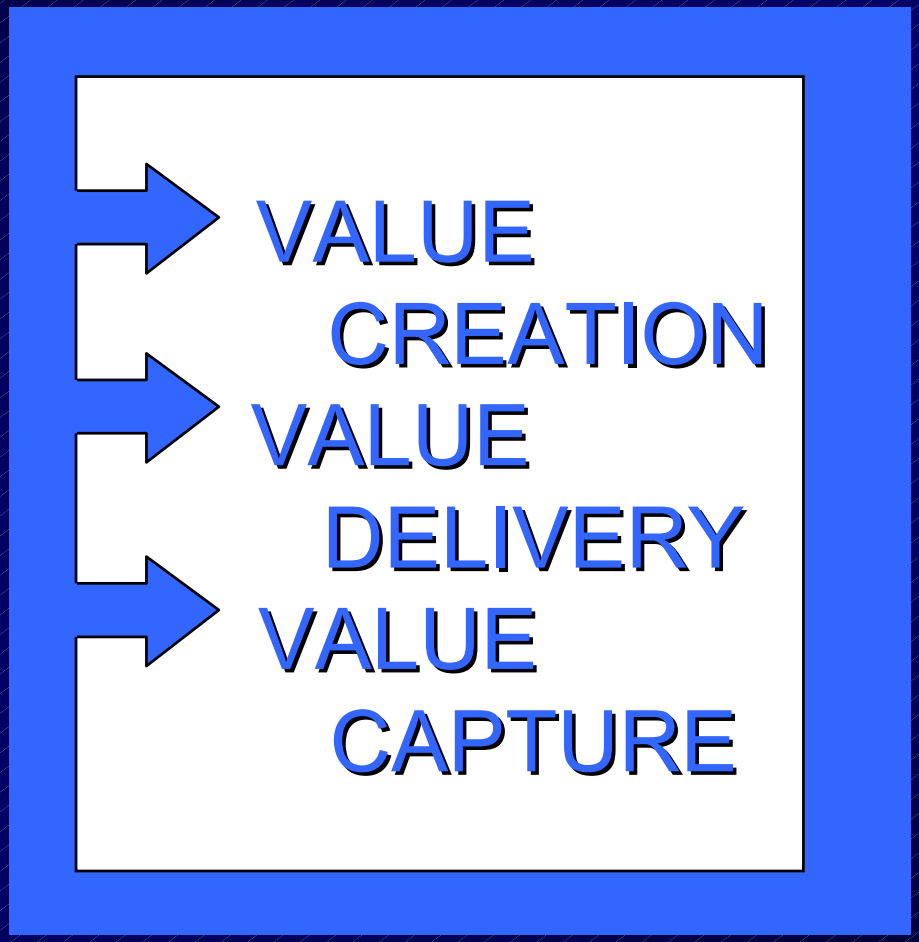
