

Final Exam

Please read the Visible Interactive (A) case, and answer the questions below. The exam should be handed back by Monday, May 20th, before 12:00 PM (noon). The exam is open book; this means you can consult your class notes, your case write-ups, the handouts, the material on the course web-site, and any recommended readings. You may use an option pricing program. You may not consult other sources such as further information on the company. Please type your solutions. Also please put your name on the cover page only. Good Luck!

Exam Questions

- (35 points) (a) Based on the data in Exhibits 4 to 6 what is the value of Visible Interactive using the discounted cash flow method? (b) Under the assumption that the company goes public in 1999, value Visible using the venture capital method. According to this method, what percentage of the equity would Spiffy Ventures need to have to justify their \$4 million investment? (c) Suppose that in order to hit the targeted numbers forecasted in Exhibit 5 Visible Interactive needs to raise an additional \$5 million second round of venture capital funding in year 1997 that would be used for further product development. How much of the equity does Spiffy Ventures need to own initially to justify its \$4 million investment? Note: You are free to make assumptions along the way provided you give a reasonable rationale for the assumptions. Please assume the tax rate is 37%.
- (15 points) What do you see as the major uncertainties and opportunities in the business model of Visible Interactive? How would you incorporate these into the valuation? Please just describe how you would change the valuation from (1) to incorporate these issues, but you do not need to do a new valuation.
- (25 points) (a) Based on the term sheet in Exhibit 7, describe the payoffs to Spiffy Ventures as a function of the value of Visible Interactive when a liquidity event is reached. Assume that the liquidity event is reached in 1999 (i.e. in five years). (b) Describe the payoffs to the founders. (c) Suppose that there is no Participation feature – this means Spiffy Ventures offers a straight convertible preferred. Now describe the payoffs to Spiffy Ventures.
- (25 points) (a) Suppose that the deal is structured as in 3 (c), i.e. Spiffy Ventures offers a straight convertible preferred. What is the post-money value of Visible Interactive implied by the fact that Spiffy Ventures is willing to invest \$4 million according to these terms? Note: To answer this question you will need to apply option-pricing techniques. For simplicity, assume that the annual volatility is 60%,

the time-to-maturity is 5 years, and the risk-free rate is 6%. (b) Please discuss how the implied valuation under the deal terms in 4(a) compares to the implied value of the actual deal structure that is given in the term sheet? I am not looking for a quantitative analysis here, just discuss the differences.