new dogma to the unreceptive. It requires curious managers at a few dozen business units and a couple of clever analysts to plausibly test if a process works. Once a new best practice starts working within CSI, wide access to benchmarking information tends to rapidly breed emulation. We've found a few other examples of high performance conglomerates built around the idea of continuously refining their business processes and then driving ever more acquired businesses up their business process learning curve as quickly as possible.

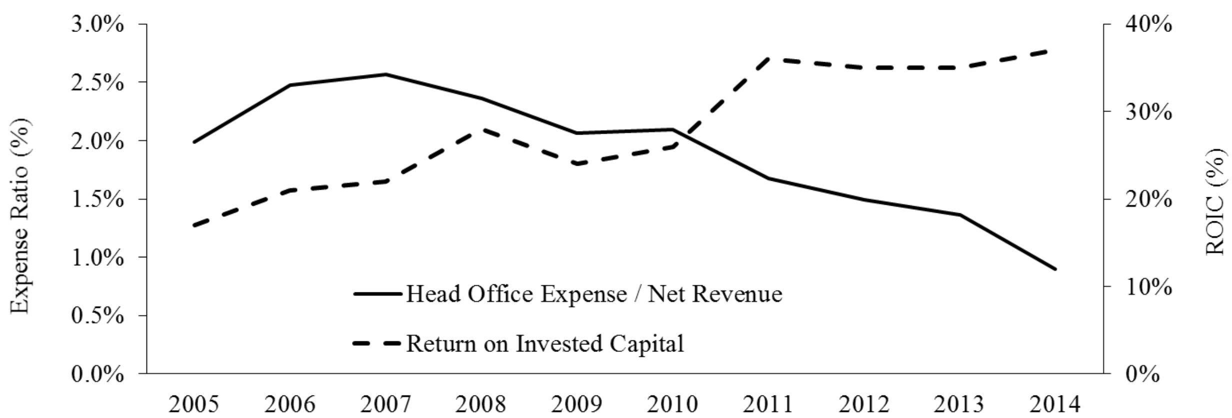
When CSI was much smaller, we used to run annual offsite meetings. Working on the curriculum for one of the offsites, I asked our academic advisor about game theory. He said "tit-for-tat, that's pretty much all you need to know". That clever but unsatisfying explanation eventually led me to the book and article that I'm recommending this year - The Evolution of Cooperation by Robert Axelrod, and a related journal article[1] (jointly, "EoC"). EoC is a short and accessible introduction to the prisoner's dilemma game. Google Scholar has 28,000 scientific citations for the original EoC article in the journal Science, so I'm not going out on much of a limb by recommending it. Despite that, it doesn't seem to get much coverage in the business press.

EoC has provided me with models for thinking about a number of business problems. Perhaps the best way to illustrate that the sort of reciprocal trust advocated by Axelrod can be profitably applied in a business, is

[1] "Launching The Evolution of Cooperation": Axelrod, Journal of Theoretical Biology April 2011

to look at some statistics from CSI's history. In Chart 1, you'll see that our head office expense as a percent of Net Revenues has halved from 1.9% in 2005 to 0.9% in 2014 while ROIC has increased from 17% to 37%. Clearly trust trumped central bureaucracy in our case.

Chart 1



If you ask me about "hierarchical bullies" at our Annual General Meeting, I'll be happy to give you another example of how EoC helped clarify my thinking in a practical application at CSI.

We will be hosting the annual general meeting on Thursday, April 30th. Many of our Directors and Officers and a number of our employee shareholders will be in attendance. We look forward to talking about our business and answering your questions. We hope to see you there.

Mark Leonard
President
Constellation Software Inc.

April 6th, 2015

Glossary

Effective Q1 2008, the term ‘‘Adjusted net income’ is derived by adjusting GAAP or IFRS net income for the non-cash amortization of intangibles, future income taxes, and charges related to appreciation in common shares eligible for redemption (a charge that we no longer incur now that CSI’s common shares are publicly traded). Prior to Q1 2008, Adjusted net income was derived by adjusting GAAP net income for the non-cash amortization of intangibles and charges related to appreciation in common shares eligible for redemption. The computation was changed to include future income taxes since the majority of future income taxes relate to the amortization of intangible assets, and thus are being added back to more closely match the non-cash future tax recovery with the amortization of intangibles. All previously reported Adjusted net income figures have been restated in the table above to reflect the new method of computations. We use Adjusted net income because it is generally a better measure of cash flow than GAAP or IFRS net income and it is closely aligned with the calculation of net income that we use for bonus purposes.

“Average Invested Capital” is based on the Company’s estimate of the amount of money that our shareholders had invested in CSI. Subsequent to that estimate, each period we have kept a running tally, adding Adjusted net income, subtracting any dividends, adding any amounts related to share issuances and making some small adjustments, including adjustments relating to our use of certain incentive programs and the amortization of impaired intangibles.

“ROIC” represents a ratio of Adjusted net income to Average Invested Capital.

“Net Revenue” is gross revenue for GAAP or IFRS purposes less any third party and flow-through expenses. We use Net Revenue since it captures 100% of the license, maintenance and services revenues associated with CSI’s own products, but only the margin on the lower value-added revenues such as commodity hardware or third party software. “Maintenance Revenue” primarily consists of fees charged for customer support on our software products post-delivery and also includes, to a lesser extent, recurring fees derived from software as a service, subscriptions, combined software/support contracts, transaction-related revenues, and hosted products.

Forward Looking Statements

Certain statements in this letter may contain “forward looking” statements that involve risks, uncertainties and other factors that may cause the actual results, performance or achievements of the Company or industry to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Words such as “may”, “will”, “expect”, “believe”, “plan”, “intend”, “should”, “anticipate” and other similar terminology are intended to identify forward looking statements. These statements reflect current assumptions and expectations regarding future events and operating performance as of the date of this letter. Forward looking statements involve significant risks and uncertainties, should not be read as guarantees of future performance or results, and will not necessarily be accurate indications of whether or not such results will be achieved. A number of factors could cause actual results to vary significantly from the results discussed in the forward looking statements. Although the forward looking statements contained in this letter are based upon what management of the Company believes are reasonable assumptions, the Company cannot assure investors that actual results will be consistent with these forward looking statements. These forward looking statements are made as of the date of this letter and the Company assumes no obligation, except as required by law, to update any forward looking statements to reflect new events or circumstances. This report should be viewed in conjunction with the Company’s other publicly available filings, copies of which can be obtained electronically on SEDAR at www.sedar.com.

Non-GAAP/IFRS Measures

Adjusted net income and Organic Net Revenue Growth are not recognized measures under GAAP or IFRS and, accordingly, shareholders are cautioned that Adjusted net income and Organic Net Revenue Growth should not be construed as alternatives to net income determined in accordance with GAAP or IFRS as an indicator of the financial performance of the Company or as a measure of the Company's liquidity and cash flows. The Company's method of calculating Adjusted net income and Organic Net Revenue Growth may differ from other issuers and, accordingly, may not be comparable to similar measures presented by other issuers. Please refer to CSI's most recently filed Management's Discussion and Analysis for reconciliation, where applicable, between the IFRS, GAAP and non-GAAP/IFRS measures referred to above.

Constellation Software Inc.

TO OUR SHAREHOLDERS

Each quarter we try to study an admirable company and discuss it with our Operating Group managers and board members. We focus on high performance conglomerates that have demonstrated at least a decade of superior shareholder returns. We started by studying those that have generated superior returns for multiple decades. That narrowed the field a lot, so we are beginning to let some single decade performers slip into the candidate pool. I'll refer to the conglomerates that we've studied to date as the "HPCs" in this letter. If you have any suggestions for the candidate pool, please send them along.

Constellation Software Inc. ("CSI") is just entering its third decade. We study the HPCs because they help us understand what CSI does well, where we might improve, and what alternatives we could pursue. Keep in mind that we are comparing CSI to a group of wonderful companies. Over the last decade, if you had held an equally weighted portfolio of the shares of the HPCs, you would have more than doubled the performance of the S&P 500.

We reviewed one of our perennial favourite HPCs this quarter, Jack Henry and Associates, Inc. ("JKHY"). The company's values are those to which we aspire and their multi-decade performance is remarkable. Their shares have outperformed the S&P 500 Index by 11%, 9% and 10% per annum over the last 30, 20 and 10 years, respectively. Best of all, JKHY is in the vertical market software business like CSI, so there are sector-specific lessons in their history from which we can draw.

I encourage you to familiarise yourself with JKHY. Their financial history is easily accessible because they went public very early in their development (i.e. in late 1985). At that time they had less than 50 employees and revenue of $12 million. They now have over 6,000 employees and revenue of $1.3 billion. There's also a lovely company history "You Don't Know Jack… or Jerry", written by a retired IBM executive. The book covers JKHY's founding years through to the end of 2007. It provides many first-hand accounts by employees, customers, competitors and partners about the business practices, strategy, and culture of the company.

During the course of this letter I've incorporated our findings from the HPCs in general and JKHY in particular to the discussion of each metric.

One point of caution with respect to the HPC analysis. The individual HPCs have differences in how they have compiled their publicly available financial information and our calculations of their financial metrics may not be entirely consistent across the group. Despite these "data challenges" we believe the analysis is worthwhile and can provide some insights.

Adjusted Net Income

Table 1 contains the non-IFRS metrics for CSI which we present each year. The definitions for these metrics appear in the Glossary at the end of this document. Any other capitalised financial terms in this letter are also defined in the Glossary. Unless otherwise indicated, all dollar amounts are expressed in millions of U.S. dollars. Several of the statements in this letter constitute forward looking statements and should not be read as guarantees of future results. See "Forward Looking Statements".

CSI's Adjusted Net Income ("ANI", column 2 of Table 1) increased by 35% to $371 million in 2015. Our average annual increase in ANI per share over the last decade has been 37%. We do not expect to come close to achieving this ANI growth rate in the next decade.

