Valuing project achieve

Introduction After years as ateacherand principal frustrated by the inability to effectively track school and student progress, Stacey Boyd and HBS classmate Mandy Lee founded Project Achieve, an information management system for schools. In a quickly changing industry with fast-moving competitors, Project Achieve aimed to use leading-edgetechnologyto reduce the workload of teachers and administrators while simultaneously keeping parents and students aware of performance. In an attempt to raise capital from an array of investors, Boyd needed to assess the firm's value before moving forward. Project Achieve's Competitive Advantage_ Project Achieve hopes to differentiate itself from its competitors via its emphasis on a completely web-based product and its founder's knowledge of schools and teachers, its two main competitive advantages. As the first mover amongst entirely web-based products, Project Achieve hopes to gain significant market share before imitations of its products appear. Being entirely web-based, the system was created in a standardized manner to allow numerous schools to have the capability to use the system and get support simultaneously. In short, the firm's products are especially scalable.

The company will also collect tremendous amounts of information on students, creating yet another potential revenue stream from advertisers and content providers. Potentially, Project Achieve could evolve into the nerve center for schools. With high switching costs, such a position could be attractive to content providers and other potential acquirers. Compared to NCS's SASI and ABACUS, Project Achieve has a more integrated web-based design and most importantly, is cheaper. Additionally, Project Achieve

features an easier template and user-friendly interface compared to similar systems like IMSeries.

With the potential to be used by administrators, teachers, parents, and students, Project Achieve could possibly become the platform for distance learning andcommunicationamong the aforementioned parties. This partly rests upon Boyd’s ability to gauge the technology needs in academia. Luckily, Boyd’s knowledge of the space is one of the firm’s competitive advantages. Unfortunately, the company’s technological advantages will probably be short-lived after the product hits the market, since competitors are likely to imitate Project Achieve and also move to ntirely web-based products. Additionally, the firm’s marketing strategy depends heavily on the support of governors, but it is questionable whether the firm has the necessary lobbying resources to gain their support. We also question the firm’s ability to entice schools to buy its fee-based program without a sales force. Comparable Company Analysis Based on Exhibit 3 from the case, Project Achieve has nine public companies that can be indentified as comparable. Project Achieve’s closest comparable companies are Click2learn. com, Learn2. com, and Vcampus.

These companies are most similar to Project Achieve in that they are all primarily online learning and training courseware. In addition, these three companies are relatively new in the marketplace with the oldest company, Learn2. com, going public mid-year 1994. Finally, these three companies have little to no debt, similar to Project Achieve’s reliance on internal funding. Boyd can use her research on comparable companies in her valuation of Project Achieve to calculate Project Achieve’s beta. The

comparable companies could also be used in a multiples-based valuation analysis.

Unfortunately we don’t have a complete set of data for each firm’s number of subscribers, otherwise we could have done a valuation based on value per subscriber. _Project Achieve’s Discount Rate_ Boyd should use a discount rate of 19. 0% in her valuation of Project Achieve. This rate was determined using Achieve’s three most comparable companies, Click2learn. com, Learn2. com, and Vcampus. These comparables’ equity betas were determined based on the movement of the market and company returns since their inception. We unlevered these betas and took the median to estimate an industry beta.

We assumed an asset beta of 1. 15 (the median asset beta of the three comparable companies) and a debt beta of 0 (with no interest bearing debt) for Project Achieve. Using the 30-year treasury rate (5. 94%) as the risk-free rate because of Project Achieve’s expected life and a historical 7. 0% market risk premium, we calculated Project Achieve’s discount rate at 14. 0%. This discount rate values Achieve as a public company, comparable to its public counterparts. As a non-public start-up, however, Project Achieve is far more risky than the more established comparables discussed above.

