The Digital Manufacturing Initiative

Northwestern University
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The Ultimate Collaborative Network
DO IT IN DIGITAL.
GET ON THE GRID
SIMULATION IN INDUSTRY... TODAY

TRENDS

What’s leading the growth of simulation?

- New regulations, laws, and standards necessitate more innovative tools
- Perceived market growth opportunities encourage adding capabilities
- Desire for superior optimization without increased cost or time

STATUS

What’s the current state of simulation?

- Evidence demonstrates significant ROI for HPC/simulation
- Large organizations have greatly outpaced smaller ones in adoption
- Simulation in manufacturing is limited to certain sectors of industry
MEET THE MISSING MIDDLE

IT’S EVERYWHERE
Globally, 2,000,000 manufacturers in have fewer than 500 employees.

IT’S OUR LIVELIHOOD
In the U.S., these companies are responsible for 12,000,000 direct jobs, and 18,000,000 indirect jobs.

IT’S ESSENTIAL
That’s more than twice the total employment of all larger manufacturers combined.
THE MISSING MIDDLE IS BEING LEFT BEHIND

PERCEPTION
Many in the Missing Middle don’t see how HPC applies to them

BUSINESS
Decision makers must be convinced that the opportunity is worth it

TECHNICAL
Fear of cost and lack of HPC expertise slow or block adoption

ACCESS
There is no easy way for the Missing Middle to use the tools
A new national infrastructure to change the way America builds.
THE APPROACH

EDUCATE

ENTICE

ENGAGE

ELEVATE
The First Step in Transforming the Way America Builds

FALL 2012

Advanced Manufacturing
& Software Technology Center

INNOVATION CENTER

Little Sable Point Light – Ludington, MI
Structural Safety & Crash Analysis

Innovation Center

Great Falls of the Potomac River – Great Falls, VA
THE ROLE OF DIGITAL MANUFACTURING

NCMS is already empowering America with Digital Manufacturing tools like modeling and simulation – and its strategy aligns perfectly with the technical elements and activities of a variety of regional and national activities.
Thank You

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