ANNUAL REPORT 2018



BEN FRANKLIN TECHNOLOGY PARTNERS OF NORTHEASTERN PENNSYLVANIA

A JOB CREATION FACTORY

fac-to-ry

noun

1. A building or group of buildings where goods are manufactured or assembled. Synonyms: plant, works, yard, mill, workshop, shop

1.1 (with modifier) A person or organization that continually produces a great quantity of something specified.

e.g., Ben Franklin Technology Partners is a Job Creation Factory.



BEN FRANKLIN TECHNOLOGY PARTNERS OF NORTHEASTERN PENNSYLVANIA A JOB CREATION FACTORY

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TO THE EDITOR:

When Ben Franklin Technology Partners (BFTP) launched more than 35 years ago, Pennsylvania was at the forefront of tech-based economic development investment. The strategy worked. BFTP has successfully built and accelerated dozens of desirable technology industries in Pennsylvania.

With its four regionally based centers, the partners have generated 54,000 jobs in client firms statewide, plus another 94,000 spinoff jobs, and boosted Pennsylvania's economy by \$25 billion. BFTP investments generate \$3.90 in additional state tax revenue for every dollar invested.

But state funding for BFTP has diminished over the years, rendering the centers unable to invest in deserving companies and having to seriously short-fund others. That's tremendously detrimental to our economy. Studies show young firms create the vast majority of new jobs.

At the same time, recognizing the competition, other states have adopted technology-based economic development programs of their own. Among the 12 most competitive states in this sector, their investments are nearly triple Pennsylvania's.

Ben Franklin Technology Partners is recognized as the international gold standard in technology-based economic development programs. We need continued investment in homegrown tech companies that provide high-paying jobs and sustainable economic growth. Restoring BFTP's funding is essential for Pennsylvania to remain competitive, attract follow-on investments, and continue to drive innovation.

If we continue to underfund Ben Franklin Technology Partners, what we lose is lost forever.

R. CHADWICK PAUL. JR.

President and Chief Executive Officer

Ben Franklin Technology Partners of Northeastern Pennsylvania

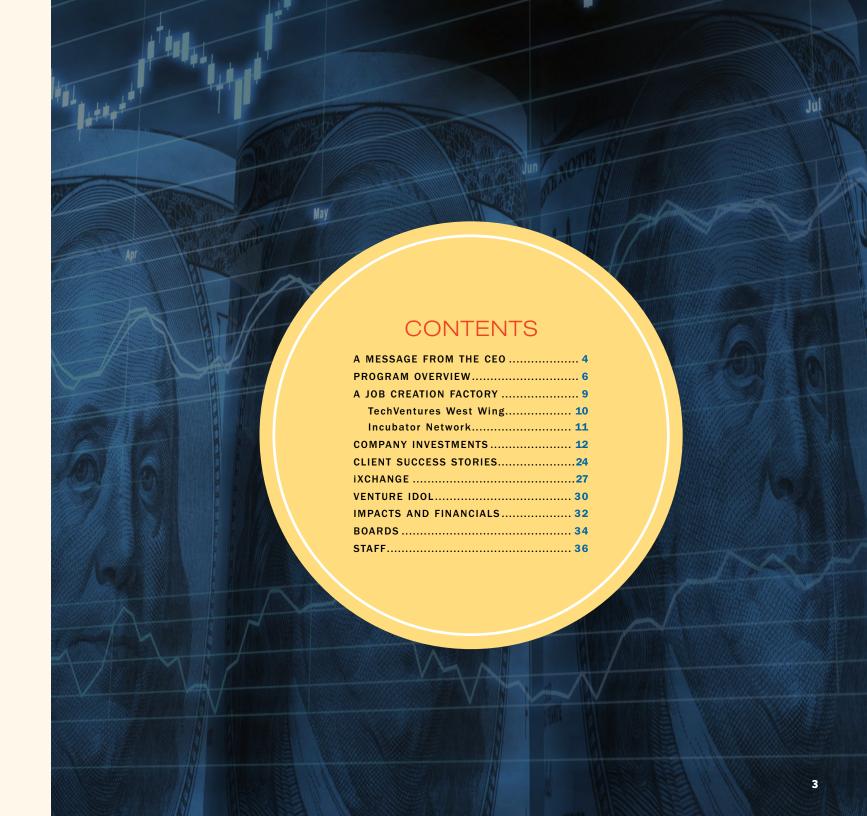
VERSIONS PUBLISHED IN NOVEMBER/DECEMBER 2018 EDITIONS*:

The Morning Call, Lehigh Valley, "Pa. lags behind other states in funding tech programs"

The Scranton Times-Tribune, "Tech funding pays"

Reading Eagle, "Economic effort needs more funds; development funding crucial for Pennsylvania's prospects" Bloomsburg Press-Enterprise, "Tech startups require state funding" Standard-Speaker, Hazleton, "Invest in homegrown tech companies"

* Statistics have been updated to reflect latest available data.



BEN FRANKLIN TECHNOLOGY PARTNERS IS A JOB CREATION FACTORY because we host and develop resident early-stage technology firms at the Ben Franklin TechVentures® and Bloomsburg Regional Technology Center business incubators. These client companies, in turn, create highly paid, sustainable jobs.



In addition, the 13-member Ben Franklin Business Incubator Network lets us leverage 35 years of successful incubation experience to help companies create even more good jobs throughout northeastern Pennsylvania. Ben Franklin business incubators are iob creation factories.

But that is only part of what being a Job Creation Factory means to us. Ben Franklin Technology Partners produces jobs by investing in companies all over our 21-county northeastern Pennsylvania service area, many of which are located outside of the business incubators. We share in-house expertise, provide business and technical support, and bring in a network of experts to advise our clients. We produce jobs by supporting innovation.

The Ben Franklin Technology Partners significantly increases the success rate of the highest-potential earlystage technology firms. We also support established manufacturers through technological innovation and product and process improvements that allow the companies to be more globally competitive. Our job is to identify and evaluate investment opportunities, to select the most promising ones,

and to provide firms with crucial resources as they strive to succeed in today's highly competitive marketplace.

Ben Franklin clients know our partners. their industries. They bring a comprehensive understanding of their products and markets. Companies come to us because they recognize the need to turn innovative concepts into competitive advantage. Applying our years of experience, we help them to evaluate their ideas and focus their energies. Nurturing new ideas is a hallmark of the strategy of the Ben Franklin Technology Partners, and our accomplishments have earned us international recognition as the gold standard in technology-based economic development.

On a regional level, Ben Franklin has worked to build a critical mass of technology-based companies by developing an infrastructure that advances them at crucial times. We combine our experience and networks, our clients' knowledge and tenacity, and targeted investments to do things in ways that have never been done before. Together with our clients, Ben Franklin Technology Partners IS a Job Creation Factory.

R. CHADWICK PAUL, JR. President and Chief Executive Officer Ben Franklin Technology Partners of Northeastern Pennsylvania

Read our client Success Stories and learn how Ben Franklin has impacted some of

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BEN FRANKLIN TECHNOLOGY PARTNERS of NORTHEASTERN PENNSYLVANIA

PROGRAM OVERVIEW

The Ben Franklin Technology Partners of Northeastern Pennsylvania (BFTP/NEP) is part of a four-center, state-funded economic development initiative that began in 1983. The Ben Franklin program was created by the Commonwealth to play a leadership role in strengthening regional economies, building Pennsylvania's technology-based economy, and creating and retaining highly paid, sustainable jobs. The northeastern center is headquartered at Ben Franklin TechVentures®, a technology incubator/post-incubator facility on Lehigh University's Mountaintop Campus in Bethlehem, Pa. Regional offices are located in Bloomsburg, Reading, and Scranton.

BFTP/NEP's mission is to promote, sustain, and invest in the development of its regional economy through innovation and partnering. Our strategy encompasses three key areas:

- 1. developing and growing early-stage technology-oriented companies;
- supporting established manufacturers as they creatively apply new technology to help them succeed globally by producing better, cheaper, and faster; and
- 3. promoting an innovative community-wide infrastructure that supports Pennsylvania's business technology ecosystem.

