



Message From the President/CEO



As a long-time resident of Central Pennsylvania, I want to continue to help build an ecosystem where all the communities I serve, including the community in which I live and work, can thrive economically. I believe it is essential that Pennsylvania's best and brightest minds have the support they need to successfully build their businesses and strengthen the communities we proudly call home.

I love the work we do at Ben Franklin because our efforts help to expand and diversify Pennsylvania's economy, even in these past two years when the emergence of COVID-19 brought about a storm of economic challenges. Our program provides a high return on investment for Pennsylvania because we live with our company investments beyond the concept stage until they are established employers and taxpayers.

We know that workforce talent goes where job opportunities exist. Ben Franklin keeps high-paying jobs in Pennsylvania by focusing on the needs of local, innovative tech-based companies and small manufacturers, and the entrepreneurs who lead those companies. We help startups survive their higher-risk, formative years and lay a stable foundation to build upon, so they can attract and retain talent in Pennsylvania. The jobs Ben Franklin tech companies create are in industries that pay higher average annual salaries to start. Best of all, our clients create the kinds of jobs young people seek to build their careers in Pennsylvania.

The need for innovation in Pennsylvania has never been more important than the last two years. Our state leaders have made it known that they value the work done by Ben Franklin Technology Partners. At a time when every tax dollar matters, Ben Franklin continues to pay dividends for Pennsylvania and demonstrate its reputation for serving as an economic driver for the state. Moving forward, Ben Franklin will continue to make smart investments in businesses that keep Pennsylvania's best and brightest minds in our communities.

Sincerely,



This Year, Ben Franklin Made Investments in the Following Companies:

Company	County
AccountAbility Tech, LLC	Franklin
Anova Innovations, LLC	Erie
Atoptix, Inc.	Centre
Benefix, Inc.	Lancaster
Blind Tiger, LLC	Erie
CPNet, LLC	Dauphin
CyberconIQ, Inc.	York
Domestic Monitoring Initiative LLC	Erie
Dub Diversified, LLC	Mercer
(DBA OhanaLink Technologies-OLT)	
Elements Aligned, LLC	Erie
Emerge Education, LLC	Cumberland
Envision BioMedical, LLC	York
Fire Solutions Group, LLC	York
Fish Gods LLC	Erie
Gig And Take Inc	Cumberland
Horizon Technology, Inc	Elk
Impulse Technology, LLC	Centre
InspectionGo Inc	Blair
Laughing Owl Press Company	McKean
Magnitude Instruments, LLC	Centre
OEE Datawatch, LLC	York
Phoenix Sintered Metals, LLC	Jefferson
Plexis Tech, Inc.	Lancaster
Reflexion Interactive Technologies	Lancaster
Regenerative Education Evolution Lab LLC	Centre
Return Logic Inc.	Cumberland
Steller Innovations, LLC	Blair
TEAMology LLC	Franklin
The Pursuit by You, LLC	Centre
WaveClear Inc	Erie
Wilds Sonshine Factory, Inc	McKean



SNAPSHOT OF THE CENTER'S IMPACT

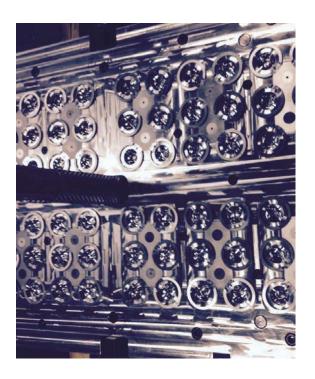
- 415 iobs created
- 1,430 jobs retained
- 301 companies assisted
- 32 company investments
- \$210 million in revenue generated
- 66 new products developed
- 34 new processes created
- 14 new patents awarded
- \$148 million in follow-on funding generated

NEW COMPANY INVESTMENT SNAPSHOT

en Franklin Technology Partners, an award-winning technology-based economic development program, is among the most widely known and emulated initiatives in the nation. For 40 years, this public-private partnership which includes the Commonwealth and Penn State University, has been investing in tech startups and small manufacturers. Our portfolio of funded companies is comprised of industry sectors as diverse as the demographic make-up of central and northern Pennsylvania.

The Following Is A Snapshot Of Just A Few Of The Investments Made This Year.





NOVN

Anova Innovations, located in Erie, PA, is poised to become the global leader in the purposeful application and use of 3D steel printed inserts for injection molds in the medical, packaging, and pharmaceutical industries. By applying advanced engineering principles in mold design and pioneering the strategic use of additive manufacturing, the company has overcome traditional boundaries and can provide innovative solutions such as pairing the 3D additive technology with biodegradable resins. Supported by an accomplished staff of technical and commercial professionals, the company is positioned to meet their customers' needs with a quicker turnaround time and less cost.

