

Management of “Emerging” Technology



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Outline



- **Introduction**
- **Background**
- **Limitations of coverage**
- **Re-emerging technologies**
- **S-curves for technology and markets**
- **Time scale to innovation**
- **Conclusion**

My Background



- **Westinghouse, Carnegie-Mellon, RPI, U. of Miami**
- **Emerging technologies**
- **Coal gasification, fuel cells, batteries, liquid crystals, robotics**

Limitations of Coverage



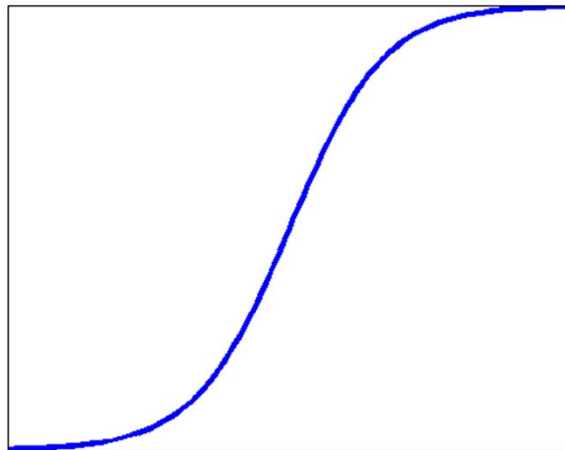
- **Course development**
- **Nanotechnology**
- **Biotechnology**
- **Information technology**

Re-emerging technologies



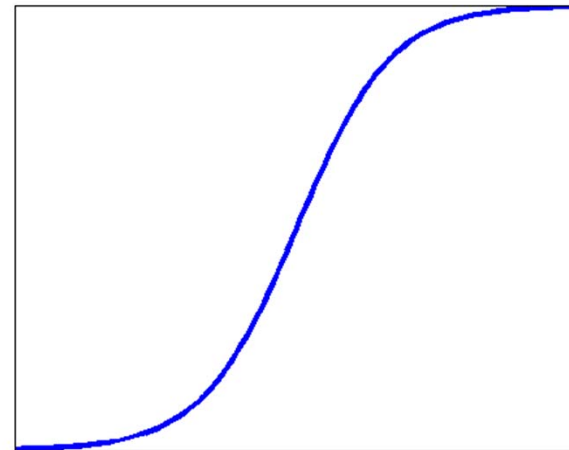
- Dominant design
- S-curves for technology and markets

Technological
parameter



R+D Spent

Market



Time

Time Scale



- Edison electric car
- Hybrid corn
- Genetics and Mendel
- Transistor-integrated circuit
- Service sector



www.electriconline.org

Conclusion



- **No one model fits all**
- **How to handle**
- **Risk analysis**
- **Knowledgeable and exploitative**