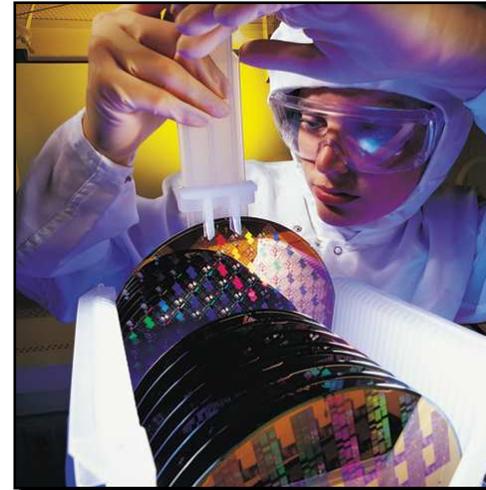# Advanced Storage Technology Consortium
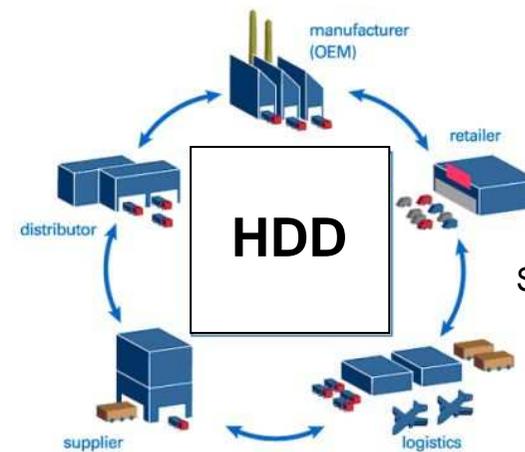
ASTC: Aligning Solutions to Technology Challenges

Mission:
member-directed, scalable R&D organization to address fundamental technology challenges

- Expanding and enhancing the power of R&D funding and technology development

- Storage industry participants, suppliers, universities, laboratories, and institutes

HDD technology roadmap
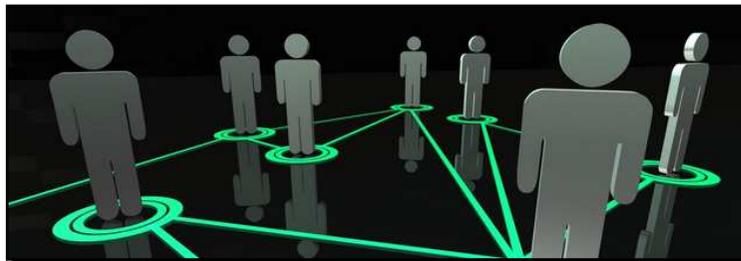
HDD

Supply chain involvement

Aligning HDD Industry for Solutions to Technology Challenges

Mission established

Pro-competitive alignment on roadmap

Multiple stakeholders HDD, suppliers, universities, labs and institutes

Collaboration across all participants

What is ASTC ?

- **New consortium created to expand and enhance the power of R&D funding**
  - Acceleration of technology development by targeted collaborations between storage industry participants, suppliers, universities, laboratories, and institutes

- **Mission**: member-directed, scalable R&D organization to address fundamental technology challenges

