15.905 Technology Strategy (Spring 2007)

Professor Michael A M Davies

Case # 5: Ember Corporation:
Building the Next Ubiquitous Network Standard

Please note that you are *not* required to submit a write-up. However, writing down your thoughts may help you during class discussion.

Ember is one of the pioneers of a new generation of low cost, low power wireless networking standards.

The case provides a snapshot of Ember's situation in October 2002, at the time of a key meeting of its strategic advisors. It has established an early lead, but the environment within it which it operates is changing rapidly?

Please give some thought to the following questions:

- how do you believe the demand opportunity for low-cost mesh wireless networking will evolve over the short, medium and long-term?

- how do you believe is the likely trajectory for the evolution of the technological infrastructure?

- what should Ember's strategy be for standardization: PHY, MAC and Data Link layer (IEEE802.15.4), versus network layers (ZigBee); open versus proprietary standards?

- what are the resulting key episodes of co-opetition, and the eras in the co-evolution of the business eco-system?

- as a result, which customers and applications do you believe that Ember should be targeting - and why?

- how should Ember's products and offer be evolving - and why?

- what should be the scope of its activities - what should it build and what should it buy and with whom should it partner for key components?

- what, if any, do you think is Ember's distinctive contribution, and how can it ensure that it captures value?