APS1035H-Syllabus: Technology Sales for Entrepreneurs

Main-Instructor: Professor Steven Treiber meetings by appointment only in WB257, tel: 416-725-1774 or by e-mail: "Steve Treiber" <steve.treiber@utoronto.ca>. See his Bio at the end of this document. TAs are Gong Xin Xu, Gong.xu17@rotman.utoronto.ca, and Katie Bayley, k.bayley@mail.utoronto.ca. Gong is an engineer completing his MBA at Rotman and Katie is a Civil Engineer completing her MEng.


Introduction
At some point in their careers most engineers and scientists they find themselves with the need to convince their boss, their company, their co-workers, or a client to try some new idea. That new idea, product or service might be so novel that there are no easy comparisons to be made to something existing and proven. This is the crux of the innovator's dilemma and the title of a famous book by Clayton Christensen¹. Most science and engineering schools teach their students how to organize their data and facts. Through group projects students are exposed to the need to argue their point of view, negotiate compromise, and then present their results and ideas to their professors to get the best marks.

Many schools also give students an opportunity to develop business plans. However, very few schools teach their students how to sell their technological ideas to a complex audience who often have conflicting views and needs, and perhaps limited technical knowledge, but who all have some influence on the decision. In fact, in most cases the decision makers have little or no technical competence in the specific subject in question and the engineer/scientist’s argument often comes down to “trust me”.

The process
Good sales people have a sales “personality”, great sales people have a sales process. That sales process is repeatable and measurable by metrics that predict ultimate success or failure. The sales process taught in this course is based on the two most reliable and scientifically based sales processes, SPIN Selling, by Neil Rackham, and The Sales Funnel, by Ray Leone.

The course is all about how to get people to listen and gain enough trust in you to take a chance on your offer. Students will learn the keys to selling a “customer” on an idea, product or service that they passionately believe in. The course is designed to have a variety of learning objectives which are delivered via lectures, exercises, role playing, group presentations and homework assignments. The students will learn how to organize and communicate their thoughts and facts

¹ The Innovator’s Dilemma, Clayton Christensen, 2002
in a way that will increase their probability of succeeding in convincing the decision makers that they should take a chance on a new idea or innovation.

The course is delivered in 12 three hour classes that are a mix of lecture and role play exercises. Lectures and handouts as appropriate provide the background material necessary for students to grasp the ideas and processes required to achieve a level of competence. The class will be organized into groups or as individuals for various course assignments. Eight of the lectures are mostly devoted to student presentations of various kinds around marketing, sales, and negotiation.

Real world scenarios based on actual events in the experience of the instructors are used as case studies around which the students prepare their presentations and assignments and these will be graded to arrive at the course mark. There is no final exam.

The ideal candidate for this course is an engineer or technologist who has an idea, for a product or service that they want to sell to someone. They will have to sell their idea to some group or individual (typically their manager), the management of a company or institution, or a government office or department. The idea can be new or something that has been done elsewhere but is new to the “customer”. Students who have taken one of the business and entrepreneurship courses, XXX488, APS234/432 or APS 1088, will find this course a helpful extension of the concepts taught in those courses but those are not a pre-requisite for this course.

The course will begin with the students telling the rest of the class their idea and so it would be helpful to have one. This course is not for auditors and students will have to qualify to participate during the first class. It is for people who have an idea to solve a problem that they or someone they know have been struggling to get approval and/or funding for. The exercises and presentations will be graded and feedback provided both from instructors and classmates. A collateral benefit is that students will be able to refine their concepts and improve their communication of them.

Some students may come with or develop real, viable ideas. In those cases the instructor may introduce them to The Hatchery or one of the many incubators and accelerators on campus and in the GTA, and even commercial companies that might have an interest in their product or service.

**Course Project.** All sales people will admit that one of the hardest things they may ever have to do in their job is a “cold call”. Interview of a Successful Entrepreneur is the course project that requires each student to interview a successful Canadian entrepreneur and write a report about them and what made them successful. The successful entrepreneur that each student chooses must be a complete stranger to whom they are not related nor who may be an employee or owner of their own company or anyone working at a university.

Each student will identify a person whom they wish to interview and obtain permission from the course instructor who will provide guidance on how to approach that individual and whether or
not the person is a suitable candidate for the assignment. Such permission is mandatory. The purpose of this assignment is twofold: 1) learn how to approach a stranger and “sell” them something. In this case the sale is to get them to give you an hour of their time; 2) all successful entrepreneurs have succeeded in selling an idea in a market so this is an opportunity to learn from their experience.
Outline & Schedule: Technology Sales for Entrepreneurs: Tuesdays, 6-9pm, WB219

■ Sept 13: Introduction: Overview of Concepts, Complex Sales: Course entry test
■ Sept 20: Developing Marketing Collateral:
  ■ Introductory Presentation (5 minutes) (10 marks)
  ■ Homework: Read SPIN Selling by Neil Rackham
■ Oct 4: Developing a Sales and Marketing Strategy
■ Oct 11: Sales Process: Stages of a complex Sale
■ Oct 18: Executing Spin Sales Process: Role Play Questioning (10 marks)
  ■ Homework: Prepare a Client Proposal Based on Questioning in Class
■ Oct 25: Present Client Proposal: PowerPoint (5 minutes) (10 marks)
■ Nov 1: Sales Negotiation: Classroom Negotiation (10 marks)
■ Nov 8: Market Validation & Market Research
■ Nov 15: Market Validation Role Play Questioning (10 marks)
■ Nov 22: Investor Presentation (10 marks)
■ Nov 29: Planning for Growth: Developing a Sales Pipeline
■ Dec 6: Financing & Legal Issues
  ■ Final Pitch (5 minutes each for prizes) (10 marks)
■ Submit your Successful Entrepreneur Interview (30 marks)
Steve Treiber Bio:
Steve Treiber is President and co-founder of Manufacturing Technology Network Inc. He started his chemical engineering career at the Shell Montreal East refinery in 1969. After leaving Shell in 1984 he starting his own process control company, Treiber Controls Inc (TCI). TCI became a world recognized leader in the field of multivariable constraint control and real-time optimization in oil refining and petrochemicals. Steve sold TCI to a NASDAQ listed competitor in 1998 and served there in various senior roles until leaving them 4 years later to start a new company. He and his employees have implemented Advanced Process Control and Real-time Optimization technology and applications at refineries and chemical plants around the world for clients including Shell, Mobil, Marathon, Sunoco, PEMEX, Saudi Aramco, Ultramar, Petro-Canada, Husky, Irving Oil, Esso, Union Carbide, Solutia, BASF, Lyondell, DuPont, NOVACOR and others.

Steve holds a PhD in Chemical Engineering from McGill University and is a member of the Professional Engineers of Ontario, Canada.