

Governor State University

August 8, 2011

A horizontal banner with a blue background and white clouds. The text 'MARC3' is in large white letters, with the '3' in a smaller, light blue font. Below it, the full name 'MIDWEST ACADEMIC & RESILIENCE CLOUD COMPUTING CONSORTIUM' is written in smaller white capital letters.

MARC³
MIDWEST ACADEMIC & RESILIENCE CLOUD COMPUTING CONSORTIUM

Direction Headed

Strategic Alignment of Business, Education, & Government

- Enhance business resilience (Enterprise, SMB/Suppliers)
- Enhance Competitiveness by Providing Tools to those who “Need” them as they Need them!
 - Develop (HPC) Innovation Cluster --Comprised of Multi-Discipline Centers of Excellence (COE)
- Create 21st Century Jobs using 21st Century Technology!
 - Enhance Competition--While Incubating New Businesses!
- ***Utilize Community Colleges as the Fulcrum!***
 - *Collaboration with other colleges/universities*
 - *Strong relations with small/large business community*

COE's Developed Around Needs of Community

(e.g. Bus, Edu, Gov etc...)

Serviced by Community College (e.g. OCC)

- Allstate Insurance Co
- Evanston North Shr Healthcare
- Advocate Lutheran General Hosp
- Mb Financial Bank
- Underwriters Laboratories Inc
- Federal-mogul Corp
- Uop Llc
- George S May Intl Co
- Rush North Shore Medical
- U S Equities Asset
- Kraft Foods Inc
- Coca-cola Bottling Co
- Navigation Technologies
- John Crane Inc
- Cvs Caremark Operations Ctr
- Fort Dearborn Co
- Avon Products Inc Mfg Facility
- Hart Schaffner & Marx
- Anixter International Inc

Need

Technician Shortages

“There is a not a labor shortage, but there is a skills shortage. Our industry needs more innovative young scientists, technologists, engineers, and mathematicians to replace the baby boomers as they retire.”

Rick Stephens, SVP of HR and Administration
Boeing Company
February 4, 2009
Aerospace Industries Association

Need

NSF Nanotech Estimates

- By 2015 there will be a need for 2 million nanotechnology workers and 6 million supporting positions.
- By 2015 companies employing these workers will produce **\$1 TRILLION** of products.
- Today, the National Nanotechnology Initiative estimates that there are **100,000** individuals working in nanotechnology.

Need

National Center for Manufacturing Science HPC Survey , September 2010

➤ Expressed interests

- 80% of SMMs want more opportunity to experiment with advanced technologies
- 75% of SMMs saw competitive value

➤ Recognized barriers

- Cost of hardware/software acquisition
- Expertise to implement and validate results