During the last decade, the HPCs struggled to increase their ANI per share by more than 15% per annum. JKHY's annualised growth in ANI was only 12% over that period. This drove much higher appreciation in JKHY's shareholder value because they also made significant dividend payments and share repurchases (jointly averaging 10% of Average Invested Capital per annum). If CSI is not successful in finding attractive acquisitions, we could pursue a similar strategy of returning capital to shareholders.

Table 1

	Adjusted Net Income (a)	Average Invested Capital	ROIC	Organic Net Revenue Growth (YoY)	ROIC + Organic Net Revenue Growth
2006	26	123	21%	8%	29%
2007	33	154	22%	1%	23%
2008	54	195	28%	5%	33%
2009	62	256	24%	-3%	21%
2010	84	325	26%	-2%	24%
2011	140	394	36%	7%	43%
2012	172	491	35%	2%	37%
2013	207	585	35%	4%	39%
2014	274	739	37%	3%	40%
2015	371	965	38%	-3%	35%

(a) Historical figures restated to comply with revised definition.

Only a couple of HPCs that have employed significant financial leverage have had ANI/Share growth consistently in excess of 15%. Inexpensive financial leverage is a tool that diversified conglomerates can easily access. We haven't decided yet where we stand on using leverage, other than that we want to avoid using short term debt to finance long term assets, or using long term debt that is unreliable.

Invested Capital

CSI's Average Invested Capital (column 3, Table 1) increased by 31% in 2015 to $965 million. By December 31st of that year, Invested Capital topped one billion dollars. There's nothing magical about the billion dollar amount, but it is a bit sobering to note that we took over seventeen years to invest the first half billion of CSI's capital. The remaining half billion has been invested during the last three years. We are continuing to add to our "investment capacity". Despite that, we expect the rate of growth in capital deployment to slow.

About eighteen months ago we looked at the impact of investment hold period on transaction costs. We had some rules of thumb in mind, but hadn't actually done the math. If you hold investments forever, you can afford to spend a surprising amount of money to deploy capital at attractive returns. I have been encouraging our Operating Groups to push down more of the acquisition activity to the Business Unit ("BU") level, even if it means higher capital deployment costs. If we can train a couple of hundred BU managers to be competent part-time capital allocators and provide them with acquisition analysis and structuring support when they need it, then I can foresee the day when we are doing 100 acquisitions per annum, instead of 30. It makes the BU manager's job richer and more fun, but also more demanding.

Only one other HPC has followed a strategy of buying hundreds of small businesses and managing them autonomously. They eventually caved in to increased centralisation. My hunch is that it takes an unusually trusting culture and a long investment horizon to support a multitude of small businesses and their entrepreneurial leaders. If trust falters the BU's can be choked by bureaucracy. If short term results are paramount, the siren song of consolidation synergies is powerful. We continue to believe that autonomy and responsibility attract and motivate the best managers and employees.

We are currently adding several hundred million to Invested Capital each year. In addition to our traditional M&A activity, we are re-starting our public company investing efforts. During the period from 1995 to 2011, we made sixteen public company investments in the software sector. If you viewed our public company investments as a single portfolio, the internal rate of return (”IRR”) for that portfolio far exceeded our hurdle rate. Thirteen of the sixteen investments generated individual IRRs in excess of 10%, and only one small investment had a negative rate of return. The average hold period was shorter than we would have liked, and most of the investments ended in the companies being acquired by third parties, rather than CSI. Those may prove to be the fundamental limitations for this sort of investment activity. We hope to find some attractive public software company investments in the coming year or two. At present, the pickings are slim due to generally high valuations.

<u>Return on Invested Capital</u>

ROIC is the next metric in the table, but I thought it was worth a long segue to discuss what we found at the HPCs when we studied a closely related metric, EBITA/Average Total Capital (“EBITA Return”). Both metrics look at return on investment. ROIC is the return on the shareholders’ investment and EBITA Return is the return on all capital. In the former, financial leverage plays a role. In the latter only the operating efficiency with which all net assets are used is reflected, irrespective of whether those assets are financed with debt or shareholders’ investment.

Surprisingly the HPCs seem to have a fairly consistent pattern of EBITA Returns. Most of them started out in an asset-light business. A few didn’t have the “asset-light epiphany” until after they’d struggled with more capital intensive businesses for a few years. During the first year of data that we were able to source for each HPC, they averaged a respectable 21% EBITA Return. Subsequently their returns experienced a period of dramatic improvement as they refined their operating methods and philosophies. These operating methods varied, but generally involved techniques for the detailed measurement of business processes coupled with relentless incremental improvement. At some of the HPCs the methods are applied with a zeal that makes me a bit uncomfortable. It’s hard to argue with results. The average peak EBITA Return for the HPCs was 46%, and on average it took them 6 years from the start of our measurement period to achieve those peak returns.

At peak returns, the HPCs’ cash flows far exceeded their internal requirements, so all of them embarked upon acquisition programs. They acquired businesses similar to their own - i.e. asset light business with good barriers to entry and a history of positive organic growth. They paid significant premiums to book value for the acquisitions. The initial EBITA Return in each of the acquired businesses would have been modest because of the high purchase prices, but organic growth required little investment in tangible assets so returns would have subsequently climbed. In many instances the acquired businesses were not run optimally prior to acquisition, and the HPCs were able to apply their business practices to further improve returns.

The HPCs have invested almost their entire Free Cash Flow (“FCF”) in acquisitions during the last decade. This has allowed them to grow Revenue per share and ANI per share at an average of 9% and 17% per annum, respectively, over the same period. However, their significant acquisition expenditures have tended to depress EBITA Returns. 2015 EBITA Return averaged only 18% for the group.

JKHY’s EBITA Return for the last decade was 24%. They performed better than the other HPCs on this metric because they had strong organic growth and did not invest as much of their FCF in acquisitions.

We haven’t confirmed it yet by compiling the detailed data, but I have a feeling that acquisition multiples, acquisition size and acquisition profitability have all increased over time for the HPCs. In CSI’s case, I’ve confirmed the first two, but need to check the third.

In summary, the general pattern for the HPCs’ EBITA Returns for the study period has been moderate, high and then declining returns, with operating excellence driving the period of growth and significant investments in relatively high priced acquisitions driving the subsequent period of contraction. If CSI’s

EBITA Return pattern is similar, there's a good argument that our 37% EBITA Return in 2015 was close to the peak, and that acquisitions will drive it lower from here on out.

CSI's ROIC (column 4 Table 1) was 38% in 2015, its highest to date. Viewed over the long term, our ROIC has increased fairly consistently due to improving EBITA/revenue margins and increasing but still moderate financial leverage. Our acquisition mix in 2015 was also unusual. We acquired some large, high margin but shrinking businesses with attractive tax characteristics and higher than normal profitability resulting in consolidated EBITA/revenue margin reaching record levels.

Most of the HPCs have operated with ROIC's in the mid to high teens during the last decade. JKHY was in the middle of the ROIC range at 18%. CSI was the second highest in the group, with a 30% ROIC average for the decade. I anticipate that we will deploy larger amounts of capital on investments each year. We are using a lower hurdle rate for larger transactions, but have retained our original hurdles for most of our acquisitions. Unless we use increasing amounts of financial leverage, increased acquisition investment and lower hurdle rates on large transaction will likely drive down our future ROIC. Interestingly, half of the HPCs have begun to acquire vertical market software businesses.

Financial leverage is a tool that can have a profound impact on ROIC. Some HPCs have whittled down Invested Capital as a percent of Total Capital by borrowing to pay dividends, repurchase shares, and/or make acquisitions. This has helped them generate higher ROIC's. One of the HPCs has returned their entire Invested Capital to shareholders, and hence generates an infinite ROIC. If covenant-free long-tenured debt is available at a lower after tax cost than equity, then this kind of capital structure is attractive.

<u>Organic Net Revenue Growth</u>

CSI's Organic Net Revenue Growth ("OGr", column 5, Table 1) was negative in 2015 for the first time since the last recession. The Maintenance analysis in Table 3 below, shows that much of the decline vs 2014 was due to shifts in foreign exchange rates. Nevertheless, when we compare CSI's organic revenue growth to that of the other HPCs, we rank amongst the poorest performers and JKHY ranks amongst the best. Are we doing something systematic that leads to low OGr, and if so, is it a mistake? It is worth comparing JKHY and CSI to get some ideas.

JKHY sells software, hardware and services to small and medium sized financial institutions. The number of potential customers in these markets has been shrinking for decades. In the early years, JKHY acquired a number of competitors for reasonable prices, which reduced some of the rivalry in their market, and gave them a larger installed base for which to develop add-on products.

Significant technology change (ATM's, internet banking, mobile banking, and proliferating electronic payment methods) in conjunction with rapidly growing regulation and compliance requirements, drove demand for add-on products and services. During the 2005 to 2015 decade, JKHY's revenue growth has been 2/3^{rds} organic and 1/3rd acquired, with acquisitions primarily being add-on products and services businesses. JKHY deployed approximately one third of their FCF on acquisitions during the decade.

Unlike JKHY, CSI serves a multitude of end markets. We deployed far more (>90%) of our FCF on acquisitions during the last decade. As of December 31, 2015 we had 182 BUs serving more than 75 verticals, run by 158 BU managers that rolled up into CSI via 6 Operating Groups. We usually organise each BU around a single vertical, although there are a few of our BUs that serve more than one vertical, and a many verticals served by more than one of our BUs.

The variations between each of our vertical markets is enormous. Some markets are consolidating, some not. In some we have high market share, in others we are a niche player. Some markets have compliance and technology drivers, while others rarely change their systems. Some have rapidly churning clients while others have long-lived clients. Some clients spend their own money buying systems, and some are spending an employer's. Some buy enterprise-wide systems with significant customisation, while others buy departmental SaaS products with no customisation. Some markets have rabid venture-backed competitors with a grow-at-any-cost ethos, while others have a few rational competitors intent on making a decent living. All of these factors impact the organic growth potential of our businesses. Taking the particular industry and company factors into account, our BU managers work to develop an appropriate strategy.

