

TESTIMONY OF
THOMAS E. ANDERSON, Ph.D., MBA
SENIOR DIRECTOR, AUTOMATION ALLEY
BEFORE THE
U.S. HOUSE FINANCIAL SERVICES COMMITTEE
NOVEMBER 30, 2009, 11:00AM
LAWRENCE TECHNOLOGICAL UNIVERSITY, SOUTHFIELD, MI

Good afternoon, Chairman Moore and members of the Committee. My name is Tom Anderson, senior director and director of entrepreneurship at Automation Alley. Automation Alley is a technology business association driving the growth of Southeast Michigan's economy through a collaborative culture that focuses on workforce and business development initiatives. I want to express my sincere appreciation to Mr. Peters for the invitation to address the vital issue of the critical credit gap facing emerging technology companies.

Automation Alley acts as a catalyst to enhance the image of Southeast Michigan and to help local technology company's grow their businesses by providing products and services that stimulate and highlight the technological excellence and diversity of our regional economy. Since its founding in 1999, Automation Alley has expanded to include more than 1,000 businesses, educational institutions and government entities from the City of Detroit and the surrounding eight county region. Automation Alley promotes regional prosperity through entrepreneurial and exporting assistance, workforce development and technology acceleration.

Automation Alley's Executive Director, Ken Rogers, also serves on the State of Michigan's 21st Century Jobs Fund Strategic Economic Investment and Commercialization Board. The Board sets the strategic direction for funding competitive edge technologies, approves funding decisions and oversees the administration of the program. Automation Alley and the 21st Century Jobs Fund both seek to foster the growth of Michigan's high-tech economy by investing in the best Michigan research and commercialization opportunities available in vital competitive-edge technology areas such as: advanced automotive; manufacturing and materials; alternative energy; homeland security; defense; and life sciences. It is a pleasure for me to offer testimony today, specifically on Automation Alley's business accelerator and seed investment program.

To date, 25 investments have been made by our three seed investment funds totaling \$4.85 million: our Advanced Automotive Seed Fund, initiated in 2004, our Michigan

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Strategic Fund Contract for an Automotive Technology Business Accelerator program, initiated in 2006 and our Michigan Economic Development Corporation (MEDC) Seed Fund, awarded September, 2008. Additionally, we've also recently expanded our options for early-stage entrepreneurs by offering a microloan program to conceptual companies through the current statewide SmartZone pre-seed fund. Additional VC and private capital exceeding \$38 million has been invested in these companies, and employment is over 150.

Automation Alley frequently interacts with our invested companies through a variety of activities including quarterly financial reporting. I serve on the boards of several of these companies and actively provide strategic input and advice to the rest, as does the SBTDC (Small Business and Technology Development Centers) counselor who works with us. Automation Alley employs a Technology Business Client Champion who works on a full-time basis with our seed-invested companies. Our internal Investment Review Board has quarterly reviews of each of the investments, and reports to our Board of Directors. When appropriate, we engage in strategic 'repurposing discussions' with companies, since with startups, things often go somewhat differently than originally planned. We assist with introductions to our members and engage our invested companies in business development programs offered through the Alley, including export trade missions.

Here are some company profiles and highlights:

- DanoTek Motion Technologies, LLC (Canton) – A wind energy company, that recently repaid our initial loan, successfully completed prototype development and testing for the Clipper and is moving forward with growth capital investment of a \$1 million bridge loan and up to \$4 million to support product development, staffing and equipment. DanoTek's five year sales target is \$250 million.
- Critical Signal Technologies, Inc. (Farmington Hills) – Founded by the former president of Guardian Alarm, this health and security monitoring company is currently operating in a dozen states, targeting 50 by the end of 2009. Automation Alley's seed funding enabled them to meet initial milestones required by the venture capital firm prior to investing \$6 million, which has now occurred. CST closed on a second \$6 million round of VC and in the next 12 months plans to finance expansion and acquisition.
- 3IS, Inc. (Novi) – Recently completed another round of funding totaling \$335,000, and is partnered with Menlo Innovations, a leading and innovative software development firm in Ann Arbor, to deliver their next version. They have secured subscriptions from Ford, GM, Chrysler, Fujitsu, and Yazaki, and currently have trial subscription arrangements with TRW and Freescale, among others.
- SpaceForm, Inc. (Detroit) – Located at Wayne State University's TechTown, is also a recipient of 21st Century Jobs Fund investment. SpaceForm has successfully negotiated to broaden the scope of their technology license from Delphi, begun to acquire customers including Honda and Harley Davidson, and

