Ray Gunn

Background:

This case study is one of several being developed as part of the KEEN initiatives at UDM. The purpose of these case studies is to illustrate how entrepreneurs have capitalized on their knowledge of specific technical topics such as those being covered in the course you are currently taking. At UDM, this case study is planned for integration into the Mechanical Measurements (Instrumentation) course; other institutions may find the content perfectly suitable for embedding into alternative courses (signal processing, biomedical engineering or physics for example – not to mention any course in entrepreneurship).

This case study is about a man named Raymond (Ray) Gunn. Ray Gunn has spent his career acting as the principal financial and strategic architect to build concept technologies into commercialized ventures/companies. He has led ten teams through their formation, funding, growth, and ultimate sale or Initial Public Offering (IPO). Additional information about Ray Gunn's background can be found at http://www.wingspanco.com/wst_page2.html.

Somanetics and Clarity are two of the companies resulting from Ray Gunn's efforts. In order to contain the scope of this case study, the focus will be on these two ventures.

Somanetics

Somanetics develops, manufactures and markets the INVOS Cerebral Oximeter, the only noninvasive patient monitoring system that continuously monitors changes in the blood oxygen levels in the brain commercially available in the U.S.

Prior to the in-class case study presentation, learn more about Somanetics' INVOS Cerebral Oximeter by visiting www.somanetics.com (make sure you visit www.somanetics.com/invos.htm and www.somanetics.com/invos_principles.htm) and developing answers to the following questions:

1. What is the basic principle of operation of the INVOS Cerebral Oximiter?
2. Who is the target market?
3. What was the purpose of the clinical research and was it necessary?
4. What things which we have learned in this course relate to this product?
5. What are Soma Sensors and do you think it makes business sense for Somanetics to make them a disposable commodity?

Optional: Review Somanetics' U.S. Patent Number 5,902,235 entitled Optical Cerebral Oximiter. (To do so, go to http://patft.uspto.gov/netahtml/PTO/search-bool.html and enter Somanetics for Term 1, choose Assignee Name for Field 1 and click on search; a list of Somanetics' patents will appear allowing you to click on the above patent).

Jonathan M. Weaver, Ph.D., Professor and Chair, Mechanical Engineering Department, University of Detroit Mercy
weaverjm@udmercy.edu /(313) 993-3372 / 4001 W. McNichols Road, Detroit, MI 48221
Michael J. Vinarcik, P.E., FESD, Adjunct Professor, University of Detroit Mercy
mvinarcik2@comcast.net / (734) 697-7756

Clarity Technologies

Clarity Technologies is a leading provider of software and services for echo and background noise cancellation in voice-based products. Its Clear Voice Capture technology (CVC) is their principal product; it has found widespread application in a variety of wireless headsets, cell phones, and automotive hands free systems. In March of 2005, Clarity Technologies was acquired by CSR plc (LSE: CSR.L), ("CSR") a wireless solutions provider and leading supplier of Bluetooth technology.

Some of the story behind Clarity's CVC will come out in the presentation of the case. In order to familiarize yourself with Clarity and CVC before the in-class case presentation, visit http://www.csr.com/products/cvc.htm to learn a bit more.

Outline:

1. Definition of an Entrepreneur ..... (1:02)
2. What Distinguishes Technical Entrepreneurship? ..... (0:21)
3. Risk and Failure ..... (1:32)
4. Intro to the INVOS Cerebral Oximeter ..... (0:51)
5. Technology Push ..... (4:39)
6. Taking the INVOS Cerebral Oximiter to the Market ..... (4:44)
7. Intellectual Property ..... (2:46)
8. Manufacturing ..... (2:34)
9. Clarity ..... (1:01)
10. Two Microphone Value Proposition ..... (1:14)
11. Taking CVC to Market ..... (3:18)
12. Better Performance = Slam Dunk, Right? ..... (1:35)
13. Screen Ideas with the Pain/Pleasure Test ..... (0:33)
14. Developing Your Idea ..... (2:21)
15. How Ray Evaluates Ideas ..... (1:12)
16. When to Become an Entrepreneur ..... (2:05)

Jonathan M. Weaver, Ph.D., Professor and Chair, Mechanical Engineering Department, University of Detroit Mercy
weaverjm@udmercy.edu /(313) 993-3372 / 4001 W. McNichols Road, Detroit, MI 48221
Michael J. Vinarcik, P.E., FESD, Adjunct Professor, University of Detroit Mercy
mvinarcik2@comcast.net / (734) 697-7756