A number of our businesses have strategies similar to JKHY i.e. they have built high market share in core systems via acquisition and organic growth, after which they've purchased and built add-on products to serve their clients better and drive up switching costs. JKHY appears to be willing to pay high prices for some third party add-on product businesses that might sell well into their installed base. We have tended to be more sceptical of such cross-selling synergies, perhaps because the investment decision-making has not historically been at the BU manager level. A lesson from JKHY, is that we may have been overly cautious regarding cross selling synergies.

In a variation on the "industry leader rollup with broad suite of add-ons" strategy, we sometimes acquire a group of businesses in the same market and run them independently. This can lead to duplication of costs but also tends to make for better market coverage, differentiated products and ultimately, higher market share. We have developed some add-on products to share between these BUs and sometimes share administration expenses, but the BU managers are autonomous, compete vigorously with each other, and are held accountable only for their own results. Operating with this kind of strategy, we may not be as likely to buy high growth add-on product businesses, nor invest as heavily in developing add-on products, because each BU Manager can't justify the investment based solely on his BU's installed base.

In some verticals, we are not the #1 or #2 player. There are a couple of strategies that we follow in this instance. We obviously try to use our knowledge of the vertical to acquire our way to a leadership position. That sometimes works (e.g. paratransit, mid-tier utilities, equipment rental software, homebuilding software, agricultural software, public housing software). If we are a small market share player and are unable to grow share via acquisition, we target a defensible niche within the overall market where we can differentiate our offering to compete effectively. Sometimes we can grow that niche, sometimes not. In some markets, it may not be economic to compete for new name clients. In that case, your niche has to be the clients that you already have. You target your service, support and add-on products solely at that base, and if the underlying attrition of the industry that you are serving is low, this can be a very good business model.

All of these strategies work, albeit with very different organic growth outcomes. We have tracked the IRR for all of the acquisitions that we've made since 2004 (i.e. >95% of the acquisition capital that we've deployed). When we graph the IRR's vs the post-acquisition OGr of each investment, there is little correlation. If you are really striving to see a relationship, you might argue that our best and our worst IRR's are both associated with low post-acquisition organic growth. Based on the data, there are much more obvious drivers of IRR than OGr. For instance, Revenue multiple paid (lower purchase price multiples are better - no revelation there), and post-acquisition EBITA margin (fatter margin acquisitions tend to generate better IRR's – somewhat intuitive, but needs further work).

How about a thought experiment? Assume attractive return opportunities are scarce and that you are an excellent forecaster. For the same price you can purchase a high profit declining revenue business or a lower profit growing business, both of which you forecast to generate the same attractive after tax IRR. Which would you rather buy?

It's easy to go down the pro and con rabbit hole of the false dichotomy. The answer we've settled on (though the debate still rages), is that you make both kinds of investments. The scarcity of attractive return opportunities trumps all other criteria. We care about IRR, irrespective of whether it is associated with high or low organic growth.

Organic growth can be associated with good IRR's. There are obvious techniques to improve IRR: You keep the early burn rate down while you test the major assumptions and then you add fuel to the fire once the risk associated with the low probability hypothesis testing is largely behind you. You try to test as cheaply as possible, and you move on quickly to new hypotheses. My background is in the venture industry, and that sort of hypothesis testing was what I did for eleven years. Most of our key managers earned their chops running strong organic growth verticals before building out their Operating Groups, so they're used to investing for organic growth. I don't think any of us had done an acquisition before we came to CSI. The vast majority of the CSI senior management team has a natural bias towards organic growth. But despite that bias, we strive to be rational, and only embark on Initiatives (and acquisitions) that we believe will meet our hurdle rate on a probability weighted basis.

Obviously we could do more organic growth Initiatives (and acquisitions) if we dropped our hurdle rates. We observed in early 2015, however, that lowering hurdle rates had historically been far more expensive than we originally thought. We analysed the weighted average expected IRR's for each of our acquisitions by year from 1995 to early 2015 and compared them with the prevailing hurdle rate we were using when the acquisitions were made. During that twenty year period we made three changes to the hurdle rate, one up, two down. The weighted average expected IRR for each vintage (e.g. all of the acquisitions done in 2004) of acquisitions tended to drop or increase to the newly implemented hurdle rate. Said another way, when we dropped our hurdle rate, it dragged down the expected IRR's for <u>all</u> the opportunities that we subsequently pursued, not just those at the margin. We try to capture this idea by saying "hurdle rates are magnetic". It now takes a very brave soul to propose a hurdle rate drop at CSI.

Only our BU managers have the intimate knowledge of their markets and teams needed to intelligently trade-off short term profitability and long term growth when they choose to sponsor an Initiative. Only they can deliver the "synergies" required to justify the acquisition of a high growth potential add-on products/services company. So if we are going to delegate the responsibility for organic growth and some of the acquisitions to the BU managers, how do we go about attracting and keeping great BU managers? I encourage you to bring up the question with our Operating Group managers at the annual general meeting ("AGM").

Our best BU managers have overseen double digit rates of growth for years via a combination of organic growth and acquisitions in their vertical and in adjacencies. That kind of low capital intensity compound growth creates powerful economics that generate remarkable incentive compensation. For BU managers that are new to the job and running a single BU, the compounding effect isn't as obvious, so we've started to roll out an additional bonus program targeted at keeping this contingent around until their wealth building potential becomes apparent. To date there are over 100 CSI employee/shareholder millionaires. Ten years from now, my hope is that there will be five times as many.

Table 2

	Quarter Ended								Fiscal Year Ended	
	Mar. 31 2014	Jun. 30 2014	Sep. 30 2014	Dec. 31 2014	Mar. 31 2015	Jun. 30 2015	Sep. 30 2015	Dec. 31 2015	Dec. 31 2014	Dec. 31 2015
CSI Method	7%	5%	4%	0%	-2%	-4%	-5%	-1%	4%	-3%
Alternate Method	6%	4%	5%	2%	-2%	-4%	-4%	-1%	4%	-3%

As a wrap up to the organic growth discussion, Jamal, at the urging of one of the analysts who covers CSI, asked me to compare how we calculate organic growth in revenue in our quarterly Management's Discussion and Analysis ("MD&A") to a commonly used alternative method. In the MD&A we estimate the run-rate revenue of the acquired businesses at the time of their acquisition as the starting point for subsequent organic growth measurements. The common alternative method excludes the revenue of the acquired businesses from the calculation of organic revenue growth until the first anniversary of each acquisition. In Table 2 above, we've calculated organic revenue growth for the last eight quarters using both methods. The results are very similar. There are advantages and disadvantages to each method, but we'll continue to use our historical method in the MD&A, since it more quickly reflects organic growth changes caused by acquired businesses.

Combined Ratio

The final column in Table 1 is our "Combined Ratio" i.e. the sum of ROIC and OGr. We have touted the Combined Ratio as the best single measure of CSI's performance. CSI's ROIC+OGr was 35% in 2015, down significantly versus the levels achieved in the years since the last recession.

One of the problems with growing asset-lite businesses is that the historical Invested Capital required to purchase the business becomes increasingly irrelevant over time. We have a number of businesses where their current EBITA now exceeds their original purchase price. If they have achieved all of that growth organically, they have likely also reduced working capital significantly, perhaps driving the net purchase price below zero, and hence ROIC to infinity. These sorts of businesses defy conventional financial statement measurement, which is why we use IRR to track performance. Even IRR has its faults, usually to do with re-investment assumptions and the fact that it indicates neither hold period nor the amount of the investment. These faults are illustrated well by the impressive but largely unimportant IRR track record of our previous public company investments.

Since ROIC is also one of the big drivers of our incentive compensation program, we care about this "increasingly high ROIC" issue. When ROIC is very high, bonuses start to consume a disproportionate and inappropriate amount of pre-bonus net income. We've actually run into this situation a couple of times. You can either change the plan, cap the bonuses, or ask the managers to keep their profits and redeploy them in acquisitions or Initiatives.

We dislike changing bonus plans because it literally takes years for trust to re-build to the point where managers are willing to trade off short term profitability and bonus for higher longer term profitability. We saw this in spades when our major investors put CSI up for sale in 2011. ROIC increased sharply, acquisitions slowed dramatically, and Initiative spending dropped. Faced with the prospect of new owners intent on changing the bonus program and borrowing mountains of debt to acquire the business, our managers reacted as you'd expect, maximising short term profitability and bonuses at the cost of longer term growth and profitability.

The second alternative is capping bonuses. This feels like an extremely strong incentive to shift revenue and profit between good and bad years. It also undermines the utility of the accounting and information systems as management tools. Good people who might stray, become bad people in tiny steps greased by "everyone is doing it" and "it was a grey area". The last thing you want to do is build an incentive system that pushes employees out onto that slippery slope. We aren't fans of capped bonuses.

The third alternative shifts the capital allocation task down to the Operating Groups and Business Units. If they are producing handsome returns, they also need to figure out how to redeploy some of that capital. If they aren't producing good returns, we are happy for them to send excess capital back to head office. Since the Operating Groups and BUs "own" the bulk of our human resources, they also have the talent to develop opportunities and manage them (whether those opportunities are acquisitions or Initiatives). This is the alternative we've opted for when ROIC's get very high.