The company is also creating an apprenticeship program that will help students in a disadvantaged school district start a technological career right out of high school. **anovainnovations.com**



benefix

Benefix, located in Lancaster, PA, provides a one-stop-shop health insurance and benefits platform which digitizes and automates a broker's workflow while providing a simple way for small businesses to enroll in benefit products. Millions of small businesses need benefits and more than half of them turn to brokers to locate the best options. This creates a lot of paperwork for the broker who needs a modern technology to provide faster and more accurate information to their customers. The company's platform provides quoting, proposal enrollment, and billing management for brokers and general agencies. The platform also offers instant quotes with direct pricing from insurance carriers along with the ability to enroll participants with the carrier. In addition, Benefix insists on working directly with the carrier partners to ensure rates are exactly right – 100% accurate, 100% of the time, guaranteed – no paper, no duplicated data entry, just more time helping clients. www.benefix.us





CPNet, located in Harrisburg, PA, provides prescriptive AI analytics based upon proprietary technologies to enhance real-time operational decision-making and improve manufacturers' productivity and profitability. The company's modelagnostic Machine Learning algorithms allow an easy scale-up from a pilot to a larger size installation. This helps various industries cut their unit costs through higher energy efficiency, enhanced output quality, increased machine uptime and asset utilization, and on-time delivery. CPNet makes it possible to unlock the hidden potential of the existing machines by tapping into their production data and building models that can augment the manufacturing intelligence of the customer's factory teams. With faster and better operating decisions projected to improve the productivity of the existing assets by 10-20%, CPNet helps mid-market producers stay competitive against more global industry players. The factory of tomorrow is powered by data analytics which is frequently trapped inside legacy machines - whether too old, ill-equipped, or incompatible. These non-connected, older machines are still being operated on a large scale at a gradual loss of productivity, profit margins, and competitive disadvantage. www.cpnet.io





Croptix, located in State College, PA, is a smart AG subscription platform that helps farmers make data backed decisions to mitigate fatal crop diseases - diseases that represent a \$200 billion global problem. The platform uses field deployable, patented sensor technology (hand-held) with analytics to screen for crop disease and detect it earlier than legacy tests. Crop disease is a significant problem for the farmer which requires an increased use of resources to manage and maintain production. Citrus greening (HLB) disease has decimated the citrus industry in Florida, slashing production, and is threatening the same in California where it was recently discovered. The only effective intervention is timely detection of the disease and removal of the infected trees. However, existing tests give results too late and are cumbersome to perform. The company's innovation allows the grower to identify disease early and through timely intervention, reduces the ability of the disease to spread throughout the groves. www.croptix.solutions





Domestic Monitoring Initiative (DMI), located in Erie, PA, provides a patent-pending digital system that unobtrusively collects data from patients with mental health issues, processes that information, and provides a dashboard/alert system for the purpose of intervention to avoid hospitalizations. This preventive measure saves insurers and hospitals significant cost while also alleviating human suffering. When a person with a mental health issue goes into crisis, the ensuing care in a medical facility is very costly. It's estimated that the first hour alone of evaluation can be thousands of dollars. The company's product is a self-learning, forecasting algorithm that provides mental health caseworkers and human services networks a tool to identify and predict escalating behaviors. The patient opts-in to this service and allows DMI to use history, social media content evaluation, and location pattern analysis to trigger alerts which become more accurate over time. Caseworkers, even those with little experience, can use this information to provide appropriate, less expensive interventions and prevent costly crisis services. www.dmi-llc.com





Impulse Technology, located in State College, PA, developed a self-aligning prosthetic ankle that enhances comfort and mobility for military and civilian personnel suffering from lower limb loss. Roughly 185,000 amputation-related discharges occur from hospitals in the United States each year. Dr. Kamrun Nahar and her team designed a self-alignment feature that contributes to comfort and biomechanical perfection, reduces amputee-prosthetist time, and lowers cost. Fifty one percent of below-knee amputees suffer from pain from misalignment. In the longer term, misaligned prosthetics can cause a range of additional maladies from lower back problems to double amputation.

Impulse Technology's patented product, Goralign, which has gone through clinical testing, mimics the biomechanics of natural walking and adapts to gait and terrain changes in real-time. This unique design redistributes any misaligned force in the prosthesis without the need for actuator, sensor, or electronics. The results are reduced pain, lower cost, and less frequent doctor visits, all without a complex, heavy prosthesis. www.impulse-technology.com



PORTFOLIO COMPANY SPOTLIGHT

en Franklin's portfolio is comprised of companies that represent a wide array of tech sectors and are in varying stages of business growth and development. Often those companies attract significant attention in their market space and are subsequently acquired. In December of 2021, just such an event took place.