Ben Franklin works with the most promising ventures that offer significant potential for future job growth through the development of a new technology or an innovative application of existing technology. To qualify as clients, companies must be located in, or relocate to, BFTP/NEP's 21-county northeastern Pennsylvania service area: Berks, Bradford, Carbon, Columbia, Lackawanna, Lehigh, Luzerne, Lycoming, Monroe, Montour, Northampton, Northumberland, Pike, Schuylkill, Snyder, Sullivan, Susquehanna, Tioga, Union, Wayne, and Wyoming. We refer companies in other Pennsylvania counties to one of our three colleague Ben Franklin Technology Partners organizations headquartered in Philadelphia, Pittsburgh, and State College.

As hundreds of companies have experienced, Ben Franklin delivers hands-on support, connections to critical resources, and investment funds at companies' most vulnerable times. BFTP/NEP helps clients to achieve and sustain market success and competitive advantage. We are evaluated on the basis of the job creation, retention, and commercial accomplishments of our clients that are achieved as a result of our assistance.

CAPITAL — Ben Franklin investments in early-stage firms typically range from \$30,000 to \$150,000 for each tranche, for a total not to exceed \$450,000 per client. We take calculated risks investing in young, unproven companies. We assist early-stage firms as they prepare to raise additional capital and provide them with an important and well-respected initial endorsement.

We also support established manufacturers by providing investments in enterprise-wide innovation of up to \$25,000 for each project, for a total not to exceed \$150,000 per client. The work is usually technology development or application-driven and is accomplished with a college or university partner.

BUSINESS AND TECHNICAL EXPERTISE — Each company in the Ben Franklin portfolio benefits from the collective experience of seasoned professionals who focus on turning high-potential ideas into high-growth businesses. In-house expertise is complemented by the Ben Franklin Solutions Network of advisors, professional service providers, investors, and college and university experts. Members of the Solutions Network number more than 600, many of whom are called upon multiple times a year, creating a powerful and comprehensive support program for clients.

COLLEGE AND UNIVERSITY RESOURCES — We tap into the strength of Pennsylvania's colleges and universities, whose faculty and students work directly with many of our clients. Ben Franklin provides an essential link between client companies and the wealth of knowledge, facilities, and human resources in the Commonwealth's higher education institutions.

INFRASTRUCTURE — BFTP/NEP staff partner with economic development colleagues to create and develop a comprehensive support system for early-stage technology-based companies and established manufacturers throughout northeastern Pennsylvania. For example, we apply 35 years of business incubation expertise in leading the 13-member Ben Franklin Business Incubator Network. Business incubation provides significant support to young firms as they launch.

Ben Franklin Technology Partners statewide returned \$3.90 in new tax revenue for each \$1 invested from 2012 to 2016.



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BEN FRANKLIN TECHNOLOGY PARTNERS of NORTHEASTERN PENNSYLVANIA

SUPPORTING CLIENTS THROUGHOUT THEIR DEVELOPMENT

CONCEPT

Creation of idea for company and beginning of prototype development

FORMATION

Creation of first-generation product and initial market testing

EARLY GROWTH

Refinement of the product and sales to early adopters

MATURITY

Established customer base and continuing growth

REINVENTION

Development of new products to seek additional market opportunities

Business & Technical Assistance grants

Jump Start loans

Seed investments — loans with warrants

Gap Fund — equity

1:1 matching grants for established manufacturers

FINANCIAL SUPPORT

SOLUTIONS NETWORK & ENTERPRISE DEVELOPMENT

- One-on-one direct business support
- Intensive, expert-driven strategy sessions
- Capital access assistance
 - Investor presentation "Scrub" sessions
- Introductions to angel investor networks and venture capitalists
- Interim CFO program

- > ENTERPRISE-WIDE CLIENT ASSESSMENT
- UNIVERSITY AND COLLEGE TECHNICAL ASSISTANCE AND APPLIED R&D
- CONTINUED LONG-TERM SUPPORT

BUSINESS ASSISTANCE

OTHER BEN FRANKLIN TECHNOLOGY PARTNERS OF NORTHEASTERN PA INITIATIVES

- BEN FRANKLIN BUSINESS INCUBATOR NETWORK
- 13 member incubators
- Owns and manages Ben Franklin TechVentures® and the Bloomsburg Regional Technology Center
- > BEN FRANKLIN VENTURE IDOL introducing clients to potential investors
- BEN FRANKLIN iXCHANGE premier regional executive networking event



- BETHLEHEM TECHNOLOGY CENTERS I AND II
- CENTERS OF EXCELLENCE
- MEDICAL DEVICE GROUP

A JOB CREATION FACTORY

The reduced operating costs of starting a company in a business incubator are typically what draw early-stage companies to us. But the business development assistance and sharing of best practices among tenants are often even more important. Business incubators provide vital support to entrepreneurs and early-stage firms at their most vulnerable times and are often pivotal to their survival and prosperity.



FOR MORE INFO OR TO VISIT OUR WEBSITE, GO TO **nep.benfranklin.org**.

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TECHVENTURES WEST WING

BFTP/NEP launched the Ben Franklin Business Incubator at Lehigh University in Bethlehem soon after the statewide Ben Franklin program began in 1983. The location on a major university research campus allows resident companies ready access to the equipment, faculty, and students at Lehigh, which complement Ben Franklin's in-house expertise and network of experts and other resources well.

In 2007, we relocated the incubator program across the street on Lehigh's campus to Ben Franklin TechVentures®, a 62,000-square-foot former Bethlehem Steel laboratory, tripling our available space. Ben Franklin TechVentures², which opened in October 2011, was a major expansion to the original facility that increased the total space to 109,000 square feet.

To address continuing demand, we expanded and opened TechVentures West Wing in autumn of 2017. This new 20,000-square-foot addition to our business incubator provides additional, much-needed office and meeting spaces. TechVentures now has a total of 129,000 square feet of space for companies to start and grow.

A total of 42 firms called Ben Franklin TechVentures home in 2018, employing as many as 170 people. The expansion will allow BFTP/NEP to build on its history as a Job Creation Factory by accommodating accelerating needs for incubator space that fuels economic growth.

Ben Franklin TechVentures² is LEED GOLD CERTIFIED.

INCUBATOR NETWORK

Business incubation provides a venue, setting, and culture that have become key components of the entrepreneurial and technology ecosystem in northeastern Pennsylvania. BFTP/NEP owns and manages both Ben Franklin TechVentures and the Bloomsburg Regional Technology Center.

With 35 years owning and managing its own incubator, BFTP/NEP was one of the pioneers of business incubation in the nation. Ben Franklin's experience has been recognized with Ben Franklin TechVentures winning the International Business Innovation Association (InBIA) Incubator of the Year award on two occasions.

In the early 1990s, BFTP/NEP developed and seed funded the Ben Franklin Business Incubator Network. The network brings together incubator managers in northeastern Pennsylvania to exchange ideas and information, work collaboratively, and share guidelines that are in accordance with InBIA standards. Through this network, we leverage our incubator experience throughout northeastern Pennsylvania.

The Ben Franklin Business Incubator Network is now 13 members strong and one of the largest incubator networks in the United States. Members of the Ben Franklin Business Incubator Network fuel innovation, catalyze the regional technology economy, and create the jobs of the future.

