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accelerate • partnership • solutions • transform • driven • perform
lean • deployment • iso • innovate • excellence • sigma • create
invest • connect • develop • share • collaborate • accelerate

Annual Report 2010-2011

Improving the Economy



To our many stakeholders and partners,

The past fiscal year has been a time of economic recovery, whether increasing sales after years of flat business or attaining stability following a period of uncertainty. At the University at Buffalo (UB) State University of New York (SUNY), we are committed to supporting businesses and communities in rebuilding a strong regional and state economy by providing access to UB engineering resources and operational excellence leaders.

Our team of professionals at UB TCIE has the skills and experience to provide results-oriented consulting, training, technical services, and

innovation through applied research for a broad range of needs. From the basics of strategic planning for small and mid-size businesses, to strategy, leadership development and operations excellence for high-growth and mature companies, helping improve performance is our goal. UB TCIE's economic outreach, consulting and research can provide the necessary tools for success.

UB continues to advance in the ranks of the U.S. News & World Report's "Best Colleges," providing access to excellence for the region and state, with 29,000 students and more than \$349 million in research. As a center whose primary mission is outreach, UB TCIE works with students to provide them service-learning experience on business cases, and collaborates with faculty on community projects and research.

UB TCIE stakeholders include business and community clients, funding partners, elected officials, university leaders, and many economic development allies, who all share our mission in building the economy. We thank you for all you do to build the economy, one business at a time.

Fiscal Year 2010/11 Summary

SERVICE RESULTS

Number of Businesses Served	145
Professional Development – Number of People Trained/Certified	1,400
Business Process Reengineering Projects	211
Undergraduate/Graduate Students Placed	19
Number of Markets Served	24
Total Revenue	\$1,561,684

STRATEGIC PARTNERSHIP INDUSTRIAL RESURGENCE IMPACT (SPIR)

Number of SPIR Projects	19
Client Jobs Created	248
Client Jobs Retained	2,114
Value of SPIR Pipeline	\$480,000
Client Increased Revenue	\$57,790,450



UB TCIE was founded in 1987 as the UB Center for Industrial Effectiveness and is the primary university center providing extension services to businesses. As we have evolved and our client base has expanded beyond manufacturing to include diverse business sectors, we have redefined our name. The word "industrial" has become obsolete. At the end of fiscal year 2010-11, we renamed ourselves to what the community calls us – "UB TCIE" – and no longer assign a meaning to the acronym.

UB TCIE continues to facilitate business growth, economic development and operational excellence for client organizations of all types and sizes, including private businesses, governments, hospitals, educational institutions and non-profit agencies. Under the aegis of UB's School of Engineering and Applied Sciences, UB TCIE delivers engineering solutions via research and development ventures, and access to testing labs and a highly trained and educated student talent pool. Services also include continuous improvement in infrastructure performance, leadership and change management, training and human resource development, and implementation services.

While UB TCIE primarily serves New York State (NYS), offerings are provided to businesses across North America and the world. In 2010-2011, UB TCIE's programs increased net sales in excess of \$57 million and created or retained more than 2,300 jobs. Additionally, UB TCIE's professional development team trained 1,400 working professionals, strengthening businesses and the community through excellence in service. Our business development and resource teams include highly knowledgeable and engaging individuals who utilize their industry experience to achieve excellent results.

UB TCIE is the regional administrator for NYS's Strategic Partnership for Industrial Resurgence (SPIR) grant, with SPIR offices located at SUNY Binghamton, New Paltz, and Stony Brook. The SPIR program offers an engineering resource that is unparalleled in the state.

UB TCIE is located at the Baird Research Park campus at 1576 Sweet Home Rd. The building is UB's Technology Incubator, encompassing UB TCIE and the Office of Science, Technology Transfer, and Economic Outreach.

Our Mission and Values

The mission of UB TCIE is to be a leader in building the economy, by strengthening businesses and communities through excellence in service.

Our vision is to be a leading university extension service organization recognized for collaborating with diverse partners and providing a broad array of services to our stakeholders.

Integrity

Building our reputation by being ...

- **Accountable**
- **Credible**
- **Ethical**
- **Respectful**

Excellence

Exceeding stakeholder expectations by ...

- **Achieving results**
- **Demonstrating leadership**
- **Leveraging our resources and expertise**

Service

Delivering results and fostering diversity by being ...

- **Responsive**
- **Adding value**
- **Providing solutions**
- **Collaborating**

Innovation

Fostering a culture of creativity by embracing ...

- **Change**
- **Lifelong learning**
- **Risk-taking**

Strategic Partnership for Industrial Resurgence



Subsidizes technically advanced multi-disciplinary projects for New York State companies.

UB TCIE works with approximately 30 companies each year to attain Strategic Partnership for Industrial Resurgence (SPIR) grant monies to assist with project costs. Companies with fewer than 500 employees have benefited by upgrading or introducing new technology, addressing challenges of product development and testing, enhancing a continuous improvement program, and making their business more competitive through other initiatives.

Specifically, SPIR projects include:

- Engineering R&D projects
- Re-engineering business processes and improved/enhanced business systems
- Accessing university equipment and resources
- Employing graduate student interns

Client projects contracted during the 2010-11 fiscal year receiving SPIR awards resulted in an estimated:

- 248 jobs created
- 2,114 jobs retained
- \$57,790,450 revenue increase



Sectors Served & Client List

UB TCIE's client engagements include Engineering Solutions research projects that call on the expertise of UB faculty, Operational Excellence consultation, and Professional Development and mentoring in the areas of Lean, Six Sigma, ISO, and Soft Skills. The client base covers the following sectors: Advanced Manufacturing, Life Sciences, Healthcare and Social Services, Food Processing and Food Services, Government and Education, Finance and Insurance, Specialty Metals, Recycling, Printing, Metal Forming, Automotive, Packaging, Agricultural, Distribution and Warehousing, Service, Aerospace and Defense, Electronics, Chemical, and Media/Advertising.