Thus, we added a 5% start-up risk premium to reach an appropriate 19% discount rate for the valuation of Project Achieve. (See Exhibit #1) Valuing Project Achieve In order to forecast the value provided by each customer type to Project Achieve, we must first identify the breakdown of customers based on the probabilities given in the case, and then forecast the cash flows

associated with each type of customer. To determine the probability of a generic targeted school falling into any customer category, we created a decision tree. Exhibit #2) Per our analysis, there are five end user states – perpetual Achieve Express users, two-year users of Achieve Express, perpetual users of Achieve Express and Achieve Logic, two-year users of Achieve Express and Achieve Logic, and targeted schools that didn't respond – all with varying probabilities. Now armed with the percentage breakdown of customers expected for Project Achieve, to determine the value of each customer we must forecast the cash flows associated with each type of customer. Exhibit #3) All of the costs and revenues associated with each type of customer are detailed in Exhibit #3. After calculating a WACC of 19. 00% and forecasting cash flows for each type of customer, it is easy to find the net present value of each customer. Not surprisingly, two-year Express users are the only loss makers for the firm, with a value of -$386. 63 per two-year Express user. Perpetual Express users, two-year Logic users, and perpetual Logic users are each worth $1, 315. 79, $15, 588. 16, and $44, 659. 4 respectively. (Exhibit #3) Now that we have calculated the value per customer for all of our customer classifications (Exhibit #3), we can apply the probabilities found in our decision tree (Exhibit #2) to find the overall value per targeted customer. Doing so, we find that each targeted customer has a value of $5, 102. 49. (Exhibit #4) Going one step farther, we matched the value per targeted customer with the forecasted number of customers targeted to find the total value of all of Project Achieve's targeted customers.

Discounted at WACC (19. 0%), all of the firm's targeted customers are cumulatively worth $78, 805, 398. (Exhibit #5) Using the DCF method, the

after tax value of Project Achieve is $11, 991, 608. (Exhibit #5) The valuation of Project Achieve is extremely risky considering the dependency of the company’s cash flows on customer acquisition and retention. In addition, Project Achieve’s tax rate along with its carry-forward loss of $1 million will significantly affect its value. The assumptions used in valuing Project Achieve are:

Total estimated overhead costs 1999-2000 are $6, 524, 826 (case Table A) Total costs increase 20% per year for 4 years and after the fifth year costs rise in line with subscription base Revenues grow 2% annually after year 5 (rate of increase for target schools) No inflation taken into account on growth rate because downward pressure on prices with new market entrants will counter inflation $1 million loss incurred to date (will carry forward in tax burden and increase the value of Achieve) 35% tax rate (ignoring depreciation) The Role of Investors

Given Project Achieve’s status as an early-stage start-up, its lack of a sales force, and its need to develop relationships with political authorities and schools, the firm requires investors that understand start-ups and can help market its products. Angel investors like Daniel Eliot don’t seem to fulfill either of these requirements. Venture capitalists deeply understand start up businesses and could provide a big chunk of capital, but they don’t know schools, their valuation is lower than Jostens’, and they would be no help in gaining traction for Project Achieve’s products.

Additionally, a VC firm would likely require much more control than the other types of investors. Strategic investors are the most compelling. A strategic

investor may wish to complement its own growth by integrating Project Achieve’s new technology into its business. Since strategic investors are almost always in the same industry as their targets, they can often help with industry contacts and business expertise. For example, Jostens knows schools, has a sales force in the field calling on schools, and offers the best valuation.

We would go with Jostens now, perhaps bringing in a venture capitalist in a later round. We would also keep in mind the possibility of selling out to Jostens down the road if Project Achieve’s products gain traction. Potential investors have widely varying estimates of the value of Project Achieve because our valuation has many aspects. Primarily, different investors may have different forecasts of product adoption rates. As discussed earlier in the paper, we feel that Boyd is being excessively optimistic about the probability of schools purchasing her fee-based program without prompting from a sales force.

Since our valuation is entirely dependent on the probabilities displayed in our decision tree (Exhibit 2), if different investors had different calculations for these probabilities, their valuations would be drastically different. Boyd needs to make sure she is realistic in her forecasts of product adoption, for they will set the stage for valuation discussions. Computing the explicit valuation, whether pre-moneyor post-money, is simple and unlikely to lead to disagreement. The valuations may differ, however, based on how big an investment is made.

Since the three potential investors, Daniel Eliot, Jostens, and the angel investors, were all offering different amounts of capital, it makes sense that their valuations would differ slightly. Quantifying the implicit valuation is what makes valuing the firm particularly problematic. The implicit valuation includes valuing warrants, liquidation preferences, and dividends. Additionally, there are non-quantifiable valuation factors such as pre-emptive rights and anti-dilution provisions. To have a better deal, it is important for Boyd to present Project Achieve’s business opportunities thoroughly and disclose all useful information.