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- has completed a merger with another welding technology firm to expand their product line.
- ElectroJet, Inc. (Brighton) – Also a 21st Century Jobs Fund funded company. Automation Alley took this company with its small engine fuel injection technology on its trade mission to China in the fall of 2006, and as a result of meetings with carburetor manufacturers supplying the local Chinese motorcycle/scooter industry, POs are now in place for ElectroJet to sell into that market. Additionally, their emission-reducing product is now certified by the China National Lab. The company’s current challenge has been locating operating capital to fulfill multi-million dollar purchase orders.
 - Limo-Reid Technologies, Inc. (Deerfield) – Automation Alley funded Limo-Reid to compete for the Hybrid Truck Users Forum RFP, which they won against several large competitors such as Eaton Corporation. Limo-Reid received \$250,000 from the Michigan SmartZone Pre-Seed Fund and a development contract from the U.S. Army TARDEC for military vehicle demonstrations. Most recently, they were awarded funds through Michigan’s 21st Century Jobs competition that led to West Coast VC investment and the repayment of Automation Alley’s initial loans.
 - ParkingCarma, Inc. (Flint) – Automation Alley’s funding joined \$250,000 from the Michigan SmartZone Pre-Seed Fund and \$250,000 from the Mott Foundation to bring this business and entrepreneur from San Diego to Flint, Michigan. This company currently has a 3-year contract with Cal Trans in San Francisco, as well as a strong relationship with NavTech in Chicago. Limited access to working capital has caused the company to consolidate and downsize operations.
 - Cielo MedSolutions, LLC (Ann Arbor) – This firm has successfully commercialized U of M- developed clinical management software for physicians and health systems, and currently has 9 employees. At present, 200,000 patients are managed through CieloClinic, and the company also has an evaluation contract from the Centers for Medicaid and Medicare Services for quality reporting. CieloMed has also attracted Michigan SmartZone Pre-Seed Fund, and private investment from the Altarum Institute.
 - CircleBuilder Software, LLC (Franklin) – This firm has successfully created social networking platform, similar to “Facebook,” for faith communities with a \$250,000 investment from Automation Alley’s seed fund. The software has appeal for organizations seeking to provide safe and family-friendly content and enables useful communication and coordination between and among members and the organization. At present over 500 centers of worship are using the platform.
 - Ventech, LLC (Wixom) – This firm has developed a revolutionary rapid heating system technology called the Liquid Heat Generator to provide instant heat for comfort and safety inside school buses and for automotive, heavy-duty, emergency, off-highway, transit and military markets. We validated the product,

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market and contingent purchase orders from OEMs before investment. However, the firm is challenged to secure working capital to fulfill purchase orders.

Why does Michigan have the highest unemployment rate in the country?

Rising productivity at home and abroad, global competition, and restricted access to credit markets have all contributed to the Nation's dismal unemployment. Michigan's unemployment is currently the highest in the country for a few reasons. We have a history of being one of the premier manufacturing states in the country. A history which served us well for many decades, and drove creation of a substantial middle class accessible to even workers with only a high school education. The level of income attainment in Michigan relative to educational level was in the upper quartile of all states. But that's a manufacturing environment which is now only historical, and we are looking to re-invent the state and its workforce to address the future. We've experienced a global disruption and improvement in manufacturing productivity over the last decade, and while that has resulted in the loss of many jobs in Michigan, it's also resulted in job losses in other manufacturing states and in manufacturing centers around the globe, including China.

Our closest peer state in geography as well as industrial demographics, Ohio, has also been hard-hit. Today's modern plant requires only a small fraction of the workers it once did, and those workers require additional skills, often created on a backdrop of additional education. According to the U.S. Bureau of Economic Analysis, only Michigan and Ohio have experienced a decrease in real Gross Domestic Product (GDP) over the period of 2004-2008.¹ Still, we need to remember that although we have high unemployment, if we compare Michigan's state gross product today versus its most recent peak in 2003, our output is down ONLY 4%. And manufacturing is not dead, though it is off over 15%. Michigan can and must promote the emergence of high-technology entrepreneurship and workforce reeducation, or it will lag its competitors in the inevitable economic recovery.