BEN FRANKLIN BUSINESS INCUBATOR NETWORK:

BEN FRANKLIN TECHVENTURES, Bethlehem

THE BLOOMSBURG REGIONAL TECHNOLOGY CENTER, Bloomsburg

BRIDGEWORKS ENTERPRISE CENTER, Allentown

CARBONDALE TECHNOLOGY TRANSFER CENTER, Carbondale

EAST STROUDSBURG UNIVERSITY INNOVATION CENTER, East Stroudsburg

THE GREATER HAZLETON CAN BE. West Hazleton

THE INNOVATION CENTER @ WILKES-BARRE. Wilkes-Barre

JUMP START INCUBATOR, Reading



ALLAN P. KIRBY ENTERPRISE CENTER AT WILKES UNIVERSITY, Wilkes-Barre

THE SCRANTON ENTERPRISE CENTER, Scranton

STARTUPLEWISBURG, Lewisburg

THE STOURBRIDGE INCUBATOR, Honesdale

THE TEKRIDGE CENTER, Jessup



To build the regional technology economy, the Ben Franklin Technology Partners of Northeastern Pennsylvania invests in companies through funding provided by the Pennsylvania Department of Community and Economic Development. All clients were competitively selected as having the greatest potential for creating or retaining highly paid, sustainable jobs, introducing novel products or processes, and filling a viable market niche. Ben Franklin works with the most promising ventures on an enterprise-wide basis to enhance their entire way of doing business.

Many BFTP clients reside in business incubators in the Ben Franklin Business Incubator Network. These incubators are noted in the following company investment descriptions.

Challenge Grant Investments

APPLIED CADENCE, LLC

Scranton Enterprise Center Scranton

Fund the patent process, conduct marketing and branding work, and support the migration to cloud services at this provider of a remote home healthcare monitoring system. The platform maximizes the safety of patients and the productivity of home care personnel by utilizing a proprietary device and app that allow caregivers and managers to confirm times and locations of services provided.

BFTP Investment: \$35,000 Total Project Budget: \$114,000

APPLIED SEPARATIONS, INC.

Allentown

University Partner: Lehigh University's Enterprise Systems Center

Complete implementation of a new Enterprise Resource Planning system to improve operational efficiency, provide scalability and flexibility of operations, and better meet customer demands. Applied Separations builds supercritical fluid (SCF) systems, develops emerging SCF markets, and supplies laboratory equipment to companies all over the world.

BFTP Investment: \$25,000 Total Project Budget: \$140,619

BLASCHAK COAL CORPORATION

Mahanoy City

University Partner: Lehigh University's Energy Research Center

Develop a process to efficiently extract Rare Earth Elements (REE) from anthracite mine water sources at this producer of anthracite coal. REEs have a wide variety of applications in electronic, optical, and magnetic devices. Currently, China produces nearly all REEs and there is great demand for domestic suppliers.

BFTP Investment: \$25,000 Total Project Budget: \$75,000

BOSCH REXROTH CORPORATION

Betniene

University Partner: Lehigh University's Enterprise Systems Center

Develop a simulation that will improve scheduling of a multi-product line for the assembly of hydraulic valves to improve operational efficiencies. Bosch Rexroth manufactures products and systems associated with the control and motion of industrial and mobile equipment.

BFTP Investment: \$25,000 Total Project Budget: \$145,119

"Ben Franklin has helped our company to grow through their support. They were able to help take our vision of improvements and make it a reality."

-DIANE SMITH

President, East Coast Erosion Blankets, LLC, Bernville



Continued from previous page

CAMPANIA INTERNATIONAL

Pennsburg

University Partner: Lehigh University's Enterprise Systems Center

Complete evaluation and enhancement of inventory control, plant layout, and process improvements at this designer, manufacturer, and distributor of fine garden accents for independent garden centers.

BFTP Investment: \$25,000 Total Project Budget: \$118,619

CARENADE HEALTH

Bethlehem

Develop marketing and customer support for the product's beta launch, and implement ongoing software enhancements to Carenade's online marketplace for in-home healthcare services. Families often find it difficult to find the best home health agency for their loved ones. Carenade is creating an online tool through which consumers can compare prices, read reviews, and purchase in-home healthcare services for themselves or their loved ones.

BFTP Investment: \$100,000 Total Project Budget: \$229,247

CONNEXICORE, LLC

Milford

Support marketing and sales efforts by refining the quote-to-order process and expanding the number of pilots at this provider of drone flight services. Using its proprietary cloud-based Software-as-a-Service flight management platform for drone flight pilots, ConnexiCore will initially target the architectural, engineering, and construction industries.

BFTP Investment: \$100,000 Total Project Budget: \$519,000

CUSTOM PROCESSING SERVICES. INC.

Reading

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University Partner: Lehigh University's Enterprise Systems Center

Complete a comprehensive analysis of the inventory management process and begin implementation of identified recommenda-

tions for improvement. CPS provides sophisticated air-jet milling, micronizing, blending, and testing of powdered materials on a contract and toll basis.

BFTP Investment: \$32,855 Total Project Budget: \$224,703

ECO2DYE, LLC

Allentown

Commercialize a new process for the waterless dyeing of fabrics, threads, and yarns for B-to-B sales to clothing manufacturers and textile companies. Current practices utilize large amounts of energy and water. With the developing worldwide water shortage, the industry is actively seeking methods to significantly lessen its water usage. Using supercritical carbon dioxide (scCO₂) in a proprietary way, the new process eliminates water use as well as substantially reduces energy consumption, drying time, amount of dye used, and waste.

BFTP Investment: \$45,000 Total Project Budget: \$90,000

EFFORT FOUNDRY, INC.

Bath

University Partner: Lehigh University's Enterprise Systems Center

Implement improved production methods and product tracking capabilities at this supplier of high-integrity steel castings for the pump, power generation, and military industries. These technology upgrades will shorten lead times and reduce costs.

BFTP Investment: \$25,000 Total Project Budget: \$95,719

"BFTP has been extremely gracious and an excellent partner in our endeavor to develop novel, controlled-release technologies."

-JITEN DIHORA

Vice President, Technology, TRuCapSol, LLC, Bethlehem



"BFTP's continued support has been an important part of our company's growth. The recent implementation of our upgraded Enterprise Resource Planning system was critical to our success this year and is a major strategic advantage moving forward."

-KEVIN RHODES

CEO & Founder, FMI, Allentown



FMI

Allentowr

University Partner: Lehigh University's Enterprise Systems Center

Upgrade FMI's Enterprise Resource Planning system to accommodate growth so the company can operate more efficiently and serve larger customers. FMI provides contract manufacturing for a wide range of clients in the skin care, personal care, hair care, and pet care markets. Its materials are sold throughout the world and comprise products in most major domestic retailers.

BFTP Investment: \$25,000 Total Project Budget: \$185,619

GILSON SNOWBOARD & SKI COMPANY Winfield

Complete manufacturing improvements and expand sales and marketing efforts at this producer of innovative snowboards and skis. Applying aeronautical engineering concepts, Gilson products have a three-dimensional base that offers a "soft edge" for a buttery or "surfy" feel not offered in traditional products. The proprietary design accelerates the learning curve for beginners and stores more energy for the "pop" that is sought by experienced users.

BFTP Investment: \$85,000 Total Project Budget: \$259,875

GODIVA CHOCOLATIER INC.

Reading

University Partner: Lehigh University's Enterprise Systems Center

Identify and implement process improvements in plant layout and inventory management to reduce cost of goods at this

producer of premium chocolate candy. These savings will allow Godiva's Reading operation to compete effectively in the company's international network.

BFTP Investment: \$25,000 Total Project Budget: \$90,519

GROVARA, LLC

Ben Franklin TechVentures Bethlehem

Continue to develop a web-based marketplace platform that will connect "Made in USA" natural foods, beverages, and other health and wellness retail brands with international B-to-B buying partners. Grovara provides end-to-end foreign market distribution and international brand management solutions, lowering the barriers to entry for global trade. The portal will make international trade faster and more cost effective and efficient, while giving brands and buyers more options and flexibility.

BFTP Investment: \$30,000 Total Project Budget: \$60,000

IDEAL SEMICONDUCTOR DEVICES, LLC

Ben Franklin TechVentures Bethlehem

Support ongoing technical development of the etch/coat and other processes for producing power semiconductor chips that offer significant improvements in performance, cost, and size.

BFTP Investment: \$100,000 Total Project Budget: \$745,000

JED POOL TOOLS, INC.

Scranton

University Partner: Lehigh University's Enterprise Systems Center

Implement an Enterprise Resource Planning tool at this manufacturer of pool and spa maintenance equipment and provider of plastic fabrication toll manufacturing through its custom injection molding division, Northeastern Plastics. JED Pool Tools is the only domestic producer of its kind and is vertically integrating to address difficult international competition and promote reshoring initiatives.

