The “Missing Middle”

...Are we asking the right questions?
and
Are we focused on the right issues?

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Talking Points

• Assumptions revisited
• Wheeling Initiative
• Focus on the “missing” piece
• Where do we go from here?
We assumed if we solved the cost and access issue we solved the problem....not the case!
Assumptions are Upside-down

- Infrastructure is the easy piece
- Solving the skill gap; creating a pipeline of students, workers...that is the hard part
- Re-tooling the workforce – it’s hard
- Community matters...ALOT
Intel-HP Wheeling Innovation Initiative
Why Wheeling?

- **Demographics**: mfg. density, STEM HS, strong local government, engaged industrial community
- **Location**: heartland of manufacturing
- **Demonstrated success**: experience in driving innovative concepts to fruition. Strong leadership
- **Strong ecosystem**: Broad capabilities across Universities, Community Colleges, National Labs, STEM HS, ISVs, Tier 1 OEMs, State/Local government
Manufacturing Jobs (1000’s of workers)

How do you facilitate a transformation?

- Awareness
- Education and Training
- Ecosystem
- Community
- Tools and Resources
Intel-HP Wheeling Innovation Initiative

Advance the adoption of digital manufacturing for small and medium-size businesses thru targeted programs providing access to high performance computing (HPC) resources and tools, training, and outreach.

Three key pillars

- **Community outreach**
- **Student competition**
- **Local industry enablement**
# Intel-HP Wheeling Innovation Initiative

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<th>Outreach</th>
<th>Student competition</th>
<th>Industry enablement</th>
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<td>Tell the story, build the</td>
<td>Launch competition to accelerate student skill development, expertise, and excitement</td>
<td>Stimulate direct engagement with small/medium mfgs. to assist them in utilizing</td>
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<td>community, raise awareness</td>
<td>to be part of digital manufacturing through hands-on HPC/ engineering competition</td>
<td>advanced computing technologies for design, engineering and process manufacturing</td>
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Where are we today?

Phase One

- Micro-pilot with Angiotech very successful
- Student Challenge phenomenal experience
- We learned a lot
  - Planning matters
  - IP concerns are real
  - Students crave the challenge
- Community wants in
Where are we today?

**Phase Two**

- Scale Student Challenge
  - PLTW / STEM
- Broaden community support
- Expand Pilot engagements
- Enable the ecosystem
  - ISVs, engineering services organizations, HPC providers, Universities etc.
The “Missing” Piece

• Create the fabric to drive a transformation through partnerships with national and regional technical institutes, community colleges, non-profits, policy organizations
  – DeVry Institute
  – Manufacturing Institute/NAM
  – AACC
  – SME
  – PLTW

• Build the community and ecosystem: connect people to each other
Big Thoughts

- 2012 has been all about discovery
  - Drill some wells and learn: built a little, test a little

- 2013 will be all about applying what we have learned and scaling the stuff that works

- Fundamental belief: listen, learn, adapt and ALWAYS plant A LOT of seeds
Closing thoughts
...where do we go from here?

• Ignite the right sparks
• Keep telling the story – to everyone who will listen
• Connect the dots – think broadly!!
• Enlist partners who are in it for the long haul
• Scale globally