The early payback of more than \$275,000 from InnovaTel Telepsychiatry, a company that developed an innovation in Telepsychiatry, was in turn used to fund new company projects.





Penman

In recent years, access to quality mental health services, especially in rural areas, has become severely limited. Dr. Jonathan Evans and Lee Penman, along with their team at InnovaTel Telepsychiatry, developed a model for virtual care that provides a technology-based solution.

Founded in 2014 and located in Erie, PA, InnovaTel, which received multiple investments from Ben Franklin, has become one of the nation's leaders in virtual psychiatric care. Today InnovaTel employs nearly 180 providers. InnovaTel clinicians hold licenses across all 50 states, and currently provide care in 33 states. Twenty-five of their total providers are licensed in Pennsylvania.

In late 2021, InnovaTel Telepsychiatry was acquired by Quartet Health, a company that works with health plans and systems to deliver speed to quality mental health care for all. Both companies were founded in 2014 and share a mission to help people quickly and seamlessly obtain quality mental health care during times of need. Through this acquisition, Quartet's technology platform and capabilities, together with InnovaTel's strong network of clinicians, enable both companies to better deliver on timely access to high-quality care for all populations, including those with a serious mental illness.

"As a longtime clinician and provider of care, I know first-hand the systemic challenges that people face every day across our country when they need to quickly access mental health care," said Jonathan Evans, clinical psychologist and InnovaTel's President and CEO. "We are thrilled to come together with Quartet Health to build a comprehensive, nationwide solution

to help all people — across insurance types and clinical needs — obtain timely access to high-quality care. Quartet's sophisticated data and analytics and technology infrastructure will provide the framework for InnovaTel to scale quickly to communities nationwide, with a continued focus on those with the most complex needs."

Isolation issues and stress related to the current pandemic increased the demand for psychiatric services and led to many mental health organizations needing to cancel appointments or turn away patients - even those in crisis.

InnovaTel's model of working with community mental health centers to get patients the care they need typically improves overall capacity by up to 10%. The goal of these two companies is to continue to expand their virtual care delivery capabilities especially for those with serious mental health conditions.

The acquisition of InnovaTel allowed the company to recently settle the total payback obligation from its Ben Franklin investment. Stephen Brawley, President and CEO of Ben Franklin, commented, "We are very proud to have played some small role in the success of InnovaTel. The service they provide is critical and the vision of the company's leadership to offer this type of care couldn't have come at a more important time. From our program's perspective, the early payback of their investment will allow us to use those dollars to fund several more startups in northwest Pennsylvania. Congratulations to Dr. Jonathan Evans, InnovaTel's President and CEO, and best wishes for continued success."



Transformation Business Services Network

Seasoned business professionals with experience in all aspects of starting and running a company, offer no-cost, hands-on assistance to Ben Franklin's portfolio members. The support and mentoring provided by these subject matter experts is often just as valuable to the clients as the actual funding provided. Annually, the collective team spends more than 10,000 hours providing one-on-one support on topics such as marketing, understanding financial statements, strategic planning, accounting practices and office setup, advertising, and human resource planning. In addition, the members of the Transformation's team are the primary source of support to those emerging entrepreneurs who are chosen to participate in our business startup boot camps.





Ben Franklin's TechCelerator Startup Boot Camps

Since the BF *TechCelerator* program's inception ten years ago, 167 emerging tech entrepreneurial teams across Ben Franklin's 32-county footprint have been introduced to a rigorous 10-week curriculum that includes a variety of topics such as: Business Formation, Market Research, Basic Financials, Revenue Models, Funding Options, Target Market Identification, Selling, and Presentation Skills.

During the process, the teams receive stipends to assist with prototyping and customer discovery expenses as well as initial legal and accounting expertise. At the culmination of the program, the teams pitch their business ideas to a panel of local professionals and potential investors with the possibility of winning cash prizes up to \$10,000. In 2022, the program, which receives funding support from the Invent Penn State initiative, was offered virtually and targeted entrepreneurs across Ben Franklin's 32-footprint. To date, 157 companies have been formed; companies that are generating more than \$28 million in revenue and have created nearly 370 full or part-time jobs. Ben Franklin has invested more than \$3.4 million in 30 of these companies; 56 of which are based on technology developed at Penn State University.

The BF Job Link Program, created with funding support from the Appalachian Regional Commission (ARC), scouts for talent to create a pipeline that connects students, graduates and alumni to area technology and manufacturing companies. The program: assists students from freshman to graduate level in identifying internships and other job opportunities that can be the first step to a rewarding career; identifies projects, internships, and other possibilities within the Ben Franklin portfolio and other regional emerging technology and manufacturing companies; mentors alumni and other regional job seekers who are looking to make an exciting career shift; and serves as a liaison between companies, educational partners, and job seekers. This two-year grant will focus its efforts on the 25 Appalachian counties within the Ben Franklin footprint which includes: Bedford, Blair, Cambria, Cameron, Centre, Clarion, Clearfield, Clinton, Crawford, Elk, Erie, Forest, Fulton, Huntingdon, Indiana, Jefferson, Juniata, McKean, Mercer, Mifflin, Perry, Potter, Somerset, Venango, and Warren.





