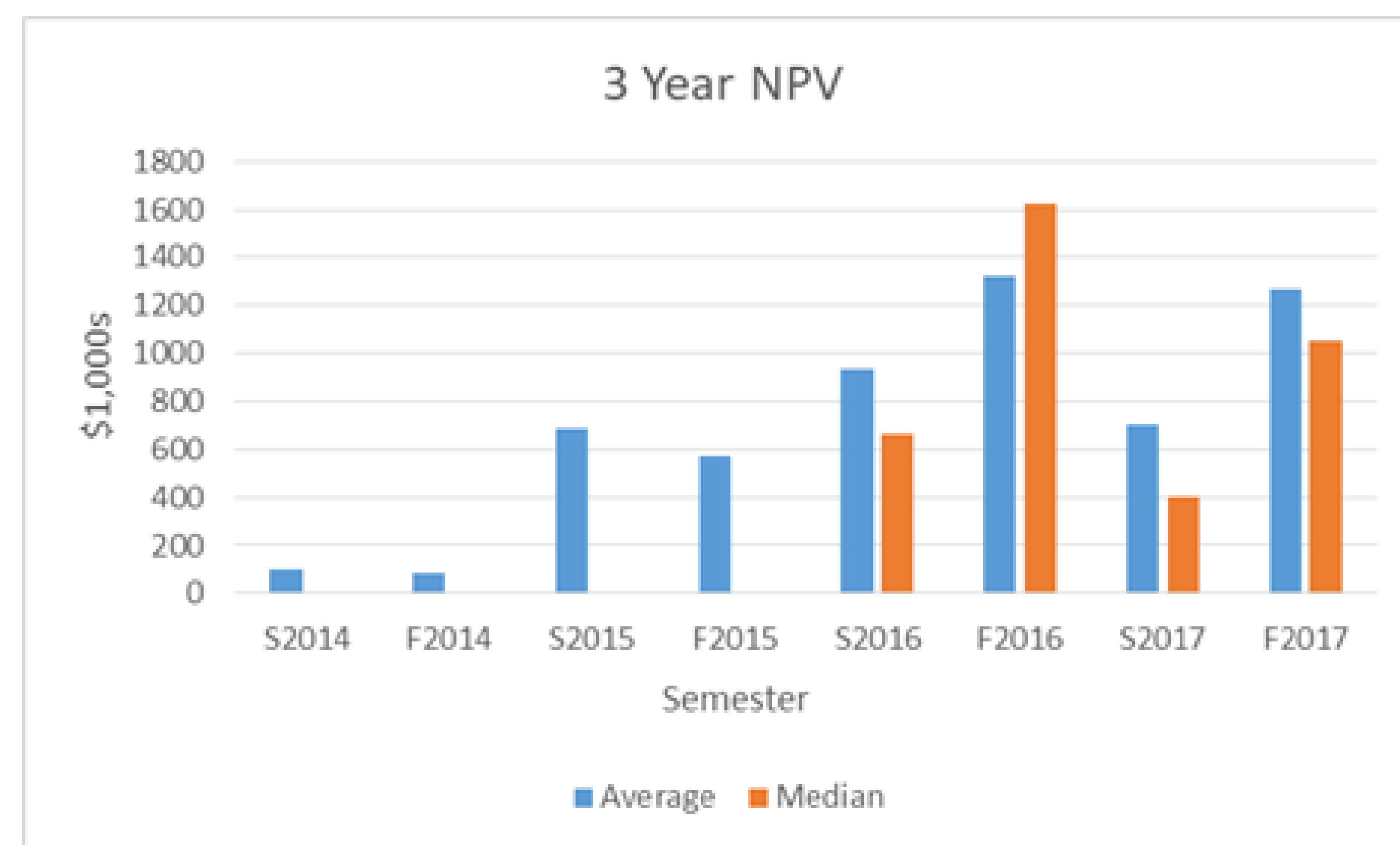


Dr. David Sly PE, Professor of Practice

Running capstone like a business – Focus on the client

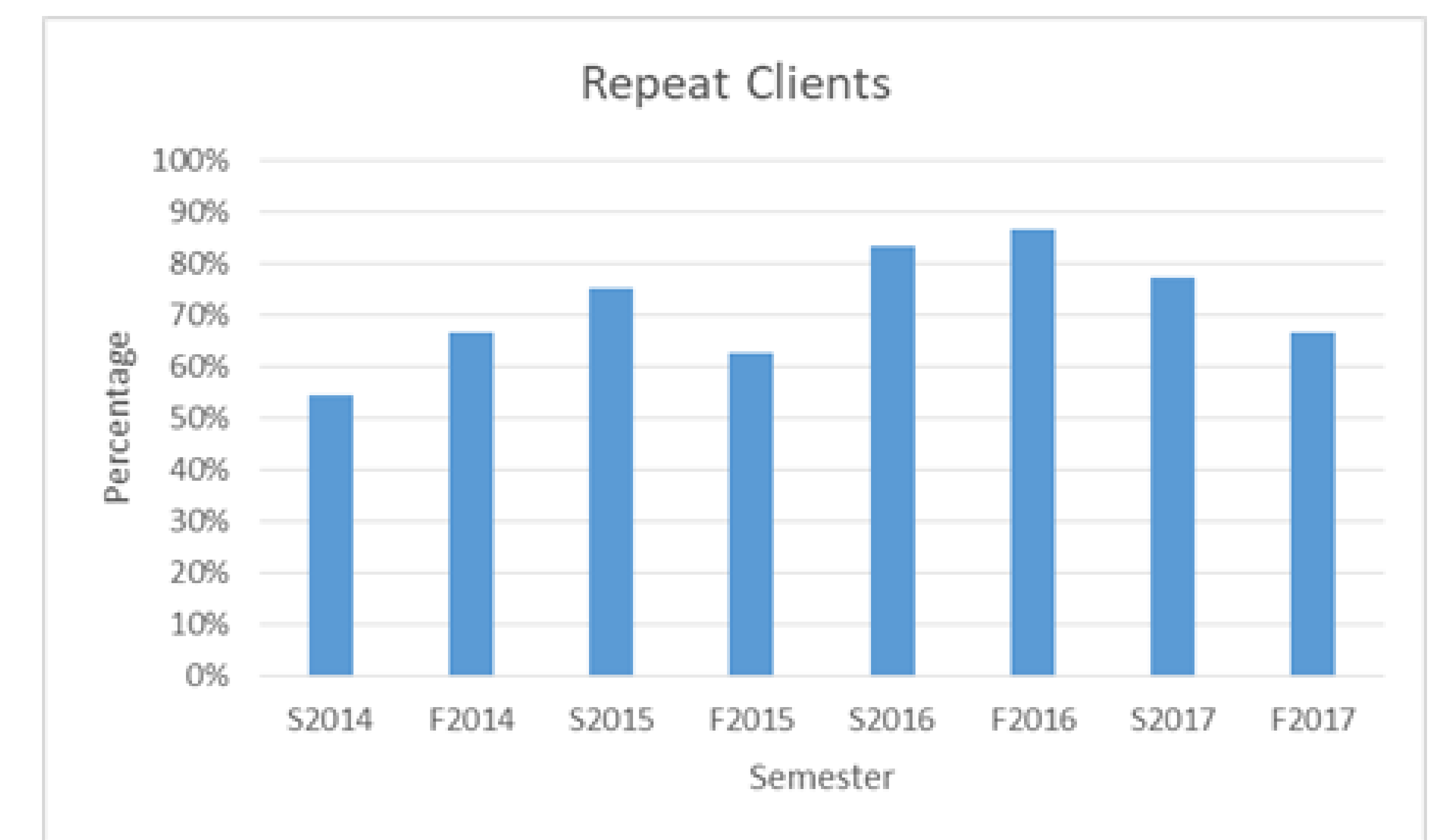
Total economic impacts reported by the clients to the university in **EACH** of the past four semesters has exceeded **\$14 million** with a peak value of **\$16.5 million**. (12-24 one semester, 4 student teams)