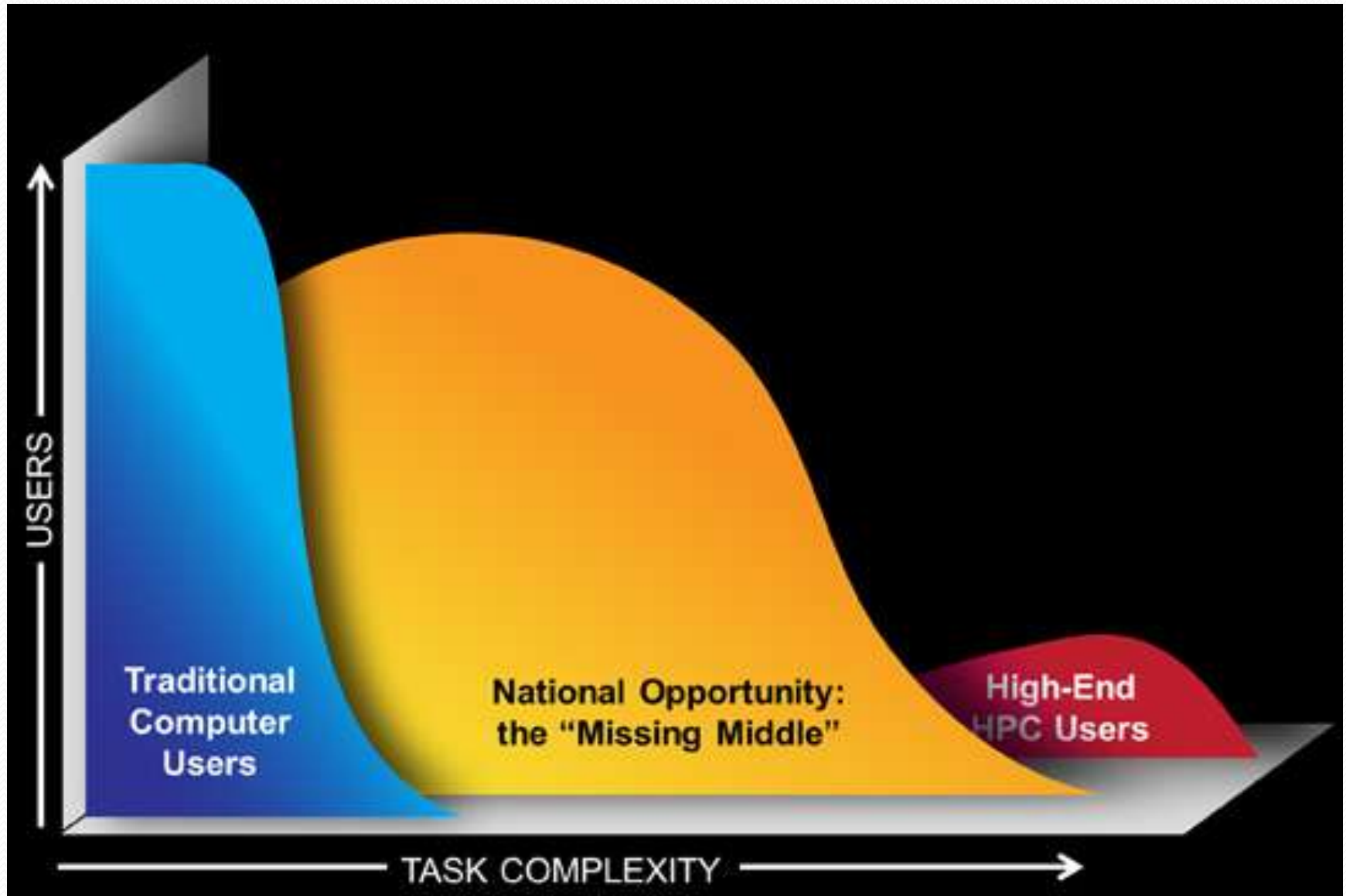
Need

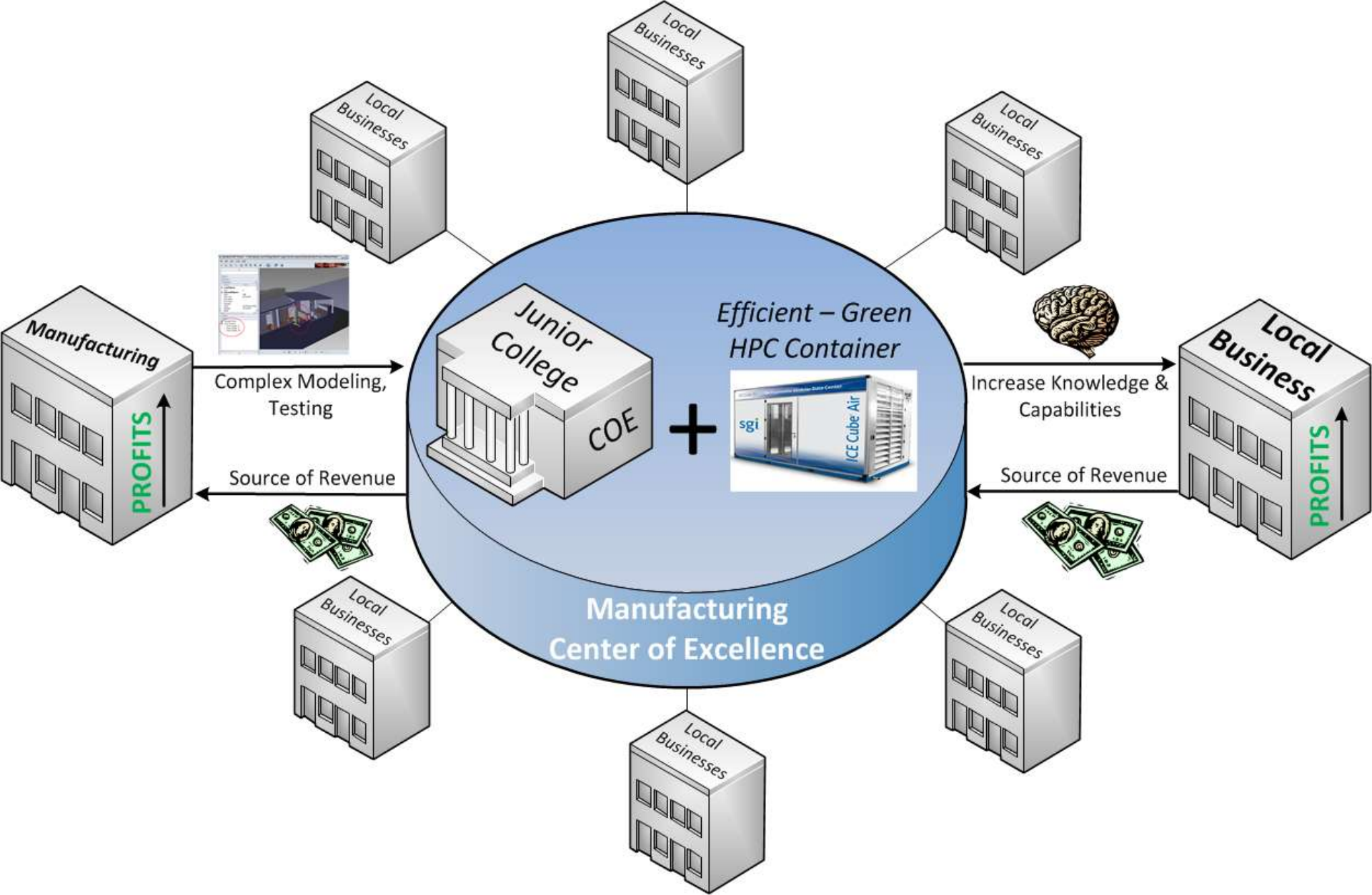
**Create curriculum for manufacturing HPC Containers,
& Operations of Computers in containers
(Jobs identified by SGI, Dell, Yahoo, Google etc...)**