BFTP Investment: \$48,595 Total Project Budget: \$246,694

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MATERIAL SOLUTION SERVICES

Northampton

University Partner: Lehigh University's Enterprise Systems Center

Complete the formulation of new composite materials that can be used in construction material and for general fill in land development and mine reclamation. The composites will recycle various waste products in conjunction with a binding agent to reclaim abandoned sites for safe and productive reuse.

BFTP Investment: \$25,000 Total Project Budget: \$117,924

MCCARTHY TIRE SERVICE

Wilkes-Barre

University Partner: Lehigh University's Enterprise Systems Center

Analyze and improve logistics operations and optimize staff time associated with distribution at this manufacturer of re-tread tires for commercial trucking. Improvements will address significant growth and respond to cost pressure to remain competitive.

BFTP Investment: \$25,000 Total Project Budget: \$127,337

"Ben Franklin continues be a great partner for Brentwood by keeping us informed of new developments and by pushing us to continue to challenge and improve our processes."

-CARL STAPLES

Executive Vice President/General Manager
Brentwood Industries, Inc., Reading



MDS LINK, INC.

Ben Franklin TechVentures Bethlehem

Complete development of a simple, inexpensive, and patent-pending MoCA SFP solution, which significantly increases data transport capacity using existing coaxial cable. There is a growing market need for greater data transmission bandwidth to homes and apartments, driving demand for sophisticated technological solutions such as the innovative MDS Link MoCA SFP. Broadband operators can deploy this solution using already installed coaxial cable systems, delivering massive increases to "last mile" bandwidth in less time and with dramatically lower cost versus installing new fiber optic cables throughout buildings.

BFTP Investment: \$100,000 Total Project Budget: \$200,000

MEDICO INDUSTRIES, INC.

Wilkes-Barre

University Partner: Lehigh University's Enterprise Systems Center

Adapt a newly developed hybrid manufacturing process for reworking high-temperature tooling surfaces through additive manufacturing to reduce costs and speed maintenance. Medico Industries produces metal parts for the U.S. Department of Defense, oil and gas drilling companies, the automotive industry, and other customers.

BFTP Investment: \$25,000 Total Project Budget: \$63,525

MISCO PRODUCTS CORPORATION

Reading

University Partner: Lehigh University's Enterprise Systems Center

Complete automation of the material handling and job tracking processes at this manufacturer of cleaning and maintenance chemicals for the janitorial and sanitation, industrial, food service, healthcare, and institutional markets. These manufacturing improvements will support the company's revenue growth by expanding product offerings and enhancing customer resources.

BFTP Investment: \$23,215 Total Project Budget: \$104,987

"BFTP has provided tremendous value to Heudia. Their engagement process and support services have enabled us to get significantly better traction with customers and investors."

—ED CONNORSCEO, Heudia Health, East Stroudsburg



MYSTIC MOUNTAINTOP PRODUCTIONS, LLC

Kunkletown

Complete the development and fabrication of a market-ready, proprietary, "smart" LED lighting system for the middle- to low-end entertainment industry. The system will include a hybrid analog/digital computerized lighting console, local and wireless remote control via a smartphone or tablet, a lighting power and control distribution unit, and installation hardware. Primary clients will be small venues, such as auditoriums, churches, and night clubs, which want a lighting system that is affordable but offers the quality of systems designed for larger facilities.

BFTP Investment: \$65,000 Total Project Budget: \$195,000

NAZARETH PALLET CO., INC.

Northampton

University Partner: Lehigh University's Enterprise Systems Center

Complete a thorough analysis of operations at this producer, customizer, recycler, and rebuilder of wooden pallets. The focus will be on identifying inefficiencies in process flow logistics, increasing output, and improving end-product quality.

BFTP Investment: \$21,000 Total Project Budget: \$62,000

OPHIDION

Ben Franklin TechVentures

Bethlehem

Support a definitive pre-clinical study to optimize delivery of central nervous system therapeutics to targeted sites in the brain. Ophidion is leveraging its proprietary blood-brain barrier transport technology to advance a systemically

delivered gene-silencing small interfering RNA (siRNA) product for the treatment of Huntington's disease, a fatal neurodegenerative disease with no current cure.

BFTP Investment: \$100,000 Total Project Budget: \$298,000

ORTHOFORGE

Ben Franklin TechVentures

Bethlehem

Finalize engineering to lead to the initial unit build of a medical device that provides clinicians real-time data regarding fracture healing as well as stimulating bone growth at the targeted area. This allows orthopedists to streamline their fracture healing treatment algorithm in a more cost-effective manner and potentially improve outcomes.

BFTP Investment: \$100,000 Total Project Budget: \$500,000

PENNSYLVANIA GLASSWORKS COMPANY

Reading

Begin production and processing of decorative architectural cast-glass panel prototypes for presentation to prospective clients and listing in an online catalog. This proprietary process will allow architects and designers to apply custom glass wall panels, windows, and doors that have deep sculptural patterns or imagery cast directly into the surface of the glass. The process will address current product limitations in color and sound transmission with better manufacturing throughput and improved cost and quality efficiencies over competitors.

BFTP Investment: \$100,000 Total Project Budget: \$200,000

PHYTOGENX, INC.

Morgantown

University Partner: Lehigh University's Enterprise Systems Center

Select and implement an Enterprise Resource Planning system at this contract manufacturer for the beauty and skincare industry. The company has realized double-digit growth and is being hampered by existing systems. The enhancements will support growing batch production levels with improved manufacturing efficiencies that will greatly enhance throughput.

BFTP Investment: \$25,000 Total Project Budget: \$120,499

Continued from previous page

"New Horizon Biotech has successfully utilized BFTP resources and funding vehicles to accomplish proof-of-concept prototyping. With ongoing help from BFTP, we are moving forward with final designs and marketing efforts. Invaluable!"

-ERNEST L. STADLER. P.E.

Founder and CEO, New Horizon Biotech, Bethlehem



PLANGURU, LLC

Wilkes-Barre

Support the release of a cloud-based solution, PlanGuru Online, at this developer of SaaS-based budgeting, forecasting, and financial analytics tools. PlanGuru enables small- and medium-sized businesses to make timely and accurate financial decisions.

BFTP Investment: \$100,000 Total Project Budget: \$875,000

PLAY IMPOSSIBLE

Lewisburg

Support the launch of version 2.0 of the Play Impossible Gameball™ and develop additional sources of revenue with the creation of subscription-based games. Gameball is a smart, inflatable ball that links real-time via Bluetooth to an accompanying smartphone app. It is designed to keep 5-to 15-year-old boys and girls challenged, entertained, and moving with active play. The ball contains sophisticated electronics, an accelerator, barometer, microcontroller, and ultra-capacitor and uses a battery-powered, hand-held charger.

BFTP Investment: \$100,000 Total Project Budget: \$200,000

PLEASANT MOUNT WELDING, INC.

Carbondale

College Partner: Johnson College

Complete a field unit Sequencing Batch Reactor, an advanced wastewater treatment system that removes pollutants from wastewater at treatment facilities. Pleasant Mount Welding is a specialty metals fabricator serving the wastewater, water treatment, and environmental industries.

BFTP Investment: \$25,000 Total Project Budget: \$320,000

QUADRANT ENGINEERING PLASTIC PRODUCTS

Reading

College Partner: Northampton Community College's Emerging Technology Applications Center

Complete a compression molding heat transfer and energy analysis for this leading global manufacturer of high-performance thermoplastic materials in the form of semi-finished products and finished parts.

BFTP Investment: \$50,000 Total Project Budget: \$160,000

REA.DEEMING BEAUTY, INC.

Bethlehem

University Partner: Lehigh University's Enterprise Systems Center

Design and implement improved operational processes at this manufacturer of the award-winning elliptical-shaped beautyblender® makeup applicator. Rea.deeming supplies high-quality products for the beauty, professional, and retail markets. This work will improve the company's ability to meet steep increases in consumer demand and enhance production and fulfillment capabilities.

