

# 15.965 Technology Strategy (Spring 2009)

Professor Michael A M Davies

## Case # 2: A123 Systems

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

Following its foundation in February 2002, A123 Systems finds itself in May 2003 presented with an interesting new technology, and has to decide whether to continue its original focus, or move more quickly to commercialization. As you read and review the case, please consider carefully the following questions:

1. is this "technology push" or "need pull", coming from "basic" research or "applied" research?
2. who do you believe are the key people involved in A123 Systems' inception, and how critical are now or will be each of them to A123 Systems founding, growth and long-term success?
3. what are the key performance parameters for these technologies, and what is the performance envelope<sup>1</sup> and innovation trajectory<sup>2</sup> for battery technologies?
4. who are the key competitors, what is their innovation trajectory, and how defensible is the incumbents' current leadership position in this market?
5. should A123Systems continue to focus on the original self-assembly concept, or refocus on incorporating the new material coming from Yet-Ming Chiang's lab into conventional mechanically assembled lithium-ion batteries?
6. which opportunities do YOU think A123 Systems should be pursuing, and what would your long-term strategy be?

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<sup>1</sup> the performance envelope characterizes the trade-off involved amongst the key performance parameters for the technology at a particular point in time

<sup>2</sup> the innovation trajectory is the rate of improvement in a performance parameter over time or in response to effort or investment, for each of the key performance parameters

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