The featured sectors include a partial list of clients.

Advanced Manufacturing:



Life Science:



Healthcare and Social Services:



Food Processing & Food Services:



Government & Education:



Finance & Insurance:





School of Engineering

UB is a premier research-intensive public university and a flagship institution in the 64-campus State University of New York (SUNY) system.

UB's School of Engineering and Applied Sciences, led by Acting Dean Rajan Batta, is the largest and most comprehensive public school of engineering in New York. Annual research expenditures are around \$50 million and the school's per faculty research expenditure places it in the top 10 percent of U.S. engineering schools. The engineering departments are: Biomedical; Chemical and Biological; Civil, Structural and Environmental; Computer Science; Electrical; Industrial and Systems; and Mechanical and Aerospace.



The University at Buffalo Office of Science, Technology Transfer, and Economic Outreach (STOR) is UB's interface between the inventive work of the faculty and students, and the applied commercial development that brings the fruits of

that work to benefit society. STOR's three main functions — intellectual property protection, funding and commercialization — provide easy access to UB's extensive resources and expertise and, through best practice services, effectively transfer the discoveries of UB to benefit the public and contribute to regional economic development.



The New York State Center of Excellence in Bioinformatics & Life Sciences (CoE) was created to serve as a hub

of life sciences expertise and innovation in Upstate New York, facilitating economic development via partnerships with government, academia and industry worldwide. Its mission is to study the mechanistic processes involved in human disease, with the goal of developing diagnostics tools and therapeutic interventions, preventative treatment and other disease management devices and processes to improve the health and well-being of the population.

University Partner Organizations



Directed Energy seeks to facilitate the emergence and growth of an alternative energy technology and

business cluster in Western New York. This NYSERDA-funded program is managed by the University at Buffalo Office of Science, Technology Transfer and Economic Outreach (STOR) and is a partnership of many technology and business assets in the western end of New York State.

NYSCEDII The mission of the **New York State Center for Engineering Design and Industrial**

Innovation (NYSCEDII) is to develop next-generation design, manufacturing, product and process development tools that best exploit new information, visualization and simulation technologies. The center emphasizes visualization, interactive environments, cyberinfrastructure, and advanced design theory and methodology to address complex analysis and design problems, and promote innovation in product design and manufacturing.



CUBRC, Inc. executes research, development, testing and systems integration programs in information fusion,

C4ISR, public health and safety, medical biotechnology, chemical and biological defense and hypersonics. CUBRC professionals apply innovative research, rigorous testing and robust engineering to deliver cutting-edge science and technology solutions allied to best-in-class business practices. The mission of CUBRC is to generate technological and economic growth in Western New York and New York State.



The **Center for the Arts Video Production Group** is a professional television and video outlet

dedicated to enhancing communication about the Center for the Arts, University at Buffalo and affiliated groups. The group collaborates with a wide range of university clients to produce videos for marketing, development, education and entertainment.

Economic Development Partner Organizations



Empire State Development (ESD) is the chief economic development agency driving job growth,

strategic investment and prosperity in New York State and is administrator of the statewide business resource portal New York First. ESD offers a number of services for businesses, including loans and grants, tax credits and other financial and technical assistance.



The mission of the **Erie County Industrial Development Agency (ECIDA)** is to provide the resources that encourage investment, innovation, growth and global competitiveness.

The ECIDA is a public benefit corporation created to promote and assist private sector industrial/business development, thereby advancing job opportunities and economic well-being to the people of Erie County.



The **Buffalo Niagara Enterprise (BNE)** provides comprehensive economic development assistance to companies looking to expand to the

Western New York region. Services include confidential project management, regional data and demographics, site location assistance, financing and incentive identification, and serving as a liaison to local economic and workforce development organizations.



The primary purpose of the **Amherst IDA** is to promote regional employment growth through the attraction,

expansion and retention of companies within the Town of Amherst. The Amherst IDA's approach to economic development is a community-wide effort focused on people, knowledge, networks and linking community assets.



The **Buffalo Niagara Partnership** (the Partnership) includes nearly 2,500 employer members working for improved business

competitiveness and expanded economic activity in the region. The Partnership advocates at local, state and national levels for policies and resources to increase private sector investment and jobs, and offers programs and services to increase chances for business success.



Like most elite university extension programs, we help our clients solve a wide range of business challenges and measure our success directly on the results we deliver. Our team of professionals has the skills and experience to provide innovative solutions for a broad range of needs, regardless of location.

www.tcie.buffalo.edu



The **Niagara County Center for Economic Development** is the

umbrella organization for the Niagara County Industrial Development Agency (NCIDA) and Niagara County Department of Economic Development (NCDED). The NCIDA facilitates economic growth and expansion through financial incentives and a variety of support services. The NCDED provides information support for businesses and the public in regard to marketing and general data, especially demographic, economic, geographic and related socioeconomic data.



The **University Economic Development Association (UEDA)** is the collective

national voice for university-based economic development. UEDA is a vibrant and growth-oriented organization of higher education, business and economic development professionals. UEDA's goals include enhancing economic development nationwide, creating community wealth and driving economic growth through innovation and entrepreneurship.

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