The BF Learning **Center** offers a wide variety of business

management topics including digital marketing, finance, human resources, and more. The program has been providing howto training and professional development, taught by regional and industry experts, for more than 15 years. "Meet the Expert" sessions feature thought leaders and subject matter experts who have the insights to identify emerging trends and potential opportunities for growth. The seminars/webinars, which are free to members, are followed by a robust question and answer period.

The best competitive advantage for any business is to empower their employees to gain new skills and grow professionally. The Ben Franklin Learning Center offers live and recorded sessions on how to apply business management, digital media, marketing, and new technology to any business. All members receive the e-newsletter to keep apprised of the upcoming schedule and new offerings. Recent webinars included topics such as the Innovation Partnership's Federal Funding Opportunities and Making Connections to Recruit Talent. www.benfranklinlearningcenter.org



Learning Center class

BIG DEA

The BF \$50,000 Big Idea Contests provide a fun, no-risk opportunity for

those who have innovative ideas to "dip their toe" in the startup world. Since 2004, more than 200 finalists have competed for cash prizes in awards that now total well over \$2 million. This year, Ben Franklin sponsored a 32-county virtual contest which attracted well over 100 budding entrepreneurs to the landing site. Those who participated in the Final's Presentations via zoom had the opportunity to invite family and friends to watch as they made their pitches to a team of independent judges. More than 200 people signed in to watch the finalists and vote for their favorite in the \$2,500 People's Choice Award which was sponsored by CARGAS.

Two companies shared in the prize money. Andrew Wolgemuth and Brian Elliot with WOVE, a Lancaster, PA-based startup, took home \$30,000 for their concept of creating a 3D printing technology that assists in the on-line purchase of custommade, high-end jewelry. Nicole Sawyers and her team at NeoNatal Loving Kare were awarded \$20,000 and the People's Choice Award. The team developed a patented, FDA approved NICU positioning device for premature infants.

Currently, a BIG IDEA contest sponsored by the Appalachian Regional Commission, in partnership with the PA WILDS, will be accepting applications through April 18, 2022, with the winner to be announced in June 2022. www.bigidea.benfranklin.org







(Andrew Wolgemuth/Wove) (Brian Elliot/Wove) (Nicole Sawyers/NeoNatal)

ADDITIONAL FUNDING TOOLS



The Erie Innovation Fund, Matched at 1:1 by Ben Franklin, funding support from the Erie County Gaming Revenue Authority (ECGRA) creates an additional pool of investment capital for tech startups and small manufacturers located in Erie County. Payback from ECGRA's original investment has continued to create funding opportunities, and in 2021/2022, five Erie-based companies received an investment. www.ecgra.org



1855 Capital

The 1855 Capital Fund, which was created with the support of Ben Franklin, invests in companies with a relationship with Penn State University. The fund looks for potential growth companies in the Information Technology, Advanced Materials, Fintech, Edtech, and Healthcare/Medical Device sectors. This initiative, while intended to help spur economic growth, job creation, and student success, also provides Ben Franklin portfolio companies with another source of investment capital. To date. 15 investments; 11 of which are Ben Franklin portfolio companies, have been made totaling \$3.5 million. www.1855capital.com



The Alleghenies Angel Fund is an investment group based in Altoona, PA. Founded in 2019, the Fund is approximately \$1.3 million of committed capital from more than 40 regional individuals, families, and institutions. The group was organized by the Southern Alleghenies Planning and Development Commission and is advised by the Appalachian Investors Alliance. Ben Franklin supported the creation of the Fund with a \$60,000 institutional investment. The Fund had made eight investments, including two in Ben Franklin portfolio companies, Reflexion and InspectionGO.



White Rose Ventures, located in York, PA, is a new \$10 million fund backed by foundations and business leaders, focused on using their capital to promote job creation and business arowth in South Central, PA. The fund has already made four investments; three of which were in Ben Franklin portfolio companies, Cybercon, PledgelT, and Reflexion. https://whiteroseventures.com

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Ben Franklin Technology PArtners/CNP, an initiative of the Pennsylvania Department of Community and Economic Development and funded by the Ben Franklin Technology Development Authority, provides investment capital and business support services to emerging tech-based companies and small manufacturers for the purpose of creating and retaining jobs in Pennsylvania. Contact the Central Office of Ben Franklin in University Park at (814) 863-4558 or see our website at: www.cnp.benfranklin.org