



University

The Pennsylvania State University

Center Director

Wayne Figurelle

Center Location

College of Engineering

Center for >30 years

Center Activities

- Technical assistance
- Outreach and information dissemination

Clients

- Existing businesses
- Entrepreneurs/new ventures
- University faculty, programs, stakeholders

Assessment Techniques

- Satisfaction survey
- Evaluation survey

Contact Information

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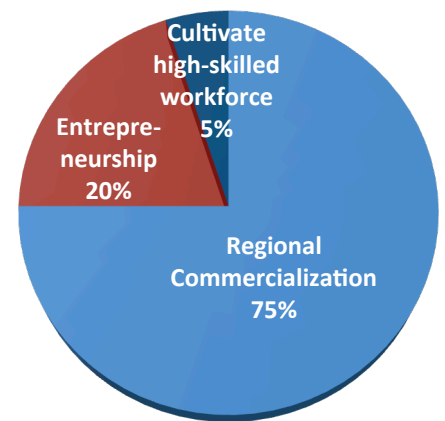
The Pennsylvania State University Center

The Pennsylvania State University Center (PS UC) is primarily focused on engineering innovation by connecting university resources to entrepreneurs and companies to spur regional commercialization activity. The Center is funded by the EDA grant and matching university funds. It provides technical assistance to university and private-sector clients to accelerate the translation of ideas into new products and processes and bring them to market via collaborative projects between industry clusters and university resources; to enhance regional innovation ecosystems by encouraging companies in allied industries within defined regions to work together with research performers to accelerate the process of bringing ideas to market; and to increase the competitiveness of distressed regions in the Commonwealth by providing direct assistance to those small and medium enterprises and manufacturing firms that drive their regional economy.

Activities

The Center provides technical

assistance in engineering innovation to companies and entrepreneurs who are seeking to bring new products to market, to bring existing products to new markets, to re-invent processes, and to gain necessary certifications for new markets. This is accomplished by technically developing projects, which ultimately result in opportunities for clients to engage College of Engineering faculty and resources.



The Center also provides technical assistance to the Engineering Innovation Program at Penn State and its components, such as the Learning Factory and Integrated Design Solutions. The Center regularly engages in outreach and information dissemination to partners and

sponsors. Another form of technical assistance provided by the Center is the inception and funding of various innovation-related projects, such as the recently-funded National Additive Manufacturing Innovation Institute (NAMII).

"Students were professional, dedicated, creative and talented... [they] successfully helped us create a better and more sustainable design." --Center Client

faculty and over \$150 million in annual research expenditures (2012), the College of Engineering at Pennsylvania State University is a substantial resource the Center leverages for the

university students in these projects through the senior design capstone project; these are primarily engineering students, but the Center also works with business, art, and architecture students. The Center leverages the strengths of the Penn State College of Engineering and its faculty expertise and specialized equipment in addition to other Penn State units, economic development organizations, and private industry.

Leveraging

With over 350 tenured/tenure-track

generation of economically valuable engineering innovations and solutions. The Center engages

Success

Taylor Energy Alternatives

Taylor Energy Alternatives (TEA) needed design, manufacturing, and commercialization assistance, as well as business planning and financial assistance. TEA initially was introduced to the Penn State University Center through PennTAP which was conducting a New Energy Idea Contest. The project was to assist in a variety of ways to prepare for commercialization of a hydroelectric product.

Penn State University Center made connections with faculty from PSU Harrisburg, and initiated a project to develop a mechanical design of the hydroelectric turbine assembly. It also engaged faculty from Penn State University Center's Integrated Design Services program to assist

with building of an initial 30KW prototype. Manufacturing resources were identified to build various components of the assembly, including molds. A preliminary design for the hydro inlet and penstock was developed in a student project based at the Penn State Hazleton Campus. The design concept was approved and a follow-on project for detailed design was initiated through Penn State's Learning Factory.

The Clean Technology Center at the Penn State Small Business Development Center is providing financial and business planning assistance. The design concept has been developed into CAD drawings, and plans are now in place for the first prototype unit to be built. In

addition a demonstration project is under development.

Buznet™: Real-Time Locating System

Buzby Networks was in need of a prototype for a new, innovative plastic enclosure for Buznet™ routers, producible by plastic injection molding. Working with a student team from the Learning Factory and with the support of the University Center, the design produced was more attractive and less intrusive, mass-producible, and easily installed on multiple ceiling types. The new design is being phased into the standard product line.