In the past, we've had both the Volaris and Vela Operating Groups on the "you've got to keep your capital" program, and they've responded well by deploying it at attractive rates of return. One of the nice side effects of the "keep your capital" restriction, is that while it usually drives down ROIC, it generates higher growth, which is the other factor in the bonus formula. Acquisitions also tend to create an attractive increase in base salaries as the team ends up managing more people, capital, BUs, etc. Currently, a couple of our Operating Groups are generating very high returns without deploying much capital and we are getting to the point that we'll ask them to keep their capital if they don't close acceptable acquisitions or pursue acceptable Initiatives shortly. You might get some interesting dialog with the Operating Group managers at the AGM if you bring up this topic.

When we judge our own track record, we use IRR. We update the IRR forecasts for our acquisitions every quarter. The more "history", and the less "forecast" that we have for each acquisition IRR, the better a measure it becomes of a manager's investment performance. It takes years to figure out who are the great capital allocators. CSI's shareholders do not have the IRR information, would question it if they did have it (by definition, it contains forecasts), and are unlikely to want to wade through the 245 acquisitions we've made since 2004 (to December 31, 2015). Divulging the information would arm our competitors with acquisition pricing information so that they can bid against us more effectively, and acquisition performance data so that they can compete with us in our most attractive markets. So providing IRR information isn't the right way to keep shareholders informed.

Years ago, we settled on the Combined Ratio as a proxy for the growth in intrinsic value. If you assume that we continue to invest our entire FCF in acquisitions, and that the economics of our acquisitions are similar to those that we've demonstrated over the years, then ROIC+OGr is a reasonable (but somewhat overstated) proxy for the increase in intrinsic value. However, if we start paying higher multiples for acquisitions or using significant amounts of debt to either make more acquisitions, buy back shares and/or pay dividends, then the Combined Ratio metric can quickly become misleading. We're starting to look around for a better single metric to reflect the growth in intrinsic value.

Maintenance Growth and Attrition

The Maintenance growth and attrition statistics appear in Table 3. We have removed the estimated impact of foreign exchange from the "Price Increases and Other" category. FX was a big number this year, driving down our Maintenance growth by 6%. Total organic growth in Maintenance revenue was 7% in 2015, down slightly from last year. Lost module attrition is back down to its historical levels after an acquisition related increase last year. Acquisitions provided the bulk of the growth in 2015.

One of the concerns with acquisitive companies is that some of them grow revenues and adjusted earnings but impair the underlying value of their intangible assets. In essence what purports to be a return on capital is really a return of capital. We present these Maintenance statistics each year so that you can see if the Maintenance base is growing or shrinking organically. Our thesis is that as long as the base is growing organically, the value of the business is growing and our shareholders are getting a return on capital, not of capital. The 2015 numbers continue to support the thesis, albeit muddied by the estimated FX numbers.

As we caution you each year with regard to this table, while the totals are materially the same as our Maintenance revenue for financial reporting purposes, the individual components reflected in the table are generated by examining and categorising tens of thousands of records. The estimated FX adjustment was calculated by translating the Maintenance amounts in major foreign currencies into U.S. dollars at the average FX rates for each year. We believe that the data presented is a fair illustration of the trends in our Maintenance base.

Table 3

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Maintenance Revenue (US$MM)	**116**	**142**	**193**	**252**	**337**	**417**	**510**	**725**	**1,015**	**1,170**
Growth from:										
Acquisitions	17%	11%	25%	27%	25%	15%	15%	34%	32%	15%
Organic Sources										
a) New Maintenance	15%	9%	9%	8%	8%	8%	8%	10%	10%	8%
b) Price Increases and other	5%	9%	9%	4%	6%	5%	5%	6%	7%	5%
c) Attrition - Lost Modules	-2%	-2%	-3%	-3%	-3%	-2%	-2%	-2%	-4%	-2%
d) Attrition - Lost Customers	-4%	-4%	-4%	-4%	-4%	-3%	-4%	-5%	-5%	-5%
Total Organic Growth*	14%	12%	10%	4%	7%	7%	8%	8%	8%	7%
Estimated effect of FX	0%	0%	0%	-1%	1%	2%	-1%	-1%	-1%	-6%
Total Maintenance Growth *	31%	23%	35%	31%	34%	24%	22%	42%	40%	15%

* Certain totals may not reconcile due to rounding

Revenue per Share

Table 4 contains a couple of IFRS/GAAP metrics that we think are useful for our investors. Revenue growth is an upper-bound setter, since the growth rate of net income, ANI, cash flow from operating activities and dividends are all ultimately going to be limited by the revenue growth rate.

Table 4

	Total Revenue per Share	YoY △	Cash Flow from Operating Activities per Share	YoY △
2006	10.01	23%	1.36	12%
2007	11.47	15%	1.62	19%
2008	15.60	36%	2.96	83%
2009	20.67	32%	3.85	30%
2010	29.92	45%	5.06	32%
2011	36.49	22%	6.49	28%
2012	42.05	15%	6.83	5%
2013	57.13	36%	10.40	52%
2014	78.77	38%	16.11	55%
2015	86.75	10%	18.68	16%
CAGR		27%		31%

In 2015 CSI's revenue per share increased 10%. This was our worst performance since 2002.

The HPCs averaged 9% per annum revenue per share growth over the last decade. JKHY averaged 10%.

Absent enough attractive opportunities to deploy capital, I would not be hugely disappointed with a 10% annual increase in CSI's revenue per share over the next five years, so long as we also started paying significant dividends. We will obviously try to do better, and have refinanced our revolving line of credit and raised incremental debentures to put ourselves into a position where we are not capital constrained if we find acquisitions that meet our hurdle rate.

Cash Flow from Operating Activities per Share

CSI's cash flow from operating activities ("CFOA", column 4, Table 4) per share increased 16% in 2015. Note that CFOA is a defined term under IFRS and is shown in this table, as it is in our financial statements for 2010 and beyond, before the deduction of interest paid. CSI's CFOA per share will eventually be limited by our growth in revenue per share.

Last year I suggested that CFOA less interest paid (for 2010 and subsequent years) and capital expenditures all calculated on a per share basis was a good way to look at CSI's results. That's a non-IFRS metric, so all the associated warnings apply.

Great Companies Are Not Always Great Stocks

There's one last lesson from JKHY that I'd like to share. It relates to you as shareholders. There was a ten year period during which JKHY's shares both underperformed the S&P 500 (2000 until 2010) and didn't make any money for shareholders. The underperformance vs the S&P 500 was minor … approximately 1%. JKHY's revenues per share and ANI per share had compound average annual growth rates of 14% and 21%, respectively during that decade. Why did stock results and operating results diverge so widely for such a long period? It had to do with shareholder expectations and market exuberance. The general mania which gripped the market in 2000, and the more specific enthusiasm for JKHY's stock which then traded at well over 60 times ANI, left shareholders incredibly vulnerable. When the market "corrected" the JKHY stock had no margin of safety.

When really good companies start trading at 5 and 6 times revenues, it's time to start worrying. I hope our shareholders are never in that position.

Partners

In last year's letter I explained that the directors and I had worked out a plan where I was to work less and get paid less. After more than a year under that regime, I'm not complaining, and the directors don't seem uncomfortable.

More important, our shareholders seem comfortable with my new "partner not employee" arrangement. I was pleased to see that this year's AGM proxies still overwhelmingly voted for both our inside and outside directors.

I'd like to thank our shareholders and our employees for their continued support.

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I sometimes recommend books. I don't do this lightly, as I know they can be an obligation (sometimes felt heavily) to spend precious time. I feel better when I remember Will Rogers' advice about learning by readin'.

The books that I recommended in previous letters were summaries of seminal scientific research. This year I'd like to propose that you read "*One Man's Medicine: An Autobiography of Professor Archie Cochrane*", and "*Effectiveness and Efficiency, Random Reflections on Health Services"*, both by A. L. Cochrane. I'm sneaking in two books because they are both thin. Once again the books contain summaries of scientific research, this time in epidemiology.

The first book is a moving, idiosyncratic and dryly amusing autobiography of a brilliant and erudite outsider that makes you wish you'd known the man firsthand.

The second is a stinging critique of a well-meaning but entrenched medical establishment, for their ineffective and dangerous medical practices.

While the epidemiology is interesting and surprisingly relevant even today (people change incredibly slowly!), Archie’s observations regarding medical practices and doctors struck me as applying equally to business practices and managers. The asymmetric effectiveness of most medical treatments, rarely influencing positive outcomes while frequently contributing to negative ones, made me think critically about what I and most other managers do.

Archie’s legacy is a worldwide volunteer organisation (Cochrane.org) consisting of 37,000 contributors in 130 countries producing systematic reviews of medical research so that researchers, doctors, and patients have access to the most recent evidence from randomised controlled trials "RCTs” to make healthcare decisions.

The progress in business knowledge is painfully slow and is fraught with guru's generalising from plausible anecdotes. A little more experimentation (in the old sense of the word, i.e. testing hypotheses) would go a long way towards improving business practices.

At CSI we spend time on non-randomised observational studies (the red haired step-child of RCTs) trying to spot business practices that actually add value rather than overhead. One of our analysts recently looked at the correlation of increased customer spending with a host of factors and found a single significant correlation. That finding may be an aberration, or it may be a way to unlock untapped organic growth. While I was interested in the analysis, I was incredibly proud of the people involved. Without questing minds and willing participants providing data, you can’t even start to solve the important questions.

We will be hosting the AGM on Thursday, April 28th. Many of our Directors and Officers and a number of our employee shareholders will be in attendance. We look forward to talking about our business and answering your questions. We hope to see you there.

Mark Leonard April 26th, 2016
President
Constellation Software Inc.

Glossary

For 2009 and prior periods, the financial information for CSI was derived from the consolidated financial statements which were prepared in accordance with Canadian generally accepted accounting principles (“GAAP”). 2010 and subsequent year financial information for the Company was derived from the consolidated financial statements which were prepared in accordance with International Financial Reporting Standards (“IFRS”). Certain totals, subtotals and percentages may not reconcile due to rounding.