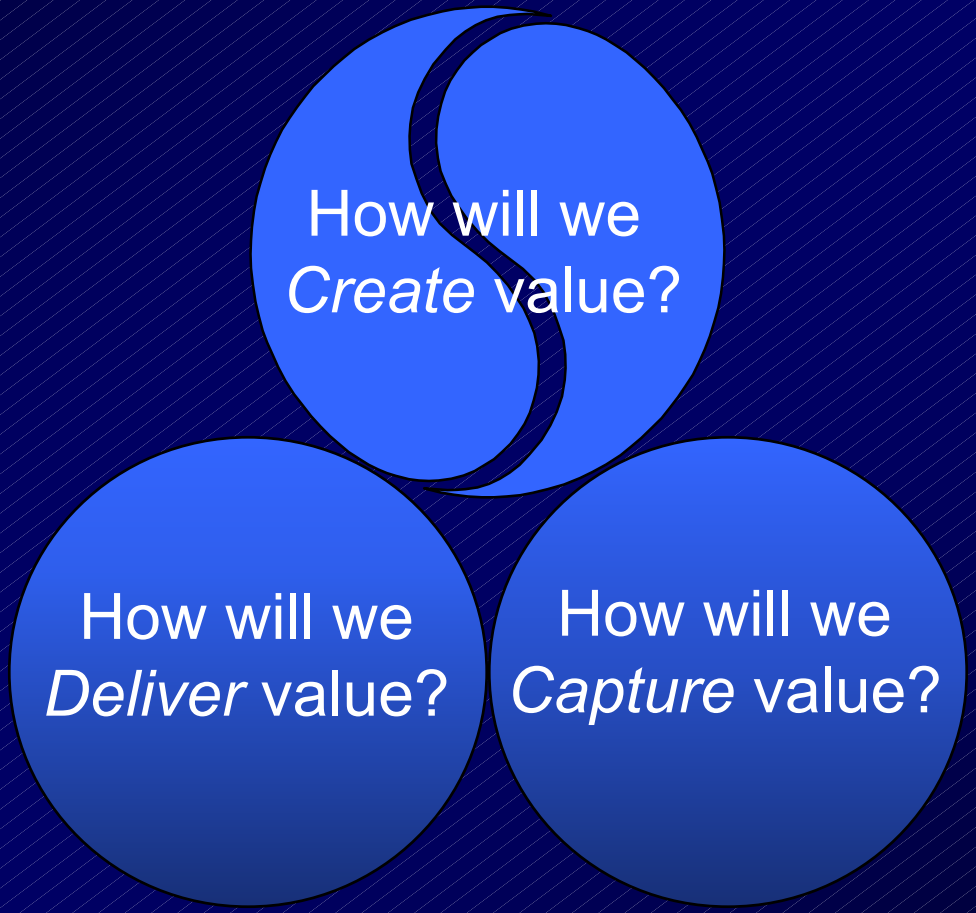
Technology Strategy

