SELECTED INVESTOR QUESTIONS RECEIVED THROUGH AUGUST 3, 2018

Question

You have obviously studied many HPCs. Do you also study failures, or companies which lost market share and/or suffered from unexpected declines? For example, are there any lessons from Blackboard or MYOB, both of which had dominant market positions and lost significant share to SaaS competitors (Instructure and Xero, respectively)? Or Micro Focus, which has struggled since acquiring HPE Software?

Response

One of the design problems of the HPC study, was that we didn't formally study conglomerates that had been failures. Most people from my generation and younger believed that conglomerates were failures, hence I focused on the few that weren't! Once we knew that there was a handful of successful conglomerates that operated in a manner similar to CSI, I'm afraid that I moved on to other areas of study. It is a great example of confirmation bias. I should have tried to distinguish the characteristics of the conglomerates that were successes and failures, and determined if there were differences between the two.

We have always studied vertical market software businesses of all kinds, including both successes and failures. MYOB isn't a VMS, nor is Micro Focus and hence they have not had much of our attention.

I followed Blackboard while it was public, but it was taken private many years ago by a PE firm. At the time, it appeared to be a successful firm largely competing in the colleges and universities market (15% of revenue was from the K-12 market). I had not heard of Instructure previously, so thank you for bringing it to our attention. I just had a glance at their profile: They seem to operate primarily in the K-12 market, so I don't believe Instructure is focused in the same place as Blackboard. They also appear to be investing significantly to generate declining growth. We'll study them further.

The economics of customer acquisition interests me. I've been looking for public SaaS companies that are clearly creating value in their customer acquisition process. I'm amazed at how difficult it is to get the data necessary to do this analysis. Most currently raise money at high valuations without providing detailed customer acquisition cost information.

We produce a valuation index of public VMS SaaS businesses each quarter and publish it internally. This quarter the weighted index hit an all-time high of 9.5X TTM Revenue. If you believe that each dollar of new customer revenue really does create 9.5 dollars of enterprise value, then you can afford to spend up to 9.5 dollars acquiring that incremental dollar of annual revenue. I think that there are a number of SaaS CEO's who are pushing customer acquisition "investment" to these record levels. It feels like a party that could end unhappily if that marginal customer's economics don't support their marginal acquisition cost.

I was having a conversation about SaaS customer acquisition economics with one of our large shareholders. They suggested that I look at The Ultimate Software Group, Inc. ("ULTI"). ULTI are not a VMS, but I did some analysis based on their publicly available information and I'm convinced that they are adding value via customer acquisition.

If there are other public SaaS businesses where you think the marginal customer acquisition costs are clearly below the customer lifetime value acquired, please send along their names and we'll study them and share what we learn with our managers.

Mark L.

P.S. The ULTI suggestion was an example of what I've referred to as "Enterprising Shareholders" adding value to CSI. I can't imagine having that conversation with most ETF managers.

Question
Margin trajectory: The margins for the first half of the year has been weaker than last year, can you give us some colour on how much of this is because of higher employee expense at the corporate office and how much is because of lower margins for the acquired company. Also just some colour on whether there has been some shift in the criteria for making new acquisitions to include lower margin companies?

Response
As mentioned in the MD&A the margin decline is primarily the result of lower margins on recently acquired businesses. If these businesses improve over time as expected, and we do not add a proportionate volume of low margin acquisitions, then overall margins of Constellation could move closer to historical levels.

Keep in mind that we are also investing a lot more in M&A, so there could be an increase in our G&A expense as a percentage of revenue.

Question
The trajectory of your ex-fx organic growth has shifted from low single digit (LSD) to mid single digit (MSD) improvements to flattish in the first half of the year. Is this a longer-term shift in your organic growth rate to the Flat to LSD range from an LSD to MSD range or a one-off in the first half with improvements expected heading into the second half of the year?

Response
Organic growth in maintenance and other recurring revenue remains stable. The organic growth in the remaining revenue streams is lumpy and there has been no fundamental shift in the organic growth profile of the overall company.

Question
The tax rate in this quarter was much higher than your prior quarter trajectory, what were the one-offs included in the tax rate numbers and what the long-term tax rate should be for the company?

Response
Current tax expense as a percentage of adjusted net income before tax was 22% and 19% for the three and six months ended June 30, 2018 respectively, and 21% for the same periods in 2017. This rate has historically approximated our cash tax rate however the quarterly rate can sometimes fall outside of the

annual range due to out of period adjustments. It is expected that the cash tax rate will increase slightly over time as taxable income growth outpaces the growth in tax deductible intangible assets.

Question

What is the company's philosophy on SaaS based models vs. on-premise? Would SaaS require more R&D spending at the company? Are Saas businesses available at similar acquisition multiples to Constellation? Will you disclose what portion of revenues are generated from SaaS products? Do Constellation businesses fall behind as SaaS competitors integrate more machine learning and artificial intelligence into their offerings?

Response

We like to generate good returns on our invested capital, whether that capital is invested in SaaS or on-premise businesses.

SaaS can be a technology model or a billing model or both. R&D spending will vary depending which of those two you mean. It will also vary by stage. For example, if a multi-tenant single instance SaaS tech model is being deployed along with a SaaS billing model, and the business is mature, then the proponents of SaaS would argue that R&D spending as a percentage of revenues would be less. In the growth phase for a similar company, that is much less likely.

Our individual businesses will offer SaaS or hosted solutions if it makes sense in the market in which they operate. This may involve a software re-write or acquiring the technology. We don't track the percentage of revenue coming from SaaS or hosted solutions.

If new technologies like machine learning and AI prove useful, we integrate them into our products.