‘‘Adjusted net income’’ effective Q1 2008, means adjusting GAAP or IFRS net income for non-cash expenses (income) such as amortization of intangible assets, deferred income taxes, the TSS membership liability revaluation charge, and certain other expenses (income), and excludes the portion of the adjusted net income of Total Specific Solutions (TSS) B.V. (“TSS”) attributable to the minority owners of TSS. Prior to Q1 2008, Adjusted net income was derived by adjusting GAAP net income for the non-cash amortization of intangibles and charges related to appreciation in common shares eligible for redemption. The calculation was changed to include future income taxes since the majority of future income taxes relate to the amortization of intangible assets, and thus are added back to more closely match the non-cash future tax recovery with the amortization of intangibles. All previously reported Adjusted net income figures have been restated in the table above to reflect the new calculation method. The Company believes that Adjusted net income is useful supplemental information as it provides an indication of the results generated by the Company’s main business activities prior to taking into consideration amortization of intangible assets, deferred income taxes, the TSS membership liability revaluation charge, and certain other non-cash expenses (income) incurred or recognized by the Company from time to time, and adjusts for the portion of TSS’ Adjusted net income not attributable to shareholders of CSI.

“Average Invested Capital” represents the average equity capital of the Company, and is based on the Company’s estimate of the amount of money that its common shareholders had invested in CSI. Subsequent to that estimate, each period the Company has kept a running tally, adding Adjusted net income, subtracting any dividends, adding any amounts related to share issuances and making some minor adjustments, including adjustments relating to our use of certain incentive programs and the amortization of impaired intangibles. The Company believes that Average Invested Capital is a useful measure as it approximates the retained earnings of the Company prior to taking into consideration amortization of intangible assets, deferred income taxes, and certain other non-cash expenses (income) incurred or recognized by the Company from time to time. ROIC” means Return on Invested Capital and represents a ratio of Adjusted net income to Average Invested Capital. The Company believes this is a useful profitability measure as it excludes non-cash expenses (income) from both the numerator and denominator.

“Net Revenue”. Net Revenue is gross revenue for GAAP or IFRS purposes less any third party and flow-through expenses. The Company believes Net Revenue is a useful measure since it captures 100% of the license, Maintenance and services revenues associated with CSI’s own products, and only the margin on the lower value-added revenues such as commodity hardware or third party software.

“Total Capital” is the sum of Net debt plus Invested Capital

“Net Debt” is debt less cash.

“Free Cash Flow” in this letter, unlike under IFRS is cash flow from operating activities less interest paid and property and equipment purchased.

“EBITA” is earnings before interest, taxes and the amortisation of intangible assets.

“EBITA Return” is EBITA/Total Capital

“HPCs”: Ametek, Danaher, Dover, Illinois Tool Works, Roper, Jack Henry & Associates, Transdigm, and United Technologies.

As part of this letter, we have compared CSI with the HPCs using many commonly used financial metrics. The financial metrics principally used to compare CSI with the HPCs are: adjusted net income (ANI), earnings before interest, taxes and amortization (EBITA), return on invested capital (ROIC), Total Capital, Net Debt, EBITA Return, and Free Cash Flow. We have had to rely on publically available information in order to calculate the financial metrics for the HPCs. It should also be noted that there will be differences between how the financial metrics are calculated for CSI and each of the HPCs.

Forward Looking Statements

Certain statements in this letter may contain “forward looking” statements that involve risks, uncertainties and other factors that may cause the actual results, performance or achievements of the Company or industry to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Words such as “may”, “will”, “expect”, “believe”, “plan”, “intend”, “should”, “anticipate” and other similar terminology are intended to identify forward looking statements. These statements reflect current assumptions and expectations regarding future events and operating performance as of the date of this letter. Forward looking statements involve significant risks and uncertainties, should not be read as guarantees of future performance or results, and will not necessarily be accurate indications of whether or not such results will be achieved. A number of factors could cause actual results to vary significantly from the results discussed in the forward looking statements. Although the forward looking statements contained in this letter are based upon what management of the Company believes are reasonable assumptions, the Company cannot assure investors that actual results will be consistent with these forward looking statements. These forward looking statements are made as of the date of this letter and the Company assumes no obligation, except as required by law, to update any forward looking statements to reflect new events or circumstances. This report should be viewed in conjunction with the Company’s other publicly available filings, copies of which can be obtained electronically on SEDAR at www.sedar.com.

Non-GAAP/IFRS Measures

Adjusted net income and Organic Net Revenue Growth are not recognized measures under GAAP or IFRS and, accordingly, shareholders are cautioned that Adjusted net income and Organic Net Revenue Growth should not be construed as alternatives to net income determined in accordance with GAAP or IFRS as an indicator of the financial performance of the Company or as a measure of the Company’s liquidity and cash flows. The Company’s method of calculating Adjusted net income and Organic Net Revenue Growth may differ from other issuers and, accordingly, may not be comparable to similar measures presented by other issuers. Please refer to CSI’s most recently filed Management’s Discussion and Analysis for reconciliation, where applicable, between the IFRS, GAAP and non-GAAP/IFRS measures referred to above.

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“optimism is highly valued, socially and in the market; people and firms reward the providers of dangerously misleading information more than they reward truth tellers” Daniel Kahneman

“What accounts for TIT FOR TAT’s robust success is its combination of being nice, retaliatory, forgiving, and clear.” Robert Axelrod

“I ended up writing the book… between the hours of 10:00 pm and 1:00 am when I had finished everything else. I date the real beginnings of my love of whiskey to this period.” Archie Cochrane

“There are three kinds of men. The ones that learn by readin’. The few who learn by observation. The rest of them have to pee on the electric fence for themselves.” Will Rogers

Constellation Software Inc.

TO OUR SHAREHOLDERS

Last year I used our study of high-performance conglomerates ("HPC's") as a framework for this letter. One of the findings from studying the HPC's was that they followed a multi-decade pattern, with extraordinary returns in asset-light businesses in their early days, followed by a period of attractively priced acquisitions to which they applied their increasingly refined operating practices. Eventually, they drifted towards paying higher multiples for larger acquisitions as the HPC's became very large. The high acquisition prices led to declining pre-tax, pre-interest returns on Total Capital. While the average return on Total Capital for the HPC's still exceeds that of the S&P 500, it is much closer to that benchmark now than it was fifteen years ago.

In the last couple of years, a number of journalists and analysts have hinted that the Constellation Software Inc. ("CSI") historical performance is too good to be true. They frequently conclude, in the best case, that our performance will revert to the mean. Reversion towards the mean is consistent with what we found for all the HPC's, so I don't disagree with their observation. Our goal, however, is to have our return on Total Capital revert to the mean as slowly as possible, while still deploying most of the Free Cash Flow ("FCF") that we generate.

Table 1

	Adjusted Net Income (a)	Average Invested Capital	ROIC	Organic Net Revenue Growth (YoY)	ROIC + Organic Net Revenue Growth
2007	33	154	22%	1%	23%
2008	54	195	28%	5%	33%
2009	62	256	24%	-3%	21%
2010	84	325	26%	-2%	24%
2011	140	394	36%	7%	43%
2012	172	491	35%	2%	37%
2013	207	585	35%	4%	39%
2014	274	739	37%	3%	40%
2015	371	965	38%	-3%	35%
2016	395	1261	31%	1%	32%

(a) Historical figures restated to comply with revised definition.

In our non-GAAP results for 2016 (Table 1), you can see evidence of reversion to the mean. Adjusted Net Income grew only 6% in 2016, as compared to our ten-year compound average growth rate ("CAGR") of 31%. Our Average Invested Capital grew 31% as compared to our ten year CAGR of 26%. On the face of it, the increasingly rapid accumulation of Invested Capital is attractive, but only if we can invest that capital at high rates of return. ROIC was 31% in 2016, in line with our 10-year average, but lower than we've achieved in each of the last five years. ROIC was depressed because we were unable to invest all of our FCF during 2016 and so were carrying excess cash by year-end, and because we made a number of larger acquisitions with lower returns over the last couple of years. Organic Net Revenue Growth for the year was 1%, an improvement vs. 2015, but below our 10-year average.

We have just completed the Maintenance Revenue analysis (Table 2) for 2016. The same cautions apply to this year's analysis as to those in prior years, i.e. while the totals are materially the same as our Maintenance Revenue for financial reporting purposes, the individual components reflected in the table are generated by examining and categorising tens of thousands of records, and the estimated FX adjustment was calculated by translating the Maintenance amounts in major foreign currencies into U.S. dollars at the average FX rates for each year. We believe that the data presented is a fair illustration of the trends in our Maintenance base.

Total organic growth in Maintenance Revenue declined to 5% for 2016. In my letter last year, I explained that we sometimes buy shrinking businesses, and despite the shrinkage, we still expect to generate good returns on those investments. Growing businesses are more attractive to us, but we can't always acquire enough growing businesses at reasonable prices to invest all of our FCF. Our "next best" use of capital is acquiring shrinking VMS businesses which still meet or exceed our hurdle rate. Mixing growing and contracting businesses in one company creates a number of interesting cultural and management challenges. This might be a lively discussion topic for shareholders to raise with our management team during the Annual General Meeting (AGM). During the last few years we purchased several healthcare software businesses and a real estate software business that were all contracting, but generating strong current results. Those acquisitions improved our short-term profitability but depressed our organic growth rate in Maintenance Revenue by over 1% in 2016.