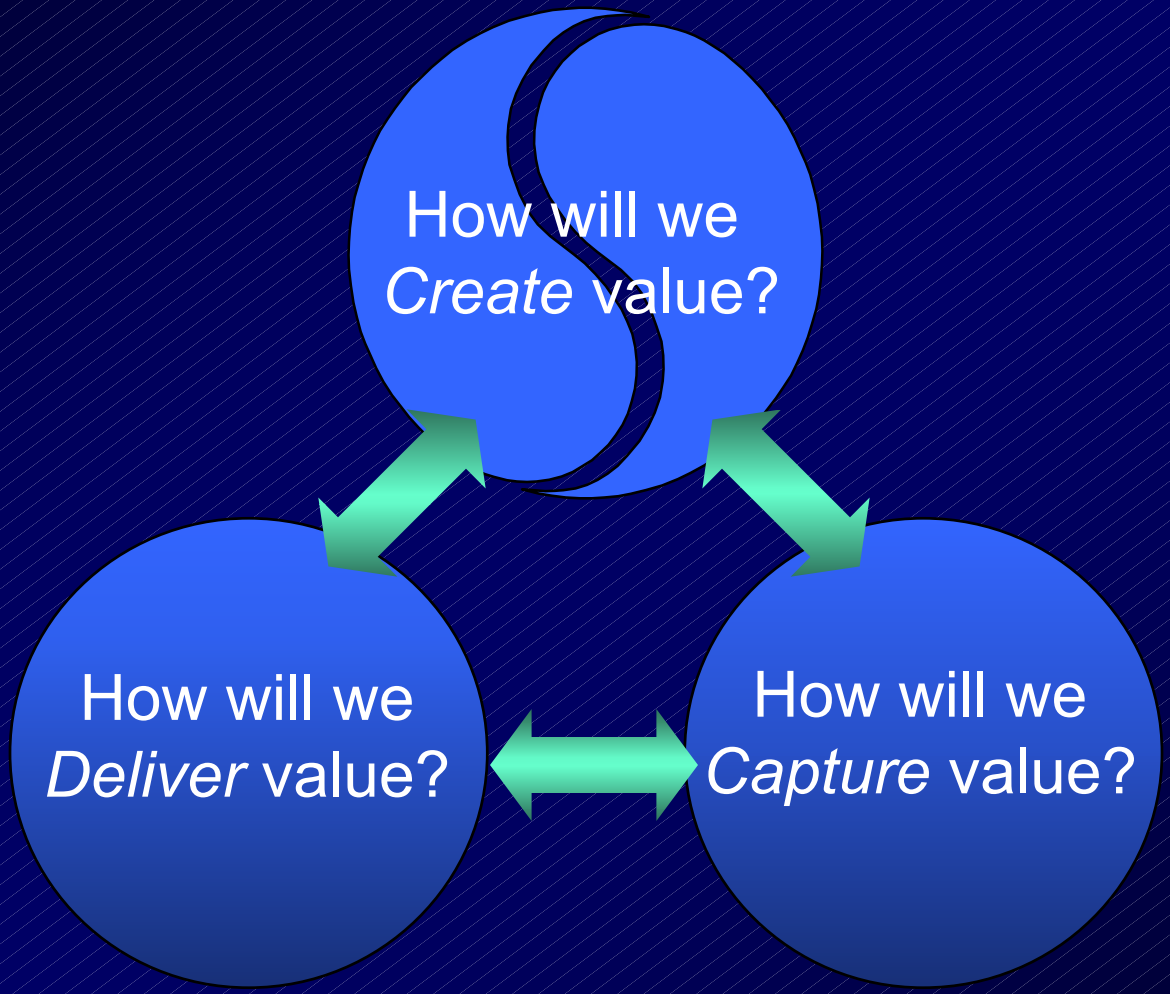
What is a Successful Technology Strategy?