BFTP Investment: \$25.000 Total Project Budget: \$75.000

ROCKET CLOUD, INC.

Ben Franklin TechVentures Bethlehem

Complete a software platform interface for use in the building materials supply industry. The company will provide innovative cloud- and machine-learning-based

software solutions to streamline the supply chain. The platform will allow traditional wholesalers of equipment and supplies to supplement their physical locations with third-party ecommerce channels, such as Amazon and eBay. Easy online access through e-commerce sites will increase sales.

BFTP Investment: \$100,000 Total Project Budget: \$272,350

SNOWVATION, INC.

Ben Franklin TechVentures Bethlehem

Expand resources and staffing for this producer of an activity booking and management platform for the mountain destination industry. The investment will allow the company to scale to more than 50 resorts globally, launch a summer platform, and grow into the southern hemisphere and Europe. Snowvation's platform manages all aspects of mountain destination operations, including scheduling, e-commerce, reservations, inventory management, and more, to allow resorts to better engage with their guests.

BFTP Investment: \$100,000 Total Project Budget: \$750,000

"The BFTP team has been very helpful in connecting us with experts to help with business planning, financial review, and other key areas. The investment funding is helping us to grow our business internally, which is translating into better penetration of our target market."

-NICK TIMPE

CEO, webCemeteries.com, Virginville



SUSTAINABLE ENERGY MANAGEMENT SYSTEMS

Scranton

Enhance marketing and sales efforts, protect intellectual property, and develop and create manufacturing tools and dies that will support scalable manufacturing for this producer of a proprietary solar tracking device. Sustainable Energy's patented Reflective Solar Tracker enhances the performance of solar panels by tracking the sun's position and utilizing reflectors to capture more sunlight, increasing solar energy production by 40 to 50%.

BFTP Investment: \$80,000 Total Project Budget: \$267,004

TIERRANOVA, LLC

Wilkes-Barre

Develop a strategic business and financial plan and enhance product commercialization efforts for this producer of a law enforcement and community-based safety software application. The company's app, "Am I Safe," utilizes crime data and real-time input to assess the current safety level in a given location. Built on a proprietary algorithm, the app provides users with a safety factor that considers their personal demographics, including age and gender. It also provides municipalities direct contact with citizens using a web-based portal that allows for alerts, broadcast messages, mass calling, and video.

BFTP Investment: \$35,000 Total Project Budget: \$70,200

TOWER PRODUCTS

Palmer

University Partner: Lehigh University's Enterprise Systems Center

Complete implementation of a new Enterprise Resource Planning system to meet customer requirements more efficiently at this manufacturer of environmentally sensitive offset and flexographic pressroom chemistry products.

BFTP Investment: \$25,000 Total Project Budget: \$182,201

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Continued from previous page

UBME, INC.

Bethlehem

Launch a multi-faceted marketing campaign to promote UBMe's proprietary mobile application. Operating in the hyperlocal business-to-consumer industry category, the app helps businesses in dense market areas provide targeted and real-time interaction directly and immediately to local residents.

BFTP Investment: \$35,000 Total Project Budget: \$70,000

UNIVERSAL CROSS-CONNECTION CONTROL

Ben Franklin TechVentures Bethlehem

Provide sales, marketing, and customer support to this producer of a software-enabled service for water utilities. Most of the 160,000 U.S. water service providers face numerous physical infrastructure challenges due to antiquated systems or software, including cross-connection control. Circumstances such as water main breaks and power failures can cause unsafe water to flow into water distribution systems, causing "boil water" warnings issued in communities. UCCC's products manage all facets of cross-connection control administration, allowing water service provider clients to remain safe and in compliance with regulations and standards.

BFTP Investment: \$100,000 Total Project Budget: \$303,000

WEBCEMETERIES.COM

Virginville

Help scale the company's product lines with software enhancements. webCemeteries.com's offerings include website portals and mobile applications for locating loved ones, GPS navigation of cemeteries, sharing memories and photos, and online memorials for funeral homes. The work will improve the software, lower costs, expand value, and accelerate sales.

BFTP Investment: \$120,000 Total Project Budget: \$263,200

WORLDKLASS TECHNOLOGIES

Allentown

University Partner: Lehigh University's Enterprise Systems Center

Complete a statistical analysis of the performance of a proprietary and patented device that improves fuel efficiency and reduces exhaust emissions for diesel engine-powered vehicles, such as refrigerated trailers, trucks, buses, and locomotives. The device also reduces maintenance costs in these applications.

BFTP Investment: \$25,000 Total Project Budget: \$100,500

ZUKAY LIVE FOODS, LLC

Elverson

Continue commercialization efforts for the Jacob's Raw product line at this manufacturer of raw, fermented, vegan, and probiotic condiments and tonics. The work will support enhancing distribution channels, slotting new products into additional grocery chains, and opening new brokerage warehouses. It will also support participation at trade shows. Natural, fermented foods are becoming increasingly mainstream in conventional shopping channels.

BFTP Investment: \$100,000 Total Project Budget: \$200,000

"The investment required to update an Enterprise Resource Planning system is beyond the reach of many companies.

Without an updated ERP system, a small company quickly falls behind its competitors. Ben Franklin is well run, putting the best interests of clients at the core of its mission."

-KEN MARINO

President, Orbel Corporation, Easton





Business & Technical Assistance investments provide early funding for specific projects that are crucial to a company's development or operations.

Business & Technical Assistance Investments

3LINX

Center Valley

Deliver business assistance to this worldwide provider of order fulfillment and third-party logistics.

ADVANCED DATA CORPORATION

Milford

Deliver business plan assistance to this provider of enterprise-wide compliance, fraud prevention, and enhanced verifications for the mortgage industry.

ADVANCED PHOTONICS SCIENCES

Friendsville

Provide marketing strategy and management support to this supplier of miniaturized lasers and highpowered cryogenic lasers for military and commercial applications.

AMETEK-READING ALLOYS, INC.

Robesonia

Redesign systems for efficiency at this producer of titanium and other master alloys for critical applications in aerospace, marine, petroleum, medical, and foundry industries.

BELLROCK INTELLIGENCE, INC.

Wayne

Create implementation capacity for software installation at this provider of intelligence information for clients.

CHANNELAPE

Scranton

Enhance the website of this provider of an e-commerce automation tool for clients' fulfillment services and customer communication.



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Continued from previous page

ETHNIC BEAUTY STORE, LLC

East Stroudsburg University Business Accelerator East Stroudsburg

Provide follow-on funding networking opportunities for this e-commerce platform for personal care products targeted to various ethnic groups.

ETHOSGEN. LLC

Dallas

Enhance the website of this producer of electrical generators that repurpose waste heat from industry.

FRESHFRIDGE, INC.

Bethlehem

Provide manufacturing support to this developer of devices and applications for tracking perishable refrigerator items.

FRESHPET, INC.

Bethlehem

Provide manufacturing support to this producer of refrigerated food and treats for dogs and cats.

HEUDIA HEALTH, LLC

East Stroudsburg University Business Accelerator East Stroudsburg

Provide a CFO assessment to this producer of a software platform that increases the efficiency of delivering healthcare into a given community.

IMMSTECH

Bethlehem

Provide market research and business model support to this provider of software tools for molecular modeling of complex biological and nanomaterial systems.

LIFEAIRE SYSTEMS, LLC

Allentown

Provide strategic sales support to this manufacturer of proprietary air purification systems for in-vitro fertilization laboratories and hospitals.

LOGIC54

Ben Franklin TechVentures Bethlehem

Provide business development support to this provider of management software for school bus contractors.

MEDTRICS LAB, LLC

Lewisburg

Conduct a Tiger Session — an intensive enterprise-wide analysis by a team of business experts — for this developer of a cloud-based clinical education management system.

MYSTIC MOUNTAINTOP PRODUCTIONS, LLC

Kunkletown

Provide strategic business plan and technical support to this manufacturer of proprietary lighting systems for small venues, such as auditoriums, churches, and night clubs.