Need

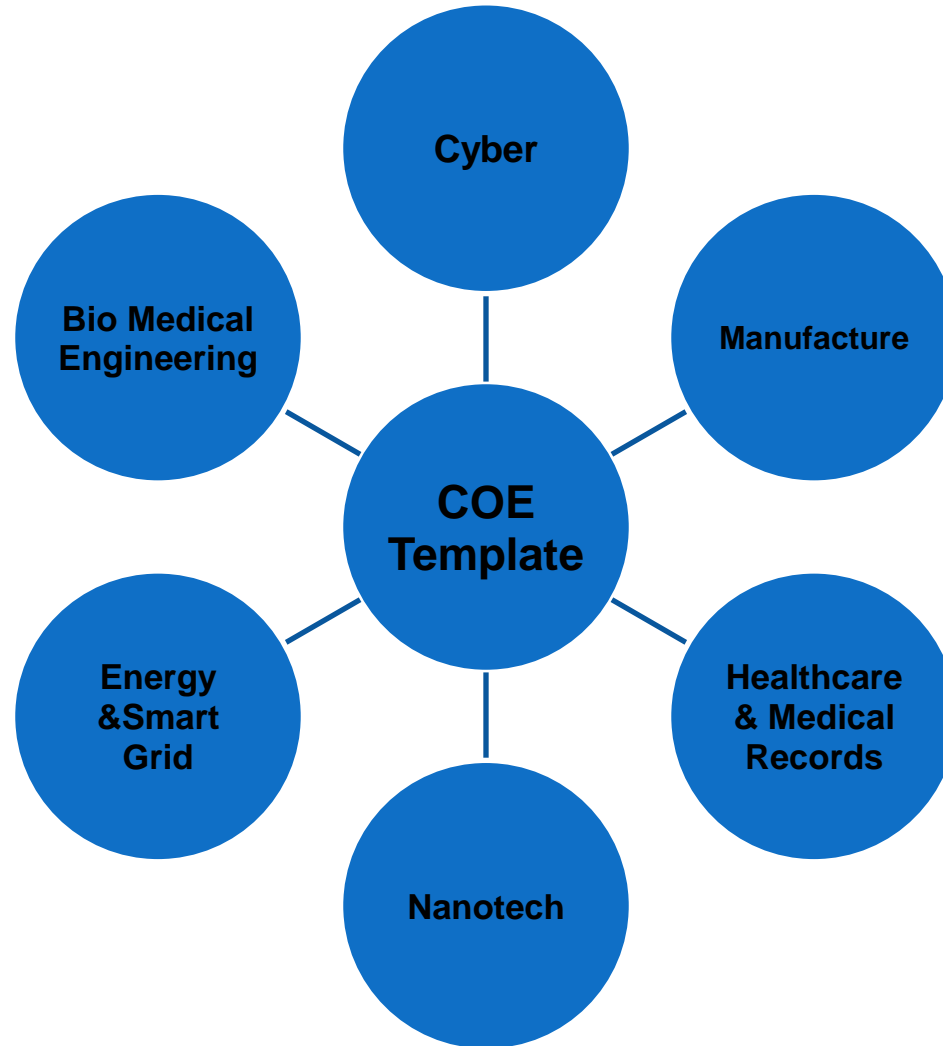
Missing Middle = SMB/Supplier



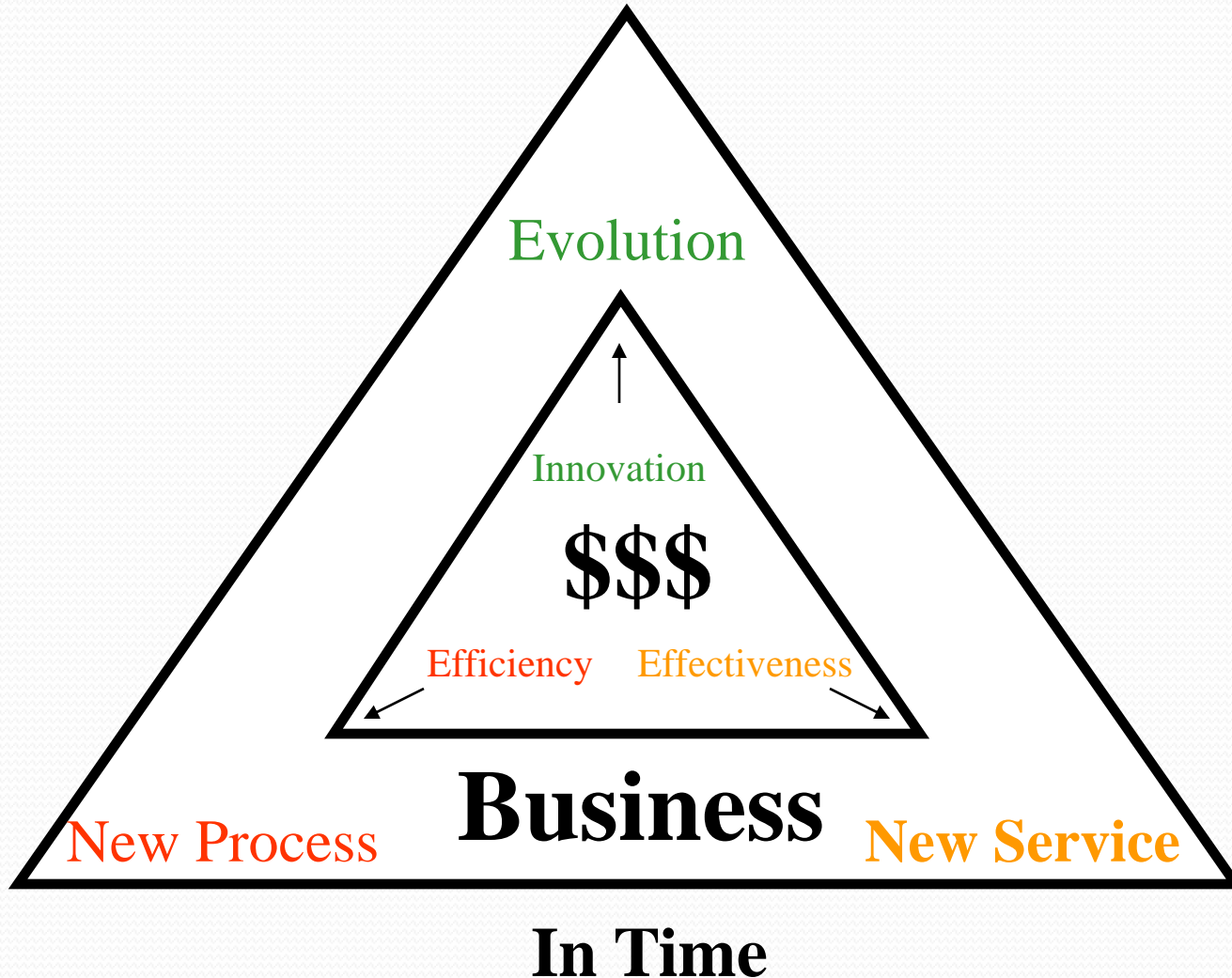


HPC Innovation Cluster

Replicate Centers of Excellence



Investment Value



Opportunity

- Job Creation & Curriculum Development with support of Top Tier Technology Partners
- Identify HPC Center of Excellence GSU would like to lead with support of MARC³ & Partners
- National Recognition with White Paper & Case Studies
- HPC Technology for school & business community
- National Lead as HPC Enabler/Catalyst for Missing Middle SMB's
- Enable HPC technology capacities for P-20 in district
- Enhance the district's economy & competitiveness of its business community