October memo to Professor, draft

Prof–

Hope your weekend went well. Since our conversation after class last week about our social media composite score & dashboard idea, and after we discussed your thoughts about it, Jonny came up with a second idea that our group was receptive to, which we’d like to run by you, alongside a better description of our first idea from its creator, Pratt. Both are below. We just want you to have both of our front-runner ideas in writing; please don’t feel the need to reply or anything, we are more than happy to discuss with you in-person on Tues. We just felt that it would be very helpful to get your feedback before we dive headlong into either one of these. Thanks.

1. Social Media Authenticity Dashboard: when it comes to gaining access to high end places (restaurnats, bars, or lounges) profiling a major issue for business owners because some people claim to be someone they are not. This tool solves that problem. We want to be able to use OAuth apis to allow users to sign up to our app/website using their social media, so we can run an analysis algorithm on these profile to give them an authenticity score. Essentially, we will be scraping their follower count, scanning for bots, looking at image quality and descriptions to get a sense of their true profile, and at the same time create a comprehensive overview of their occupation, work experience, connectionsin industry and etc (using linkedin & IG).
2. Auto Investment Banking Valuation: there are 5-6 different ways of valuing firms (Comparables, Precedents, DCF, LBO, Merger Model, Liquidation/Recovery depending who you ask), and all of them require a great deal of poring over press releases, annual reports, merger proxy filings, 10 K’s, 10 Q's, 8 K’s, stock history, and the like. They also require lots of ‘gut instinct’ into how a firm may grow for the next 3, 5, or infinite number of years, what synergies may be found in 3/5/infinite years if two firms merge, and where interest rates, tax rates, and costs of capital will be in x years. In banking pitch decks, most of this grueling modeling is often summarized in a ‘Football Field’ diagram to show to clients, so why not automate everything up until that point, with the ability for users to change some of the predictive assumptions we made that underpin this football field we spit out?
   1. Predictive element
      1. Cashflows, expense margins, inventory growth rates, etc
      2. Gordon growth rates, terminal exit multiples, costs of capital, weightings of capital
      3. For accretion/dilution ‘Merger Models’: synergies
   2. Scraping element
      1. Trawling through oceans of financial information
         1. How a stock reacted to merger news; how the media reacted (sentiment) to merger news; what happened to the merged company after X years (synergies)
         2. Scraping Preqin, S&P Insight, FactIQ, and merger proxy filings to assemble lists of comparable companies for Comparables Analysis (‘Comps’)
         3. Running sentiment analysis on the tone of the Management Discussion & Analysis (MD&A) sections of the Annual Reports
   3. Front-end
      1. Allow users to modify any of the assumptions we made for any of the types of valuation, and see those modifications reflected in the end product, the Football Field diagram
   4. Misc: we will include more ideas & applications for class content as we progress