NEW HORIZON BIOTECH, INC.

Ben Franklin TechVentures Bethlehem

Provide QuickBooks™ support to this designer and producer of an innovative system for microbial fermentation.

PAYROLLMART Ben Franklin TechVentures

Ben Franklin TechVenture. Bethlehem

Conduct a Tiger Session for this provider of a cloud-based platform that automates the process of pricing and quoting for payroll and human resources services firms.

PENNSYLVANIA GLASSWORKS COMPANY

Reading

Provide QuickBooks™ support to this producer of architectural cast-glass panels that are created utilizing a proprietary, low-cost process.

PLANGURU, LLC

Wilkes-Barre

Provide digital marketing support to this producer of financial tools for small- and medium-sized businesses.

PRECISION POS, LLC

Jessup

Provide sales support to this android-compatible point-ofsale solution and cloud-based online ordering system.

PROVA SYSTEMS & TECHNOLOGIES, INC.

Carbondale Technology Transfer Center Carbondale

Conduct an Under the Lens session — an interactive evaluation of marketing/sales approaches, under the direction of a highly seasoned strategist — for this producer of wireless diagnostic fleet management systems for vehicles.

ROCKET CLOUD, INC.

Ben Franklin TechVentures Bethlehem

Provide accounting support to this producer of software that permits wholesalers to take their product catalogs online.



SIGNALLAMP HEALTH, LLC

Scranton

Provide financial analysis support to this provider of Chronic Care Management (CCM) in collaboration with Electronic Medical Record (EMR) partners.

SNOWVATION, INC.

Ben Franklin TechVentures Bethlehem

Provide QuickBooks™ support to this producer of an activity booking and management platform for the ski and snowboard industry.

WEBCEMETERIES.COM

Virginville

Conduct a strategic assessment for this provider of electronically accessible cemetery burial records, GPS navigation of cemeteries, branded mobile applications for cemeteries, and e-commerce platforms for funeral homes.

ZUKAY LIVE FOODS, LLC

Elverson

Conduct a Tiger Session for this manufacturer of raw, probiotic, and vegan condiments and beverages.

SUCCESS STORY SUCCESS STORY

RADIUS Corporation

KUTZTOWN • MADEBYRADIUS.COM

RADIUS Corporation designs and manufactures premium personal care products, including eco-friendly toothbrushes, organic toothpastes, dental floss, and accessories. The certified woman-owned company is committed to ongoing R&D to identify innovative and sustainable manufacturing approaches to make everyday products distinctive. Its Source Toothbrush uses replacement head technology with a handle made from recycled dollar bills, paper, and wood, reducing waste by 93%. The company earned two patents for product design in 2017.

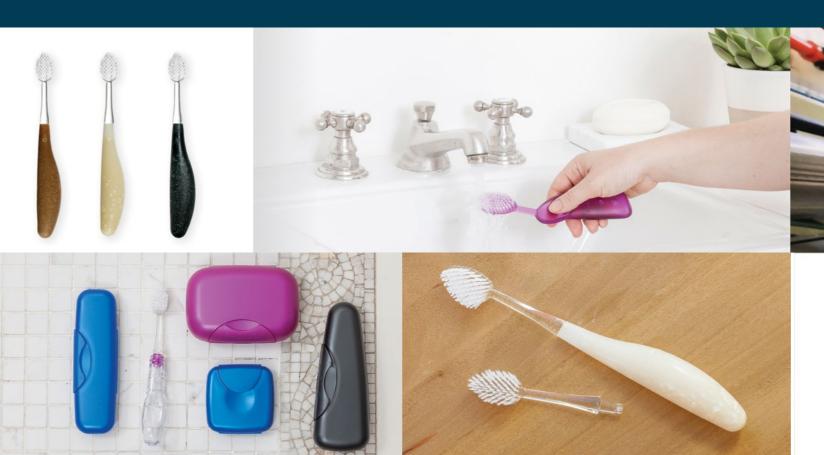
Through Ben Franklin's funding and connections, RADIUS received marketing and strategy support, teamed with the Plastics Manufacturing Center at Penn College to address a breakage problem with toothbrushes, and most recently worked with Lehigh University's Enterprise Systems Center on facility optimization. Since last year, RADIUS increased employment from 30 to 35, and in the past five years, company revenue has increased by 3½ times. The company is in the process of renovating a larger building to respond to burgeoning demand.

Select Products Holdings, LLC

VANDLING • SELECTPRODUCTS-USA.COM

Select Products Holdings manufactures paper products, including paper towels, napkins, and facial and bathroom tissue. Its private-label Pennsylvania brands include Avenue A, Brio, Captiva, Fairway, Dollar General, Red and White, and Redner's. The company's new 160,000-square-foot building allows it to integrate patented paper conversion machinery and produce proprietary novel products, as well as engage in contract manufacturing.

Select Products Holdings received more than \$1 million in federal and state funding to expand its operation to take advantage of northeastern Pennsylvania's attractive production facilities, centralized location, and Ben Franklin support. BFTP/NEP invested in the company to implement production improvements and support sales and marketing. The company now employs 36 Pennsylvanians.











BEN FRANKLIN TECHNOLOGY PARTNERS of

NORTHEASTERN PENNSYLVANIA

CLIENT

SUCCESS STORIES

FOR MORE INFO, GO TO nep.benfranklin.org.

MORE SUCCESSES

Three minutes. That's the average amount of time we work uninterrupted by email, social media,

colleagues, phone calls, and other distractions, according to Ben Franklin's 2018 iXchange keynote

Bio Med Sciences, Inc.

ALLENTOWN • SILON.COM

Mark Dillon developed the initial technology for Bio Med Sciences while in college and launched his company in the Ben Franklin Business Incubator, where the start-up resided for five years. Bio Med Sciences produces innovative and specialized materials for burn and wound care, and aesthetic skin care.

Ben Franklin provided seed funding to the early-stage firm and continued to invest in the company as an established manufacturer more than 25 years later. With Lehigh University's Enterprise Systems Center, Bio Med Sciences is implementing an Enterprise Resource Planning system. Expected growth over the next three to five years necessitates a robust information technology system to improve operational efficiency, provide scalability and flexibility of operation, and meet customers' demands.

Bio Med Sciences employs 22, four of whom have been with the company more than 20 years, and the average length of employment is 11 years. The company holds 55 patents and sells in 50 foreign countries.

Rea.deeming Beauty, Inc.

Rea.deeming Beauty manufactures the award-winning elliptical-shaped beautyblender® makeup applicator. Combining an innovative design and material, the applicator allows for line- and streak-free makeup application. It has gained wide market acceptance in both the professional and consumer markets.

BFTP/NEP invested in the company in 2014, 2015, 2017, and 2018 for plant design, operations support, and improvements in production capacity and efficiency. BFTP/NEP linked Rea.deeming with Lehigh University's Enterprise Systems Center to enhance its production and fulfillment capabilities to meet steep increases in demand. The result was a productivity increase of more than 28%.

Relocating to the Lehigh Valley in 2007, the company now employs 130. The firm has increased revenue by a factor of more than five over the last five years. Rea.deeming Beauty won Lehigh Valley Business' Fastest Growing Company in the Lehigh Valley award three years in a row, 2015 to 2017.





speaker Curt Steinhorst.

iXchange keynote speaker Curt Steinhorst

The iXchange began with a new video presenting the award-winning Ben Franklin TechVentures® business incubator/ post-incubator. The West Wing expansion of TechVentures was completed in fall 2017, and BFTP/NEP also leads the Ben Franklin Business Incubator Network throughout its 21-county service area. Business incubation encourages focus and mentorship among entrepreneurs who lead the resident

"Innovating, persisting, and succeeding against the odds embody the American Dream," said BFTP President and CEO Chad Paul. "At Ben Franklin Technology Partners, we have

learned that an entrepreneurial disposition must be focused. Avoiding distraction is a challenge now more than ever." Paul presented Innovation Awards to six recipients who have achieved business success through Ben Franklin funding and assistance, have helped others to achieve success, or have improved their companies through innovation. The 2018 Ben Franklin Technology Partners of Northeastern Pennsylvania Innovation Award winners are:

companies.