Table 2

(US$MM)	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Maintenance Revenue	142	193	252	337	417	510	725	1015	1170	1400
Growth from:										
Acquisitions	11%	25%	27%	25%	15%	15%	34%	32%	15%	16%
Organic Sources										
a) New Maintenance	9%	9%	8%	8%	8%	8%	10%	10%	8%	9%
b) Price Increases & Other	9%	9%	4%	6%	5%	5%	6%	7%	5%	5%
c) Attrition- lost modules	-2%	-3%	-3%	-3%	-2%	-2%	-2%	-4%	-2%	-4%
d)Attrition- lost customers	-4%	-4%	-4%	-4%	-3%	-4%	-5%	-5%	-5%	-5%
Total organic growth*	12%	10%	4%	7%	7%	8%	8%	8%	7%	5%
Estimated effect of FX	0%	0%	-1%	1%	2%	-1%	-1%	-1%	-6%	-2%
Total maintenance growth*	23%	35%	31%	34%	24%	22%	42%	40%	15%	20%

* Certain totals may not reconcile due to rounding

Our overall organic growth in revenue has averaged 2% during the last 10 years. The organic growth in Maintenance Revenue has averaged close to 8%. The discrepancy between the two figures has been possible because Maintenance Revenue as a portion of total revenue has increased. While some of the change in revenue mix is due to the elimination of low-margin, non-Maintenance activities, a portion is because we have knowingly traded off one-time licenses for increased recurring revenues. To some extent, particularly where we've adopted a SaaS model, we may have also traded off professional service revenues for increased recurring revenue. These trade-offs create revenue streams that are more stable and make managing our businesses easier. As Maintenance Revenue becomes a larger portion of total revenues, the discrepancy between the organic growth in total revenue and Maintenance Revenue is likely to be smaller.

This will be the last year that we present the Maintenance analysis in this format. Our business units ("BU's") monitor customer health in many ways and tend to do so on a much shorter cycle than annually. When we ask them to produce the information in Table 2, there is a large, unautomated process of classifying data and making it consistent between BU's. The benefit of providing this information for shareholders feels like it is outweighed by the effort of compiling it, if we can do it another way. For reporting purposes, Jamal began (last quarter) an alternative process of measuring organic growth by revenue stream, including maintenance, on a quarterly basis. This is a top-down analysis, and can be done quickly without a lot of ad hoc effort. Jamal will describe the calculation in managements' discussion of the Q1 results, but a significant difference is that instead of using only the prior year's Maintenance Revenue as the denominator for the growth calculations, he adds a run-rate assumption for acquired Maintenance Revenue to the denominator for such calculations. We will be reporting that data quarterly, and will provide quarterly historical comparisons going back to Q1 2016. While the information presented will not be as detailed as in Table 2, the increased frequency of reporting should be valuable for our shareholders.

Because some of our shareholders prefer IFRS-sanctioned data, we regularly present a couple of IFRS metrics that we find informative (Table 3). Total revenue per share increased 16% in 2016, up from 10% the prior year but down from the 26% CAGR that we achieved during the last decade. I consider 16% growth in Revenue per Share to be superb performance. The S&P 500's Revenue per Share grew less than 3% in 2016 and its growth has averaged 2% for the last decade.

Our Cash Flow from Operating Activities per Share grew 24% in 2016, down from the 33% CAGR that we achieved during the last decade. The S&P 500 seems to have grown its Cash Flow from Operating Activities per share in the mid to high single digit percentage range during the last decade, depending upon which source you believe, and whether financial companies are included in the calculation or not. CSI has done an outstanding job of growing cash flow per share, but that surfeit of cash contributes to our reinvestment challenges.

Table 3

	Total Revenue per Share	YoY △	Cash Flow from Operating Activities per Share	YoY △
2007	11.47	15%	1.62	19%
2008	15.60	36%	2.96	83%
2009	20.67	32%	3.85	30%
2010	29.92	45%	5.06	32%
2011	36.49	22%	6.49	28%
2012	42.05	15%	6.83	5%
2013	57.13	36%	10.40	52%
2014	78.77	38%	16.11	55%
2015	86.75	10%	18.68	16%
2016	100.28	16%	23.16	24%
CAGR		26%		33%

CSI is still an exceptional company by most standards, but we are clearly not performing as well as we have in the past. Part of that slippage is due to external factors. Part of it is due to internal execution issues.

Externally, competition to buy vertical market software ("VMS") businesses is intense. Vista Equity Partners and Thoma Bravo are two of the most prominent private equity ("PE") firms that concentrate on software acquisitions. Roper Industries is a large publicly traded industrial conglomerate that we included in our HPC study and that also actively competes for VMS acquisitions. Vista currently manages approximately $28 billion of capital and Thoma Bravo is managing approximately $16 billion. Both have raised multi-billion dollar funds in the last couple of years. CSI is currently managing only $1.4 billion of capital. In the last 9 years, Roper Industries has invested five times as much capital in the VMS sector as CSI has since its inception, 22 years ago.

In addition to these three daunting competitors, there are a dozen or so PE firms who each manage in excess of a billion dollars and who have well-established software track records. At the lowest end of the market, every quarter we seem to profile for our Operating Group Managers at least one new competitor that proposes to create a CSI look-alike. A number of these new competitors are trolling our employee base for talent. This much capital targeting the VMS sector has driven and will continue to drive up purchase price multiples.

The internal execution issues upon which we currently focus are: Maintaining investment discipline, avoiding overhead creep, and increasing our investment in growth, both organic and acquired. Even if we execute superbly on the first two, it is difficult to foresee consistent multiyear growth in intrinsic value per share (assuming that dividends are reinvested) that exceeds 10% to 12%.

<u>Maintaining Investment Discipline:</u>

I recently worked on a large transaction. With every day that passed, I could feel my commitment to the process growing… not because the news was getting better, just because I was spending more time on the prospect. The investment didn't quite meet our hurdle rate. We were not able to negotiate a structure that got us an extra couple of points of IRR, and the big one got away. The difference between investing and not, was tiny.

Currently, we have 26 Operating Group and Portfolio Managers who spend >50% of their time on M&A, and another 60 full-time M&A professionals spread across CSI. We are trying to ramp up our M&A capacity from the 40 acquisitions that we did last year, to 100 per annum. It was useful for me to once again experience the temptations that these people face every day. It also reaffirmed for me that when we pursue a very large acquisition, the diligence, structuring, negotiating and integration needs to be led by a single person who is one of our highly-experienced acquirers, and who will shoulder responsibility for the process and the outcome.

Bernie tries to be the last line of defense when our Operating Groups and BU's propose borderline investments. Some of our Operating Groups have developed or are developing senior M&A people to help Bernie filter out over-optimistic acquisition proposals, but Bernie is still the primary provider of this acquisition control function for some of the Operating Groups.

If a small investment with a borderline hurdle rate is proposed, we sometimes allow it to proceed. Our rationale is that if the investment goes sideways, then it becomes a "lesson" for the Operating Group or BU personnel that proposed it. If the investment goes well, it becomes a "lesson" for Bernie and me.

An investment only becomes a lesson if we diligently track its post-acquisition performance and take the time to analyse the outcome while the investment is still fresh in everyone's mind. We have a process for this that we call a post-acquisition review, or "PAR". We try to schedule the PAR's about a year after the initial investment. The PAR's originated as a head office led process approximately four years ago. Just over a year ago, we started delegating them down to the Operating Groups.

One of the useful things that head office can do, is pilot new processes and champion new ideas. If the ideas add enough value to the BU's and Operating Groups, and they choose to maintain them, then I'm delighted. Nevertheless, I think all processes should be periodically re-examined for their cost and benefit. An ad-hoc analysis done to understand a problem or opportunity is more likely to translate into action than a quarterly report that gets generated because "we've always done it that way". The former requires curiosity and intelligence, the latter bureaucracy and compliance. If the Operating Groups can learn from their acquisitions by some less burdensome method than PAR's, I'm all for it.

As we teach more people at CSI how to deploy capital, we lean on the accumulated data from our historical acquisitions to help maintain investment discipline. We have base rates for a variety of key operating metrics. Whether it is a neophyte investment champion arguing that a particular acquisition is "special", or a senior executive being tempted by a large acquisition, we have enough data to make the discussion rational, not emotional. We all know whether the key assumptions are being pushed to the 55th or 95th percentiles of our historical distributions.

My only significant concern regarding investment discipline, is that we'll be tempted to drop our hurdle rates as our cash balances climb.

Avoiding Overhead Creep:

Overhead creep is a short-term concern of mine and the BU Managers.

It is human nature to build empires. The slippery slope looks something like this:

I add value to the CSI Operating Groups and BU's, and CSI is doing well, hence the expenditures that I make at head office are justified.

Our Operating Group Managers add value to their BU's, and their Operating Groups are doing well, hence their expenditures are justified (although they find the expenditures at head office questionable).

The Portfolio Managers who work for the Operating Group Managers add value to their BU's hence their expenditures are justified, etc., etc.

There's no real feedback in the process, until the costs of head office, the Operating Groups, the Portfolio Managers and their staff, and the Player/Coaches who work for the Portfolio Managers, all get allocated down to the BU's. We do this allocation, but the BU Managers often don't feel that they can control allocated overheads.

The only way we've been able to consistently stifle overhead growth at head office is to arbitrarily limit headcount additions. That has allowed us to reduce the head office burden from 3.0% of Net Revenue in 2004, to 0.5% last year. We hope it will be lower in 2017.

I have struggled to find a less arbitrary means of appropriately sizing overheads. A couple of years ago, our head office tax folks seemed to have an insatiable appetite for increased headcount. I couldn't argue with their justification, but I asked them to start billing the Operating Groups for the incremental services, separate from our normal overhead allocation. There were two short-term results… our head office tax people hated billing the Operating Groups and justifying their bills, and one of the Operating Groups went off and hired their own tax person. The long-term result also pleased me: the head office tax people have stopped asking about hiring additional staff. Now, if I could just figure out how to stop them spending all that money with outside tax consultants…

Each of the Operating Groups is the equivalent of what CSI was ten years ago (plus or minus three years). If every Operating Group manages to develop six or seven Portfolio Managers to whom they can download the monitoring, coaching and acquisition control functions, and seeks to operate their remaining overheads with cost parameters similar to those that CSI's head office exhibited at the comparable time/size of portfolio, then overhead creep should be controllable.