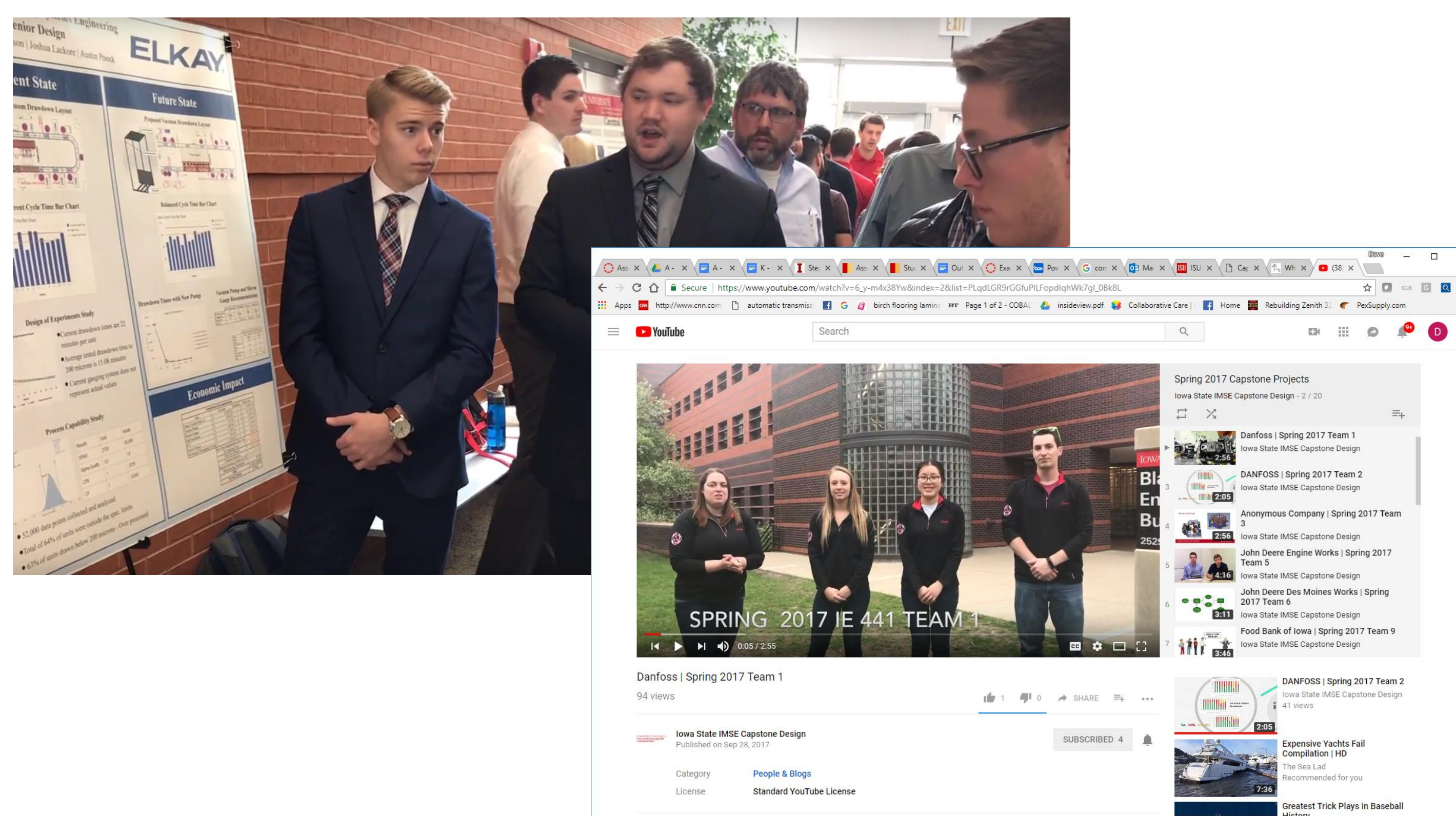
Average project 3 year Net Present Value