Effective Strategies Answer 3 Key Questions:



Successful strategies are *dynamic*



And have real resources in place behind them….

Why have a strategy?

1. To make choices

Overcommitment destroys productivity

Why is it so hard to kill project #26?

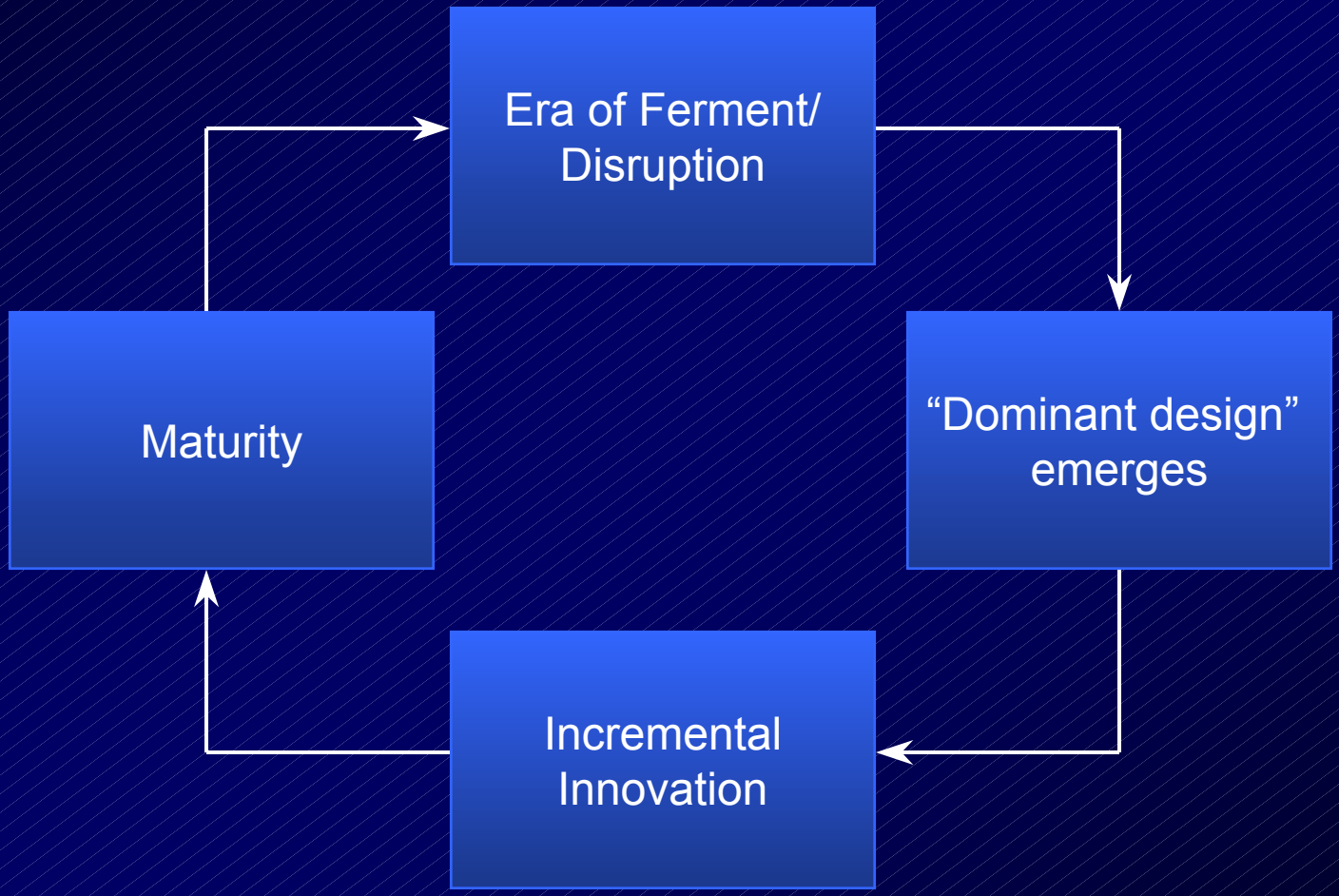
- It's a "good" project!
- Good managers can meet stretch goals
  (and I'm a good manager)
- Making difficult decisions takes time & energy