Increasing Investment in Growth, both Organic and Acquired

This is a big topic. The Operating Group Managers and I are concerned that our BU's are not investing enough in the pursuit of profitable Organic growth. Equally important, we would like to see the company investing all of its FCF (and perhaps more) in acquisitions.

I believe that optimising organic growth investment is the single toughest management task in software. It requires a long-term orientation and an intimate understanding of customers and capabilities from our BU Managers. Historically, organic growth has not been a struggle for our best BU Managers. When most of our current Operating Group Managers ran single BU's, they had strong organic growth businesses. As those managers gave up their original BU management position to oversee a larger Group of BU's (i.e. became Portfolio Managers), the organic growth of their original BU's decreased and the profitability of those BU's increased. Perhaps those trade-offs were rational and inevitable, and it was just a function of maturing verticals and higher market share. Nevertheless, once you've experienced higher organic growth with all of its ancillary benefits for employees and for the depth and radius of your business moat, the move towards higher profit and lower growth is much less satisfying. Across the board, our Operating Group Managers have organic growth as the primary objective for their BU Managers.

When we study organic growth, there are no easy answers from CSI's data. We are just as likely to have good organic growth in our small BU's as in our large ones. We are just as likely to have good profitability in our small BU's as in our large ones. If you believe that small implies agile and responsive, then the former observation is counter-intuitive. If you believe that economies of scale are the primary drivers of profitability in the software business, then the latter observation is counter-intuitive.

One of my research acquaintances says that most people keep torturing the data until it confesses. In this instance, we can do that… we can make a case for "small is beautiful". Our businesses with fewer than 100 employees are a tiny bit more profitable and have a bit more organic growth. Unfortunately, we can flip that finding by excluding only a couple of outlier data points. Despite the lack of compelling data, I believe that small BU's are more manageable and do a better job of serving clients in the VMS industry. Sometimes belief and gut feel are all you have, and you must act upon them until there's more evidence to influence your thinking.

CSI's BU demographics (as of December 2016) appear below. There are some BU's that are independent but are run by the same BU manager, that get aggregated as single BU's into this tally, i.e. the total number of BU's is slightly higher and the average size is slightly lower than indicated in Table 4.

Table 4

# of BU's	BU Size (Employees)
6	>200
29	100-200
158	<100

CSI's strategy is to be a good owner of hundreds (and perhaps someday thousands) of growing autonomous small businesses that generate high returns on capital. Our strategy is unusual. Most CEO's of public companies would rather run a single big business - perhaps two or three big businesses, but rarely 200 businesses. They expect (or hope) to get above average returns on capital by pursuing economies of scale and by crushing or acquiring their smaller competition. "We are #1 in this large and growing market" is their normal aspirational paradigm. It's also a formula with which shareholders, analysts and boards are comfortable. We recognise that economies of scale, centralised management and world class talent competing in large and growing markets can be a great business-building formula. But, it isn't what we do.

We seek out vertical market software businesses where motivated small teams composed of good people, can produce superior results in tiny markets. These markets are usually characterised by a gradually consolidating customer base, so partnering with the right clients, and helping them survive and prosper is an important part of our job. What we offer our BU Managers is autonomy, an environment that supports them in mastering vertical market software management skills, and the chance to build an enduring and competent team in a “human-scale” business.

While we have developed some techniques and best practices for fostering organic growth, I think our most powerful tool is using human-scale BU’s. When a VMS business is small, its manager usually has five or six functional managers to work with: Marketing & Sales, Research & Development ("R&D"), Professional Services, Maintenance & Support and General & Administration. Each of those functional managers starts off heading a single working group. If the business leader is smart, energetic and has integrity, these tend to be halcyon days. All the employees know each other, and if a team member isn't trusted and pulling his weight, he tends to get weeded-out. If employees are talented, they can be quirky, as long as they are working for the greater good of the business. Priorities are clear, systems haven't had time to metastasise, rules are few, trust and communication are high, and the focus tends to be on how to increase the size of the pie, not how it gets divided. That's how I remember my favourite venture investments when I was a venture capitalist, and it's how I remember many of the early CSI acquisitions.

That structure usually suffices until there are perhaps 30 to 40 people in the business. At that stage, some of the teams - perhaps R&D if the product is rapidly evolving or has high needs for interfaces or compliance changes - must grow beyond the five to nine optimal team size. If the head of R&D in this example is brilliant and is willing to work hours that are unsustainable for most of us, he may be able to parse out tasks for each of the team members despite the increased team size. He may be able to judge the capabilities and cater to the development needs of each of his direct reports. He may be able to recruit excellent new employees, and he may be able to manage the demands and trade-offs required to co-ordinate with the other functional managers. The more likely outcome, is that the R&D manager isn't a brilliant workaholic and cannot cope as the team size exceeds double digits. Instead, he'll break his team up into multiple teams. A new level of middle managers will be born, with all the potential for overhead creation, politics, and bureaucracy that comes with another tier of middle managers.

The larger a business gets, the more difficult it becomes to manage and the more policies, procedures, systems, rules and regulations are generated to handle the growing complexity. Talented people get frustrated, innovation suffers, and the focus shifts from customers and markets to internal communication, cost control, and rule enforcement. The quirky but talented rarely survive in this environment. A huge body of academic research confirms that complexity and co-ordination effort increase at a much faster rate than headcount in a growing organisation.

If the BU is small enough, and has a competent BU manager who has several years experience in the vertical, and good functional managers, then he/she will be able to cope with complexity for a while, making the right calls to optimise organic growth as the business grows. The challenge of running a BU of this size is human-scaled. As a BU becomes larger (by our standards, that’s greater than 100 employees), I worry that even an extraordinarily brilliant and energetic manager, who has been in the vertical and the BU for a very long time, and is surrounded by a strong team that he/she has selected and trained and winnowed over many years, is going to struggle to steer the business to above industry-average organic growth.

No one wants to admit that they've hit their limit. Some BU Managers lack the humility, some lack the courage, and most lack the time for reflection, to notice that their task is getting too large, and the sacrifices are getting too great. This is the point at which our Operating Group Managers or Portfolio Managers can provide coaching. If a large BU is not generating the organic growth that we think it should, the BU manager needs to be asked why employees and customers wouldn't be better served by splitting the BU into smaller units. Our favourite outcome in this sort of situation is that the original BU Manager runs a large piece of the original BU and spins off a new BU run by one of his/her proteges. Ideally, he/she has been grooming a promising functional manager who'll be enthusiastic about running and growing a tightly focused, customer-centric BU.

This dividing of larger BU's into smaller units is rare, but not unknown, in other large companies. One of the HPC's that we studied was Illinois Tool Works Inc. ("ITW"). It has hundreds of BU's. We began following the company from afar in 2005. The most relevant period in ITW's history for CSI was the tenure of John Nichols. Nichols began consulting to ITW in 1979, and appears to have been the primary author of its decentralisation strategy. He was CEO as the company went from $369 million in revenues in 1981 to $4.2 billion in 1995 ($6.7 billion in today's dollars). Prior to Nichols's tenure, ITW had acquired only 3 businesses. During his tenure, ITW aggressively acquired and often split the larger acquisitions into smaller BU's. ITW had 365 separate operating units by 1996 when Nichols retired. I'm sorry I didn't reach out to some of the ITW employees and ex-employees until 2015. When I did talk with one of the senior managers, he said (I'm paraphrasing) "Something wonderful happens when you spin off a new business unit." … "With a clean sheet of paper, the leader only takes those he needs. They set up in an open office with good communication and no overheads. They cover for each other. They leave all the bureaucracy and the crap behind". I did record a couple of verbatim quotes from that conversation: "Don't share sales, R&D, HR, etc. because the accountants never get the allocations right and the business units always treat the allocated costs as outside their control", and "When you get big you lose entrepreneurship".

I don't want to give you the impression that the "human-scale" BU idea is a universally accepted doctrine in our ranks. For that, I suspect we'd need more compelling data. However, we have been successfully experimenting with the concept for a long time. Volaris and TSS regularly divide their larger BU's into smaller BU's that focus on sub-segments of their markets. Volaris feels strongly that splitting larger BU's into smaller ones allows more targeted products and services that differentiate their offerings from their more horizontal competitors. Harris has very successfully acquired multiple BU's in the same industry and run them independently rather than combining them into one BU. Both tactics forego obvious and easily obtainable benefits from economies of scale. We think we get something valuable when we constrain BU headcount, but it isn't a panacea for all of our organic growth challenges.

The other way we grow is via acquisitions. The vast majority of our acquisitions fall into the sub-100 employee category and were owner-managed prior to our acquisition. In 2016 we made 40 acquisitions, of which 35 had fewer than 100 employees. 30 of those acquisitions were from owner-managers.

I believe that CSI can be a great home for an owner-managed business. If the business has more than a handful of employees, we nearly always run it as a stand-alone BU. We respect the vertical-specific knowledge of the employees and give them the chance to learn from employees running similar departments and functions in our other BU's. We don't sunset products and we believe that customers and BU Managers, not head office CTO's or product strategists, should choose which products get continued investment. If the owner-manager wants to transition out quickly, the probability is very high that the successor that he/she designates will end up running the business for CSI. If the owner-manager wishes to stay for several years, perhaps spending less time on day to day management and more on acquisitions, then we are just as happy with that outcome. If you are an owner-manager of a VMS company and fall into either camp, we can arrange for you to meet with former owners like yourself who have sold to CSI.