Summary of Key Factors

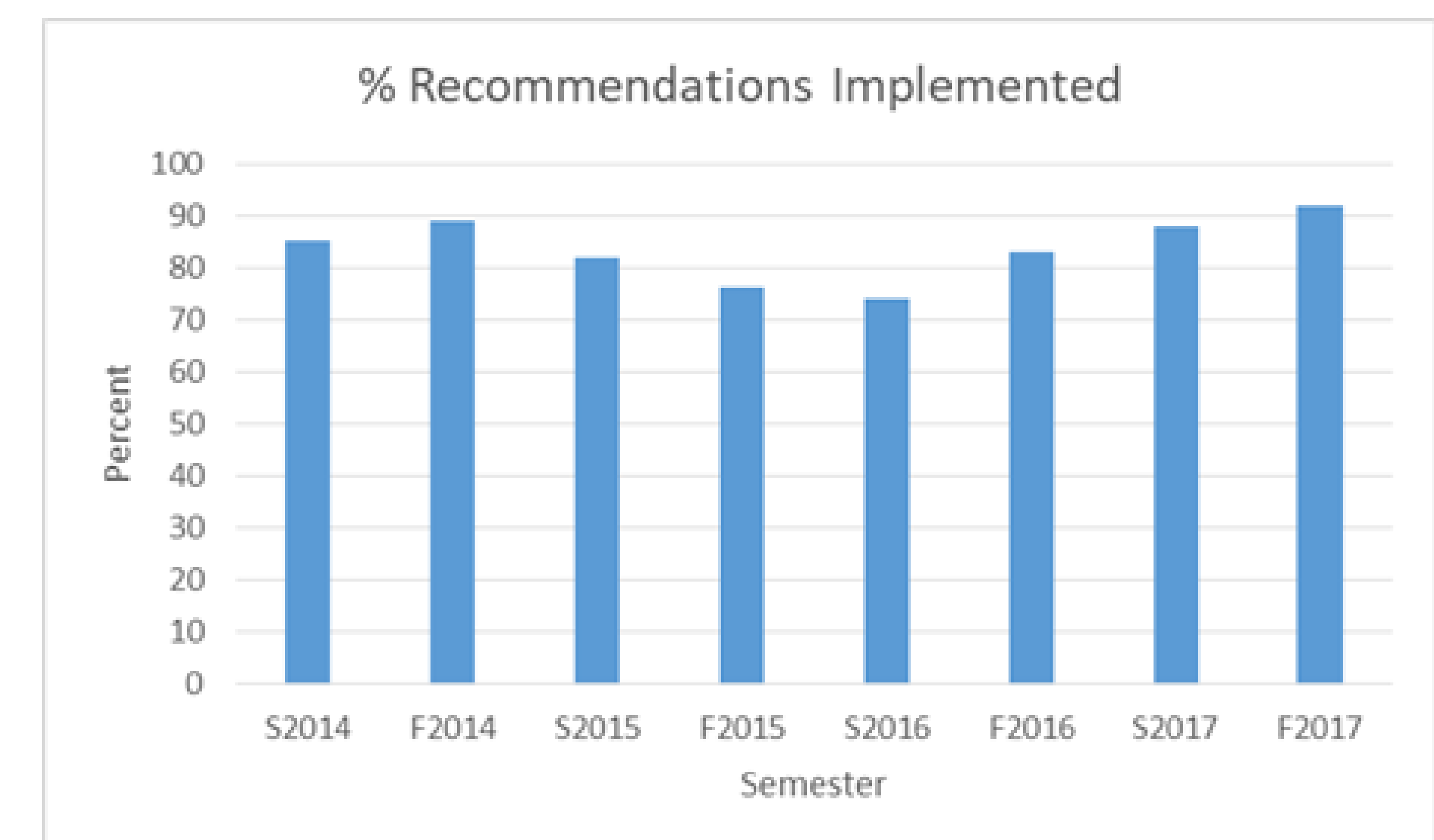
- Successful projects are the primary objective.
 - Students will learn best by participating on a successful project.
- Designs are due 4 weeks before the end.
 - Students need time to receive feedback and make changes to their project before the end of the semester.
- Practicing engineers select, scope and manage the projects from beginning to end.
 - Instructors own the success of the project and may need to jump in and help out if necessary (before, during and after the semester).
- Clients must pay a fee (bigger is better) to ensure a strong commitment to the project's results and student support.
 - Client need to be educated on how to productively assist the students. [\$5k-\$10k per semester for a 4 person team]
- Students must engage the clients personally and often.
 - Difficult with the students today being dependent on social media.
- Student teams of size 4 work well.
- Student teams should work on unique projects.
 - Competition between projects is good but within a project is bad.
- Students should select their team members.
 - Compete for projects based on competency (Internships, courses, grades, job acceptances, etc.)



Percent of companies repeating



You-Tube and industry exchange promotion



Percent of student designs implemented