What policies should the Congress pursue to promote economic recovery?

Automation Alley supports the Obama Administration's proposal to support further economic recovery and job creation by ensuring that credit is available to small businesses. Of particular interest are the measures that would: raise lending limits on SBA's 7(a) and 504 programs from \$2 million to \$5 million; raise the manufacturing company limit to \$5.5 million, and raise lending limits on the Microloan program from \$35,000 to \$50,000.

¹ <http://www.ssti.org/Digest/Tables/061009t.htm>

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For companies looking to diversify, the value of existing plant and equipment has fallen and is often inadequate to fund the credit lines needed to move into new markets. Supplier diversification funding from the federal government and the state has helped in the past, but those deployed funds had a narrow technology focus. Many new economy companies do not have the same need for physical plant and equipment. In absence of such easily valued assets, these firms face a distinct disadvantage to garner working capital. I urge the committee to consider mechanisms to address this.

Capital to move from seed stage to VC fundable (or bootstrap able) is scarce. A subordinated debt fund targeted at innovation companies would assist in this regard.

Regarding policies to promote job growth, we would suggest that many of the current efforts are exactly the right thing to be doing. Increased educational access through the “No Worker Left Behind” funding, the market diversification summits hosted by MEDC in cooperation with organizations throughout the state and the three Department of Labor WIRED programs currently active to facilitate worker transition to new industries. The best way to promote job growth is by making opportunities visible and accessible. Key to this is attracting new and growing businesses to Michigan, and perhaps even more importantly, supporting our small businesses that are beginning to gain market share and revenue and that would benefit from increased access to capital and business development resources. Michigan has put in place programs to substantially increase access to seed and pre-seed capital, and to Venture Capital, but the gap persists, and companies that successfully leverage the initial investment of \$200-500k are finding it difficult to raise the next pre-VC round of \$1M or so.

Michigan has been working to leverage federal investments wherever possible, and Automation Alley supports manufacturing diversification and R&D in collaboration with the U.S. Army Tank Automotive Research Development & Engineering Command (TARDEC), the state’s only federal research laboratory. The Detroit Arsenal, as it is known, includes the military’s ground vehicle laboratories and procurement arm, TACOM, procures between \$14 and \$30 billion per year. Michigan has taken two significant steps to capitalizing on this opportunity through the Michigan Defense Contract Coordination Center and the Michigan Procurement Technical Assistance Centers.

Automation Alley has been active in helping Michigan manufacturers to diversify into the defense space. Automation Alley has maintained a Cooperative Research and Development Agreement with the Army since 2002. Automation Alley, itself, is now a defense contractor, having recently been awarded a \$1.5 million contract to help identify new manufacturers of replacement parts. Automation Alley was also awarded a \$295,000 contract from the U.S. Army TARDEC in 2008 to evaluate its current Small Business Innovation Research (SBIR) contract program, benchmark it against other programs nationally and in different government agencies, and provide recommendations for

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improvement. There is approximately \$25 million available annually from this program to meet Army R&D needs, principally ground transportation related. Automation Alley also works to ensure that small companies become knowledgeable about these available programs.

The infrastructure to launch Michigan's technology future is in place. It is delivering results for taxpayers, and has capacity to do much more with an unfreezing of the capital markets. As these programs continue to create new and dynamic companies, job opportunities will follow.

In closing, the largest gap currently in the funding continuum for start-ups is the availability of follow-on investment for companies moving successfully beyond the seed stage. Those who are beginning to generate revenue but are not yet profitable, and for that reason or others are not candidates for venture capital funding. Michigan has launched programs that have successfully expanded availability of angel/pre-seed funds and venture capital, but the gap persists.

In conclusion, Automation Alley is very appreciative of the attention received by Congress and federal agencies during this catastrophic economic downturn in our state. We believe that a continuum of available funding and local support for technology entrepreneurs remains a vital piece in the economic development puzzle. Thank you very much for your time this afternoon. I would be happy to answer any questions you have.
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Thomas E. Anderson, Ph.D., MBA

Senior Director, Automation Alley

2675 Bellingham, Troy, MI 48083

(T) 248-457-3200, (E) andersont@automationalley.com