We have best practices for acquisitions, just as we have best practices for fostering organic growth. When our BU managers encounter natural limits we coach them on how to get the most leverage from their skills and team. We apply a similar model when our Portfolio Managers encounter the limits to their monitoring, coaching, and acquisition related activities. I was CSI's first Portfolio Manager. Somewhere between mid-2005 and mid-2006, I ran out of capacity. CSI had $200 million in revenue, seven Operating Groups and about thirty BU's at that time. I could do the short-term BU monitoring portion of the job, but I couldn't stay abreast of the important longer-term factors for the BU's: details about competitors, market share, major customers, product strategy, initiatives, management competencies, etc. Without those details, my ability to provide context-sensitive coaching for BU Managers and Portfolio Managers rapidly deteriorated. I had been involved in all the large acquisitions that CSI had done up until 2005 and I had chased down a second significant acquisition for several of those verticals. By 2006 I could no longer be the primary driver of our acquisition activities. I began to ask our Operating Group Managers to shoulder the entire responsibility for monitoring and coaching their BU's and to also assume responsibility for deploying the majority of our FCF.

I didn't have complete confidence in a couple of the Operating Group Managers so the delegation process dragged on for a while. We eventually terminated two managers. It cost us some severance pay and time but we were able to find capable and trusted replacements from within CSI. There was a bit of a hiccup in our growth in 2006 and 2007 but the current Operating Group Managers - Barry, Dexter, Jeff, John, Mark, and Robin - have driven most of our capital deployment since 2006. They've developed their teams, put their own unique stamp on their groups and done a magnificent job of growing CSI's revenue and FCF per share by more than tenfold. Each is now running a group of BU's that is similar in size to CSI when I ran out of capacity. All of the Operating Group Managers have started the process of delegating their monitoring, coaching, and acquisition activities down to their Portfolio Managers, so the cycle begins anew.

When I look at the current generation of Portfolio Managers, I see some that have the potential to be exceptional managers and capital deployers. While that bodes well for continued growth, there aren't enough of them to get us the ten-fold growth that we've had in the last eleven years. To generate that sort of growth, we need more Portfolio Managers and they need to be as competent as our current Operating Group Managers. That's a tall order. It will require an intense training and coaching effort with our existing Portfolio Managers, possibly some outside hires into Portfolio Manager roles, and the acceleration of some existing BU Managers into Player/Coach and Portfolio Manager roles. Until these Portfolio Management roles are filled with people that have the complete confidence of their Operating Group Managers, delegating the majority of capital allocation won't happen, and the sustainable 20% plus growth rates of the past are impossible.

In December, we asked our Operating Groups to identify new "Potential Portfolio Managers". The good news was that there were 45 BU Managers on the list and 84% of them had been internal promotions to BU manager, or had arrived as part of an acquisition. The bad news is that newly identified high-potential BU Managers must first demonstrate that they can run a BU well, build a team, and generate optimal organic growth. Then they need to learn some non-trivial M&A skills. They'll have lots of support in this process, but it doesn't happen overnight. If we manage to get even a dozen of these 45 BU managers to the point where they are running 500-1000 employee portfolios in ten years' time, that will be a huge achievement.

I have a bias towards developing our Portfolio Managers internally or having them join us via an acquisition. Our best managers have risen through the ranks and developed a following. When they make it to BU Manager, they act like they "own" their BU and they stick with it. They have career-spanning relationships with their employees and their clients. They feel responsibility heavily. If the industry they serve is suffering, they find a way to grow the business organically, or they roll up their vertical via acquisition. They progress to running one BU and coaching others. If they're ambitious for themselves and their team, they evolve into deeply experienced Portfolio Managers with a tried and trusted cadre of employees that can help them do acquisitions and they continue to build out their Portfolio. It starts small. It's incremental. It's slow, but over the course of a long career their mastery, satisfaction, wealth and the number of their followers, all compound.

This sort of career path obviously worked for our current Operating Group Managers, who all either came up through the ranks or joined us via an acquisition. I believe that attracting, developing, and keeping that sort of talent, is the internal execution issue that poses the greatest threat to our continued success.

I don't know if the analysts and journalists who predict reversion to average performance for CSI will be proved correct in the next few years. Our plan is to maintain investment discipline, keep overheads low and hire and coach a new generation of ambitious, hard-working BU Managers who can be taught how to be competent long-term "owners". Hopefully we'll still be having this reversion debate ten years from now.

Some businesses get their unique advantage from government-granted monopolies, some from natural resources, some from large patent portfolios, and some from enormous fixed assets. CSI doesn't have these advantages. Our employees, and the customer relationships that those employees have built and fostered over many years, provide our competitive advantage. I hope all of our shareholders will join me in thanking our thirteen thousand employees for the company's continued prosperity.

We will be hosting the AGM on Friday, April 28th. Many of our Directors and Officers and a number of our employee shareholders will be in attendance. We look forward to talking about our business and answering your questions. We hope to see you there.

Mark Leonard,

President

Constellation Software Inc.

April 25th, 2017

Glossary

For 2009 and prior periods, the financial information for CSI was derived from the consolidated financial statements which were prepared in accordance with Canadian generally accepted accounting principles (“GAAP”). 2010 and subsequent year financial information for the Company was derived from the consolidated financial statements which were prepared in accordance with International Financial Reporting Standards (“IFRS”). Certain totals, subtotals and percentages may not reconcile due to rounding.

‘‘Adjusted net income’’ effective Q1 2008, means adjusting GAAP or IFRS net income for non-cash expenses (income) such as amortization of intangible assets, deferred income taxes, the TSS membership liability revaluation charge, and certain other expenses (income), and excludes the portion of the adjusted net income of Total Specific Solutions (TSS) B.V. (“TSS”) attributable to the minority owners of TSS. Prior to Q1 2008, Adjusted net income was derived by adjusting GAAP net income for the non-cash amortization of intangibles and charges related to appreciation in common shares eligible for redemption. The calculation was changed to include future income taxes since the majority of future income taxes relate to the amortization of intangible assets, and thus are added back to more closely match the non-cash future tax recovery with the amortization of intangibles. All previously reported Adjusted net income figures have been restated in the table above to reflect the new calculation method. The Company believes that Adjusted net income is useful supplemental information as it provides an indication of the results generated by the Company’s main business activities prior to taking into consideration amortization of intangible assets, deferred income taxes, the TSS membership liability revaluation charge, and certain other non-cash expenses (income) incurred or recognized by the Company from time to time, and adjusts for the portion of TSS’ Adjusted net income not attributable to shareholders of CSI.

“Average Invested Capital” represents the average equity capital of the Company, and is based on the Company’s estimate of the amount of money that its common shareholders had invested in CSI. Subsequent to that estimate, each period the Company has kept a running tally, adding Adjusted net income, subtracting any dividends, adding any amounts related to share issuances and making some minor adjustments, including adjustments relating to our use of certain incentive programs and the amortization of impaired intangibles. The Company believes that Average Invested Capital is a useful measure as it approximates the retained earnings of the Company prior to taking into consideration amortization of intangible assets, deferred income taxes, and certain other non-cash expenses (income) incurred or recognized by the Company from time to time. ROIC” means Return on Invested Capital and represents a ratio of Adjusted net income to Average Invested Capital. The Company believes this is a useful profitability measure as it excludes non-cash expenses (income) from both the numerator and denominator.

“Net Revenue”. Net Revenue is gross revenue for GAAP or IFRS purposes less any third party and flow-through expenses. The Company believes Net Revenue is a useful measure since it captures 100% of the license, Maintenance and services revenues associated with CSI’s own products, and only the margin on the lower value-added revenues such as commodity hardware or third party software.

“Total Capital” is the sum of Net debt plus Invested Capital

“Net Debt” is debt less cash.

“Maintenance Revenue” primarily consists of fees charged for customer support on our software products post-delivery and also includes, to a lesser extent, recurring fees derived from software as a service, subscriptions, combined software/support contracts, transaction-related revenues, and hosted products.

“Free Cash Flow” in this letter, unlike under IFRS is cash flow from operating activities less interest paid and property and equipment purchased. I figure if you have to pay interest and buy new computers, the cash used for those purposes is no longer available, and shouldn’t be included in FCF.

“EBITA” is earnings before interest, taxes and the amortisation of intangible assets.

“HPCs”: Ametek, Berkshire Hathaway, Danaher, Dover, Illinois Tool Works, Roper, Jack Henry & Associates, Transdigm, and United Technologies.

Forward Looking Statements

Certain statements in this letter may contain “forward looking” statements that involve risks, uncertainties and other factors that may cause the actual results, performance or achievements of the Company or industry to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Words such as “may”, “will”, “expect”, “believe”, “plan”, “intend”, “should”, “anticipate” and other similar terminology are intended to identify forward looking statements. These statements reflect current assumptions and expectations regarding future events and operating performance as of the date of this letter. Forward looking statements involve significant risks and uncertainties, should not be read as guarantees of future performance or results, and will not necessarily be accurate indications of whether or not such results will be achieved. A number of factors could cause actual results to vary significantly from the results discussed in the forward looking statements. Although the forward looking statements contained in this letter are based upon what management of the Company believes are reasonable assumptions, the Company cannot assure investors that actual results will be consistent with these forward looking statements. These forward looking statements are made as of the date of this letter and the Company assumes no obligation, except as required by law, to update any forward looking statements to reflect new events or circumstances. This report should be viewed in conjunction with the Company’s other publicly available filings, copies of which can be obtained electronically on SEDAR at www.sedar.com.

Non-GAAP/IFRS Measures

Adjusted net income and Organic Net Revenue Growth are not recognized measures under GAAP or IFRS and, accordingly, shareholders are cautioned that Adjusted net income and Organic Net Revenue Growth should not be construed as alternatives to net income determined in accordance with GAAP or IFRS as an indicator of the financial performance of the Company or as a measure of the Company’s liquidity and cash flows. The Company’s method of calculating Adjusted net income and Organic Net Revenue Growth may differ from other issuers and, accordingly, may not be comparable to similar measures presented by other issuers. Please refer to CSI’s most recently filed Management’s Discussion and Analysis for reconciliation, where applicable, between the IFRS, GAAP and non-GAAP/IFRS measures referred to above.