ENTREPRENEURIAL ACHIEVEMENT

The company leader who best exemplifies the quintessential entrepreneurial spirit: a combination of ingenuity, hard work, and innovation that has resulted in the creation of a successful and growing business venture.

WINNER: KEVIN RHODES, CEO and Founder FMI. Allentown

FMI provides contract manufacturing for a wide range of clients in the skin care, personal care, hair care, home care and pet care markets. Its materials are sold throughout the world and comprise products in most major domestic retailers.

The road to success was challenging for founder Kevin Rhodes, with slow initial growth exacerbated by the economic crisis of 2008. When FMI lost a client that represented 60% of its business, it was in danger of closing.

But the FMI team persevered, and its tenacity was rewarded. In 2000 through 2002, Ben Franklin invested \$267,000 in the company as an early-stage firm to work with Lehigh University to develop a strategic information systems plan. In 2015 and 2016, Ben Franklin invested \$53,000 in FMI as an established manufacturer to, again with Lehigh, upgrade its Enterprise Resource Planning system to improve operational efficiency and provide scalability and flexibility of operation. Beginning with a single founder, the company now employs 100 in Allentown and increased revenue by 87% last year.















iXCHANGE/INNOVATION AWARDS WINNERS

Continued from previous page

INCUBATOR GRADUATE

The company that best demonstrates successful Ben Franklin business incubation. The business has been operated skillfully and confidently, meeting all challenges, from the development of the product concept, execution of the business and technical plan, and successful start-up and operation, to graduation from the incubator.

WINNER: ORBWEAVER SOURCING, LLC. Bethlehem

T. Christopher Ciesielka, CEO, and Tony Powell, CTO

Orbweaver Sourcing is the first and only provider of complete, real-time supply chain integration solutions for the electronics manufacturing industry. Orbweaver's suite of software solutions empowers distributors and manufacturers to instantly and securely transfer and use critical supply chain data to dramatically increase efficiency, reduce cost, and improve customer service.

The firm started in Ben Franklin TechVentures in 2013 with two employees. Ben Franklin invested \$400,000 in the company over four years. By 2016, Orbweaver had outgrown the incubator with 13 full-time employees and three contractors. The company now has a significant client roster that includes industry leaders and has raised substantial follow-on funding to complement the Ben Franklin investment.



PRODUCT INNOVATION

The company that best demonstrates the commercialization of a unique, innovative product that creatively and effectively meets a market need.

WINNER: PLAY IMPOSSIBLE, Lewisburg

Brian Monnin, Co-founder and CEO

The Play Impossible GameballTM is a multi-sport "smart ball" that provides connected games designed to keep 5- to 15-year-old boys and girls challenged, entertained, and moving with active play. The five-inch-diameter ball is for indoor and outdoor recreation and contains sensors, a microcontroller, Bluetooth radio, and ultra-capacitor. The ball uses a battery-powered, hand-held charger and connects via Bluetooth to Android and iOS applications. The mobile applications contain fun, addicting games for physical digital play. Play

Impossible has developed an innovative way to utilize technology to encourage children to engage in active play, building on a new category of toys.

Ben Franklin invested \$138,000 in the company in 2016. The Gameball successfully launched at Target and on Amazon in the 2017 holiday season and is now exclusively available inside Apple Store locations across North America and on Apple.com, along with the company's website. The firm was nominated for a prestigious Webby Award, the leading international competition honoring excellence on the Internet.

INNOVATIVE APPLICATION OF TECHNOLOGY

The company that strongly demonstrates a "break-the-mold" approach to integrating new or existing technology into its business.

WINNER: EAST COAST EROSION CONTROL, Bernville

Diane Smith. President

East Coast Erosion Control is one of the largest manufacturers of erosion and sediment control products and turf reinforcement mats for the construction industry in the U.S. Ben Franklin invested \$75,000 in the company over three years, linking it with Lehigh University

and Enterprise Systems Partners, Inc. to develop and implement an Enterprise Resource Planning system.

Operational process improvements enhanced customer delivery performance, reduced cost of goods sold, and increased efficiency. The upgrades allowed East Coast Erosion Control to lead its industry in production capacity, providing a competitive advantage and facilitating continued growth. The company is planning a major expansion of its physical plant and equipment that will allow it to increase production by 46%.

MANUFACTURING ACHIEVEMENT

The company that best exemplifies achievement in the manufacturing arena, showing a proven track record of success and an unbending commitment to achieving and maintaining excellence in manufacturing.

$\label{eq:winner: pleasant mount welding, inc., carbondale} Winner: Pleasant mount welding, inc., carbondale$

Robert Non, CEO

Pleasant Mount Welding is a specialty metals fabricator that primarily serves the water/wastewater treatment and environmental industries.

manufacturing and engineering products including flood control equipment and SBR wastewater equipment. Ben Franklin has been working with Pleasant Mount Welding since 1988, supporting the company's information technology infrastructure. More recently, BFTP engaged Johnson College to help the firm build a machine controlled by PLC software to manufacture grating that drove an annual revenue increase of more than \$3 million. A current Ben Franklin project for a proprietary water treatment facility promises to create 10 more jobs.

A classic entrepreneurial success story, founder Robert Non started his firm in his garage while still in high school. He moved his company to Carbondale and worked on several major projects, including the downtown Wilkes-Barre floodgates. Today, the company has four manufacturing facilities and employs 161 Pennsylvanians.

PARTNERSHIP

An individual whose strong vision, dedication, and commitment have helped the Ben Franklin Technology Partners accomplish its goals. This support demonstrates a sincere desire to see the region thrive.

WINNER: GREGORY F. KRUG, President

Lampire Biological Laboratories, Inc., Pipersville

Gregory Krug has been working with Ben Franklin since 1989, when his company received three successive investments. Since then, he has built Lampire into a substantial firm that employs more than 130 in six Pennsylvania facilities.

Krug has successfully encouraged companies such as Arista Biologicals and Saladax Biomedical to become Ben Franklin incubator residents and clients. He introduced Ben Franklin to numerous prospective clients and was a significant partner in other TechVentures life sciences companies. He acquired Ben Franklin client HB Custom Media and continued to advance its technology while also assuming much of its financial obligation to Ben Franklin.

Krug has advocated for Ben Franklin with elected officials, the media, and other community leaders. For nearly three decades as an entrepreneur, mentor, and proponent, Krug has substantially advanced Ben Franklin Technology Partners and the northeastern Pennsylvania business technology ecosystem.



Pennsulvania's job creation factory A proven entrepreneurial Client technologies that ions one of the largest

VENTURE IDOL

Signallamp Health, Scranton, won Ben Franklin Venture Idol, hosted by BFTP/NEP on Nov. 8 in the recently expanded Ben Franklin TechVentures* West Wing. Ben Franklin Venture Idol is a cross between Shark Tank* and American Idol* and illustrates a significant way in which early-stage entrepreneurs seek and obtain seed capital.

Signallamp Health (SLH) is an IT-enabled care management provider that works as an extension of the physician practice, targets new and untapped sources of Medicare revenue, and helps practices prepare for the certain changes in reimbursement that will reward value over volume. SLH has more than 1,000 doctors under contract, representing 78,000 eligible patients.

Approximately 300 guests attended Venture Idol, which included pre- and post-event executive networking receptions. Seven entrepreneurs from Ben Franklin's portfolio were selected as competitors. In addition to Signallamp, the 2018 Ben Franklin Venture Idol competitors were:

ConnexiCore, Milford
 Game Face Products, ESU Innovation Center, East Stroudsburg
 Grovara, LLC, Philadelphia (graduate of Ben Franklin TechVentures)
 HootBoard, Ben Franklin TechVentures, Bethlehem
 Universal Cross-Connection Control, Ben Franklin TechVentures, Bethlehem

Three of the seven start-up technology companies, Grovara, HootBoard, and Signallamp, earned their way to finalist status in a round of judging in the afternoon prior to the event.