It's very hard to kill projects without a strategy

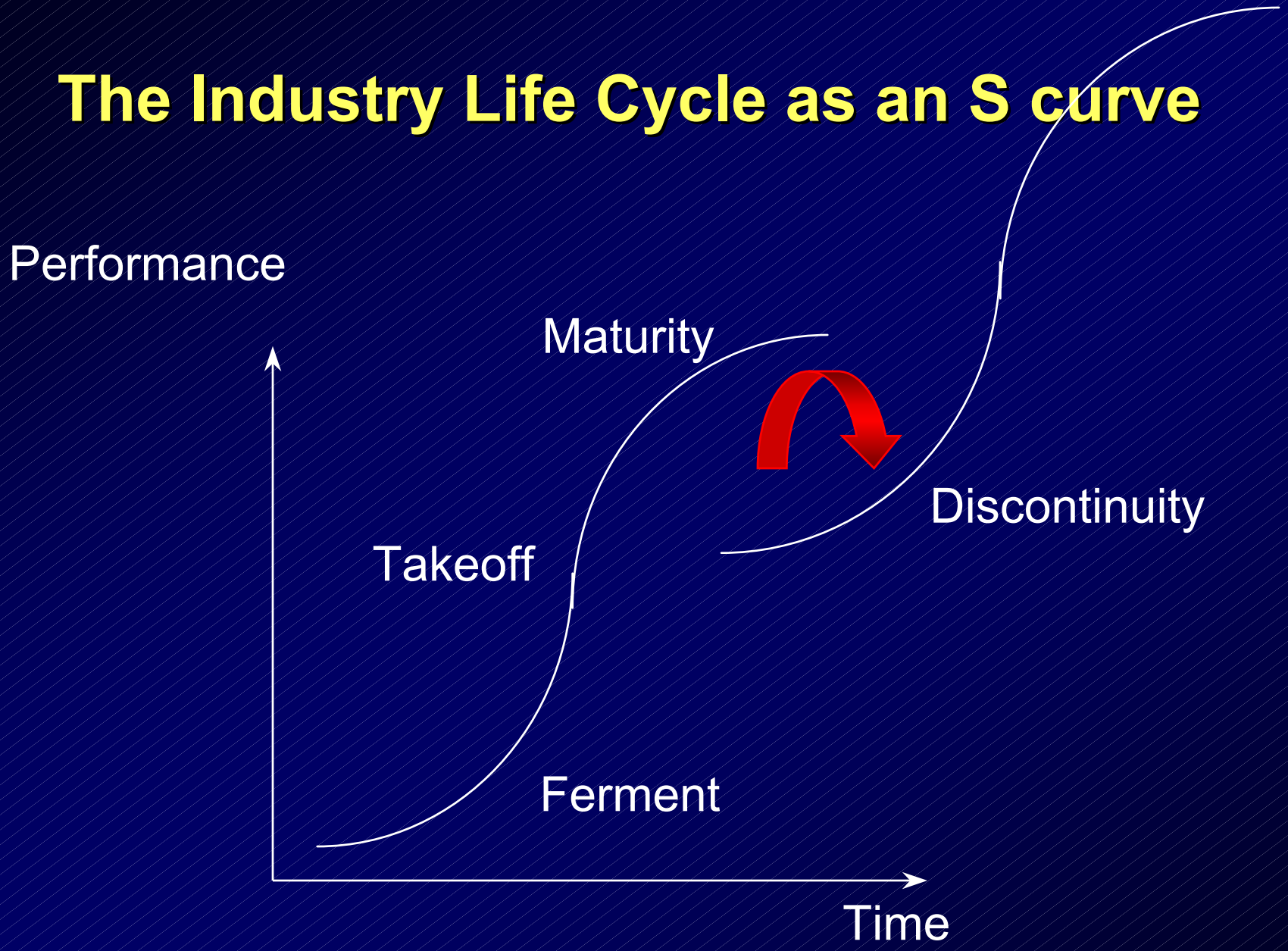
Reasons to have a strategy:

2. To be able to change it

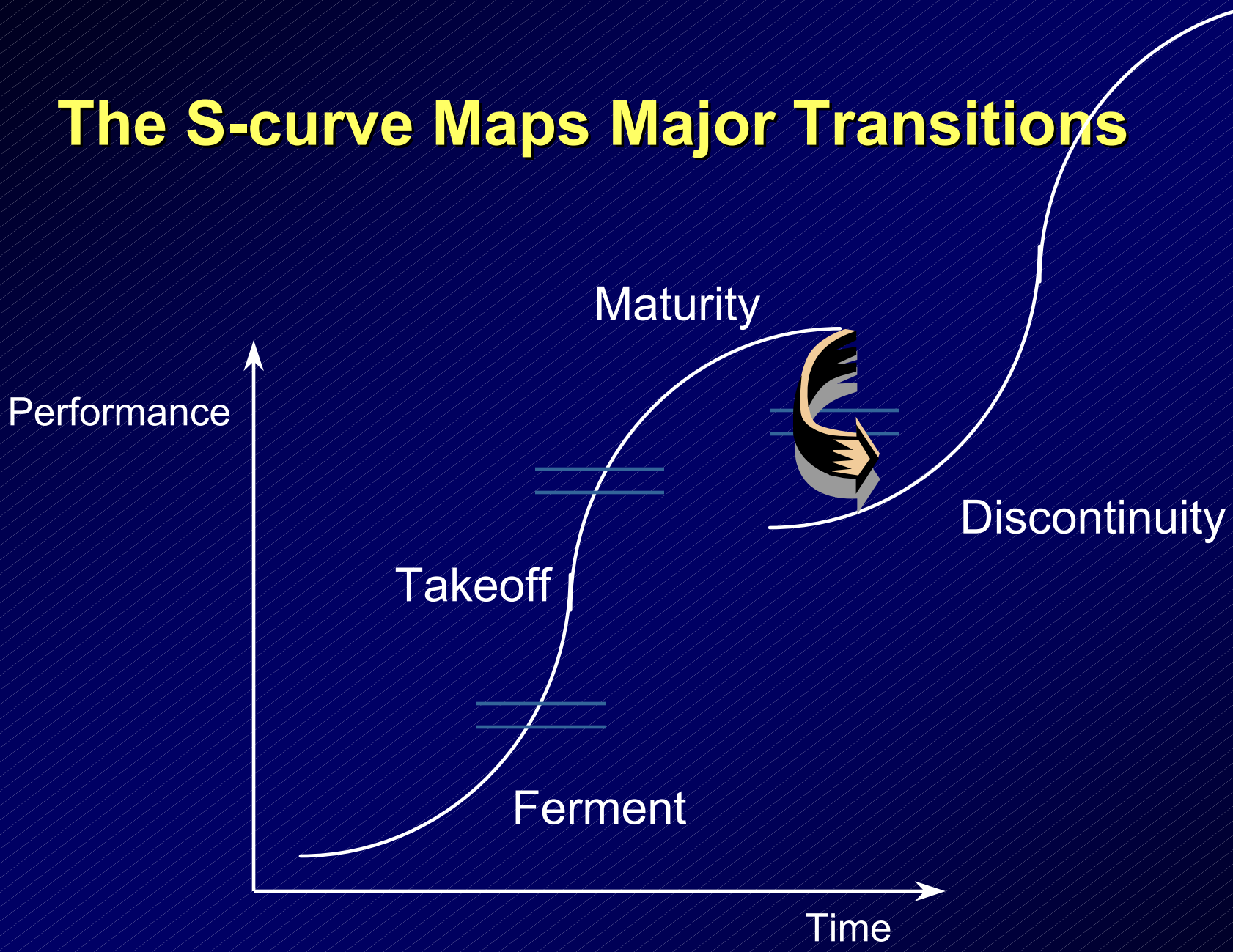
A Key Framework: The industry life cycle