- **Supply chain involvement**
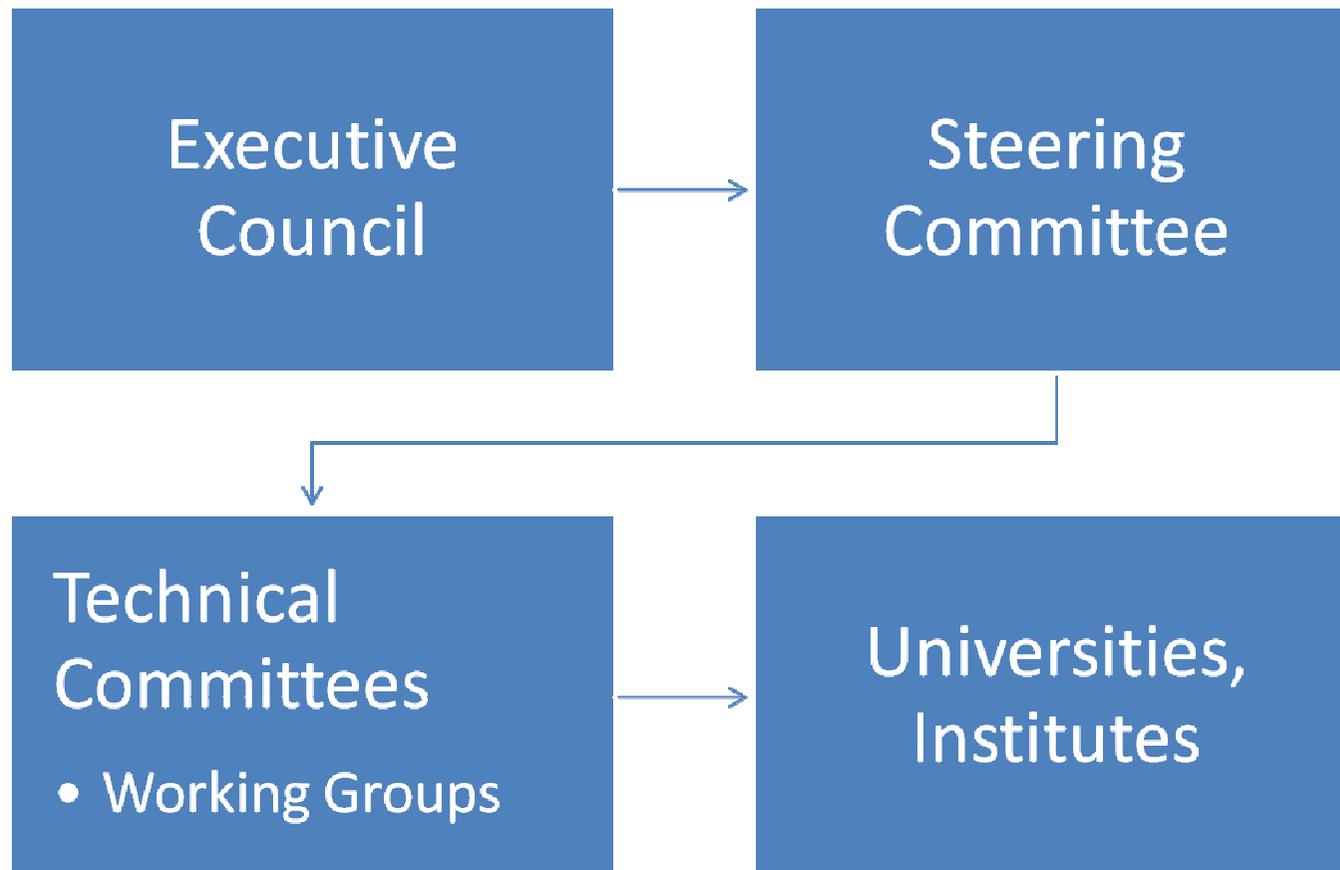
- **HDD technology roadmap**

Vision for ASTC

- Global organization
- Collaborative research programs with universities

- More open collaboration among companies to share directions and manage projects

- Act with a sense of urgency consistent with the needs of the industry

- Engage broader base of companies

Expected Outputs from ASTC

- Forum to share and coordinate directions to increase speed of technology development

- Focused, collaborative research projects that will enable better understanding of key scientific challenges

- Shared, realistic roadmap for the Industry

- Solutions – <u>science</u> to <u>engineering</u> to <u>manufacturing</u> options – *that will shorten time from invention to productization*

ASTC Structure

Working Groups

System Working Groups

	HAMR	BPR	TDMR	MAMR	...
Heads					
Media					
Signal Processing					
Servo-Mechanics					
Head-Disk Interface					

Functional Working Groups

Role of System Working Groups:
- Define funding priorities for projects for each system area, and guide selection of projects.
- Ensure a coordinated portfolio of projects for each system area.
- Oversee activities in associated functional areas.
- Define roadmaps for each system area.

Role of Functional Working Groups:
- Management of university research projects across each functional area.
- Generate periodic status reports and summaries, and provide feedback to universities.
- Manage project proposal process within each functional area, subject to funding priorities and guidance provided by system area working groups.

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ASTC High Level Goals

- **Accelerate the pace of technology innovation to shorten the time from invention to productization.**
  - Through sponsorship and management of university projects
  - By addressing key, less understood aspects of a given technology with more fundamental scientific focus.

- **Provide a realistic roadmap to guide technology investments and help focus resources.**

- **Lead to common solutions whenever possible.**

ASTC Membership