Following a networking session beginning at 5:30 p.m., Ben Franklin Venture Idol began with a simulated "deal negotiation," facilitated by investment banker and Lehigh University professor Dale Falcinelli. Only 27% of the "deals" that are shown on television show Shark Tank^a actually happen at the agreed-upon terms, and nearly half never happen at all. Venture capitalist Doug Petillo, general partner, Leading Edge Ventures, and founder Michael Stocker, CEO, Snowvation, Inc., demonstrated what this post-deal negotiation looks like.

The three company finalists then pitched their ventures to a new panel of accredited investors and the audience. After short critiques from the investors, the audience "funded" the companies, crowdfunding style. With \$100 of "Ben Bucks," each guest distributed his or her "investment dollars" in whole or part among the three finalists. Ben Franklin will award \$15,000, prorated in real dollars, to the companies based on the audience vote.

The evening's investor panelists were:
Dr. Clark DeHaven, SoundBoard Angel Fund
Mark Kramer, Private Investors Forum
Liz Sigety, Delaware Crossing Investor Group
Brett Topche, Red and Blue Ventures

Ken Okrepkie, BFTP/NEP regional manager, Pocono Northeast; Andy Goldberg, Signallamp co-founder; Drew Kearney, Signallamp CEO; Chad Paul, BFTP/NEP president and CEO



IMPACTS AND FINANCIALS

The Ben Franklin Technology Partners of Northeastern Pennsylvania is part of a four-center statewide network that serves all of Pennsylvania. For 35 years, the Ben Franklin Technology Partners has delivered outstanding results.

STATEWIDE IMPACTS

New Study

The Ben Franklin Technology Partners commissioned its fifth-consecutive five-year, third-party study this year, which evaluates Ben Franklin's impact on the state's economy. It was conducted independently by the Pennsylvania Economy League and KLIOS Consulting. The report focuses on Ben Franklin's role in providing financial investments and related services to early-stage technology firms and established manufacturers in Pennsylvania.

Central/ Northern PA

Southwestern
PA

Southeastern
PA

The new study shows that Pennsylvania's investment in Ben Franklin

Technology Partners statewide from 2012 to 2016 returned \$3.90 in new tax revenue for each \$1 spent. Jobs created by Ben Franklin's clients pay an average of \$79,364 annually, which is 52% more than the average non-farm wage in Pennsylvania. The study also concluded that, since 1989, the Ben Franklin statewide network has created 54,000 additional jobs in client firms and has boosted the Pennsylvania economy by \$25 billion.

- BFTP boosted the Pennsylvania economy (Gross State Product) by **\$4.1 billion** from 2012 through 2016 and by **\$25 billion** since 1989.
- From 2012 through 2016, the Commonwealth received \$350 million in additional state tax receipts as a direct result of BFTP investments in client firms. Another \$36 million in state tax receipts flowed from related BFTP client services, for a total increase of \$386 million in state revenue due to BFTP.
- New state tax revenue generated because of BFTP represents a **3.9-to-1 payback** to the Commonwealth on its \$100 million investment during that period.
- From 2012 through 2016, BFTP generated **4,182 additional jobs** in client firms.
- Client revenues, purchasing, and investments ripple throughout the Pennsylvania economy, giving rise to higher employment across the state. From 2012 through 2016, BFTP generated an additional **7,225 jobs** beyond those in client firms, for a total of **11,407 jobs** in the Commonwealth that otherwise would not have existed.
- Since 1989, BFTP has generated **54,000 jobs** in client firms and an additional **94,000 jobs** because of increased purchasing and investments by client firms, yielding a total of **148,000 new jobs** attributable to BFTP's work.

The Pennsylvania Department of Community and Economic Development, which funds and oversees Ben Franklin Technology Partners statewide, has earned international acclaim for the success of the program in creating and retaining highly paid, sustainable technology-based jobs throughout the Commonwealth.

BEN FRANKLIN TECHNOLOGY PARTNERS OF NORTHEASTERN PENNSYLVANIA

NORTHEASTERN PA IMPACTS

The Ben Franklin Technology Partners of Northeastern Pennsylvania surveys its client companies on the economic impacts that are accomplished as a direct result of its investments. BFTP/NEP reports these figures to the Pennsylvania Department of Community and Economic Development.

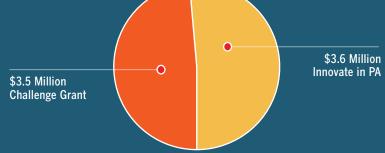
	2017	CUMULATIVE (since 1983)
NEW JOBS CREATED	641	18,056
EXISTING JOBS RETAINED	4,456	31,840
NEW COMPANIES STARTED	19	511
NEW PRODUCTS AND PROCESSES DEVELOPED	142	1,733

Since 2007, companies in our portfolio have together generated \$1.4968 billion in follow-on funding.

FINANCIAL INFORMATION

In 2017-18, the Pennsylvania Department of Community and Economic Development funded the Ben Franklin Technology Partners of Northeastern Pennsylvania with a Challenge Grant as well as an allocation from the Innovate in PA initiative. Innovate in PA was created to increase investments in technology-based companies throughout the Commonwealth. New technology companies create highly paid, sustainable jobs that generate additional state tax revenue.





\$7.1 MILLION TOTAL SOURCES

The Innovate in PA state funding, which provided 51% of BFTP's budget, ended on June 30, 2018.

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Diane M. Smith

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Partner, Herbein + Company

Frank J. Zukas

President, Schuylkill Economic Development Corporation

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Community Development Director Downtown Allentown Community Development Initiative

Patrick Clasen

Principal, EcoTech Marine

Ed J. Coringrato

Private Consultant

Thomas J. Garrity

President, Compass Point Consulting, LLC

Michael J. Gausling

Managing Partner, Originate Ventures

Kenneth P. Guito

Independent Business Development Consultant Biopharma Industry

Ned D. Heindel, Ph.D.

Professor of Chemistry, Lehigh University

Kathy Henderson

Director of Economic Development Carbon County Chamber & Economic Development

Bernard M. Lesavoy

Partner, Lesavoy Butz & Seitz LLC

Mary Frances Postupack

Chief Operating Officer, Center for Research and Economic Development East Stroudsburg University

Matthew A. Tuerk

VP of Administration and Investor Relations Lehigh Valley Economic Development Corporation

Kerry A. Wrobel

Executive Vice President LV Industrial Park, Inc.

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President, Penn's Northeast

Kristine L. Augustine

Vice President, Scranton Chamber of Commerce

The Honorable Elisabeth J. Baker

State Senator

The Honorable John P. Blake State Senator

Jeffrev K. Box

President/CEO

Northeastern Pennsylvania Alliance

Austin J. Burke AustinBurkeArt

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U.S. Congressman

Michael Duffy

Founder, Keystone Automation

Eric J. Esoda

Executive Director, NEPIRC

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Founder & CEO, KBJ Capital Group
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PNC Bank
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President, CAN DO, Inc.

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Regional Advisory Board Chairman

Founder, Skyward Health

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Allan P. Kirby Center for Free Enterprise

& Entrepreneurship

Darlene J. Robbins

Wilkes University

President, Northeast Pennsylvania Manufacturers & Employers

Association

Julie Schumacher Cohen

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University of Scranton

Michael Sullivan

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Economic Development Authority

Wico van Genderen

Chief Executive Officer

Greater Wilkes-Barre Chamber of Commerce

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President, TecBridge
Mary Beth Wood

Executive Director
Wayne County Economic Development

UPPER SUSOUEHANNA REGION

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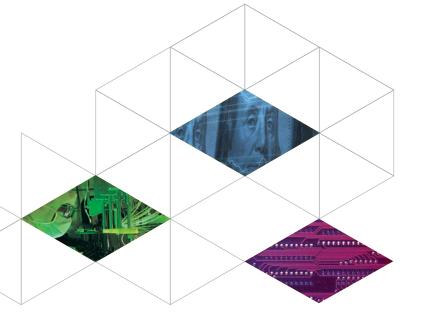
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