The Industry Life Cycle as an S curve



The S-curve Maps Major Transitions

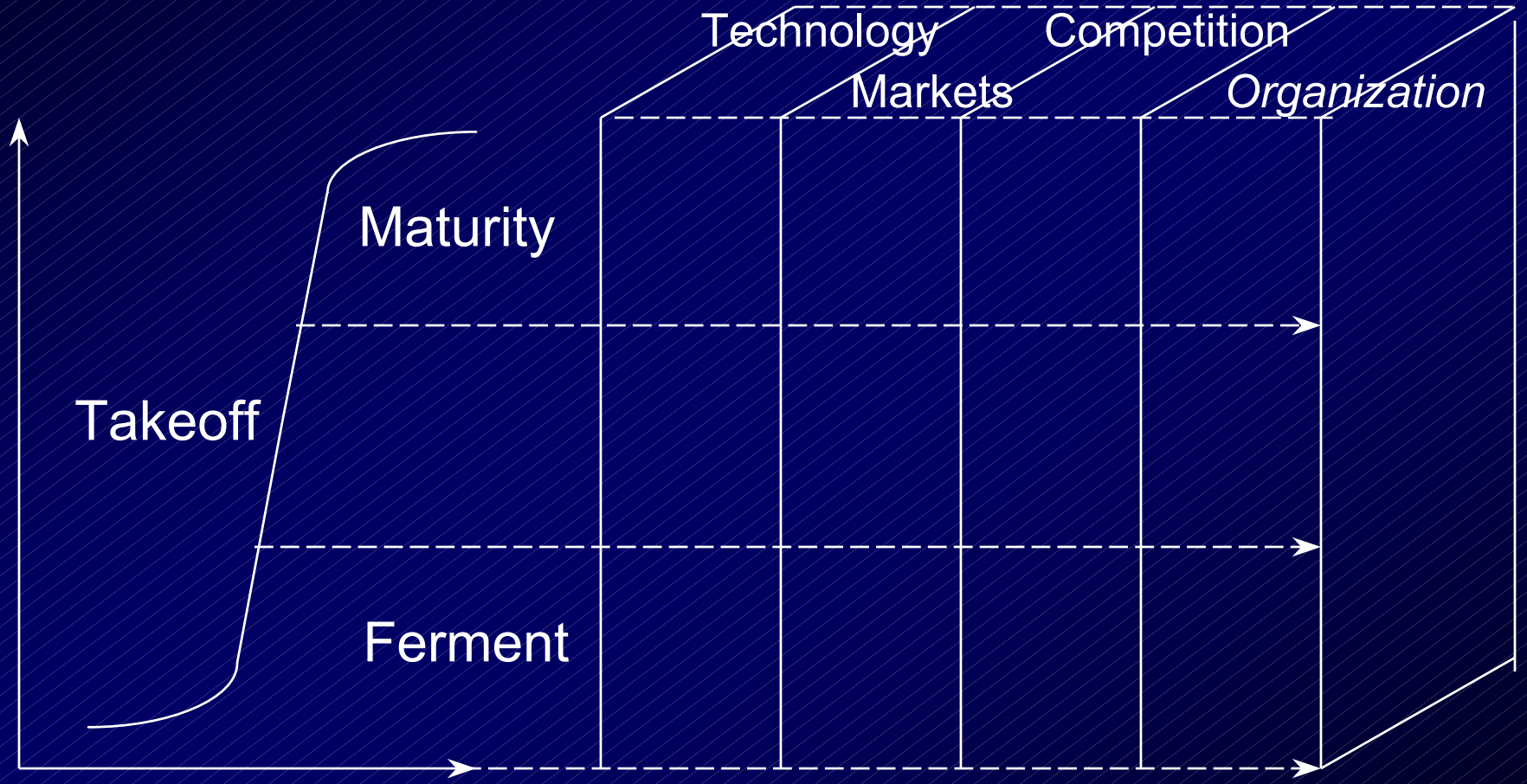


Transitions often challenge existing organizations severely

But they also create major opportunity

- Corning glass
  - Cookware to optical fiber
- HP
  - Instrumentation to computers
- IBM
  - Mainframes to PCs to Services
- Merck
  - “Random” drug discovery to genetics and genomics

Understanding the life cycle is critical since it shapes strategic choices:



Course Outline:

- How will we create value?
  - PDAs, EMI and the Cat Scanner
- How will we capture value?
  - Surface Logix, Abgenix, Ember, Mercury
- How will we deliver value?
  - Siemens, Intel, Synthes, XTV, P&G, Alza/Ciba
- Actually Doing Strategy
  - Kirkham Instruments, Kodak, Nokia

S curves and Technological trajectories

- Read: Foster, R. (1986). "The S-curve: A New Forecasting Tool."
- Think: *What determines the limits of an S curve? Can such limits be determined ex post? How would one determine what to map on the vertical axis of an S curve?*
- Try: *On the course web site you will find an excel program that contains performance specifications for nearly every PDA ever introduced. Draw one or more S curves for the industry. Speculate about the industry's future evolution.*

Next class:
First 2 page paper due the following week.

- Use the next class to choose an industry or firm.

- *Plot and describe the relevant S curve(s) for your industry. Is the industry likely to be subject to "natural technological limits"? Why or why not? Has it experienced "discontinuities"? Is it likely to do so soon?*