

3D Printing and the Renaissance of Local Economies

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The rise of 3D printing holds tremendous potential to impact the economy from the local to the national level. Although it is still an estimated five to 10 years away from mainstream consumer adoption, we are already seeing notable examples of businesses leveraging the technology, including giants like UPS, GE and Home Depot. Our April 21 conference will communicate what each of these companies is presently doing in 3D printing. Adoption of 3D printing will continue to rise, particularly among manufacturers - an estimated 67% of which are already using the technology - as costs fall.

Over the next five years, it is expected that 3D printing will become 50% cheaper and up to 400% faster. The technology presents opportunities for building national economies-particularly those that have seen significant losses in manufacturing. It also builds on “the shift to local” by offering small businesses the ability to manufacture goods locally or even onsite, thereby incurring lower costs, streamlining processes and offering greater customization. Further, entrepreneurs can now be manufacturers, eliminating the need for the warehousing and distribution of products and parts, and reducing reliance on the outsourcing of manufacturing to large centralized plants, often located offshore.

While traditional subtractive manufacturing is not going to disappear overnight, smaller enterprises can leverage 3D printing today to obtain the advantages of a technology that is driving customization and innovation and fueling a manufacturing renaissance.

The technology will have specific impact on entrepreneurial activities in local economies, especially as “makerspaces” spring up in places in Ohio and other places such as Greenville, South Carolina and Pittsburgh, Pennsylvania. These spaces help makers, designers, creators and entrepreneurs make their ideas a reality, translating them into a tangible, manufactured item. 3D printing is fueling this “maker movement,” making the tools to build enterprises more accessible and changing how companies are formed, while simultaneously spurring notable developments in manufacturing.

In Ohio, the impact of 3D printing will be aided by further state funding to help manufacturers adopt the technology, providing a competitive advantage on the national stage. Manufacturing remains particularly vital to Northeast Ohio’s economy, with technologies like 3D printing providing stimulating career choices and supporting the region. Northeast Ohio has experienced an 18% growth in employment, as well as gross regional product growth of 40%. The region is unique due to how it has embedded IT into its strong focus in manufacturing and professional services. The region is actively supporting startups with resources such as incubators to help young companies get established. There’s also a strong commitment to encouraging youth and STEM education, providing tools such as 3D printers to encourage project-based learning and spur innovative ideas.

Across other parts of the state, economic growth is being driven by advanced manufacturing, biohealth and technology sectors - all prime sectors for 3D printing adoption. The first FDA approved 3D printed drug will be manufactured in Blue Ash, Ohio.

There is an opportunity for local economies across the U.S., including Northeast Ohio, to get in front of this developing technology, fostering an environment that supports not only the development of the technology, but its usage as well.

There will be a panel wholly focused on growing 3D printing in Northeast Ohio at our April 21, 2016 conference at the Ritz Carlton in Cleveland, Ohio.

Almost every business doing long-term planning should be thinking about 3D printing and the impact it will have on its business. Our 3D Printing Industry Group is here to help, and is happy to participate in planning sessions.

3D Printing has the potential to revolutionize the way we make everything. Because the technology will change our clients' businesses, Benesch has formed a 3D Printing Industry Group, a multidisciplinary team led by core members of the firm's Innovations, Information Technology & Intellectual (3iP) Property Group.

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To register for the April 21 conference: mpajakowski@beneschlaw.com