

Success Story: Custom Container Solutions, LLC Surpasses Production Objectives with IMC Support

written by Lauri Moon | February 21, 2022

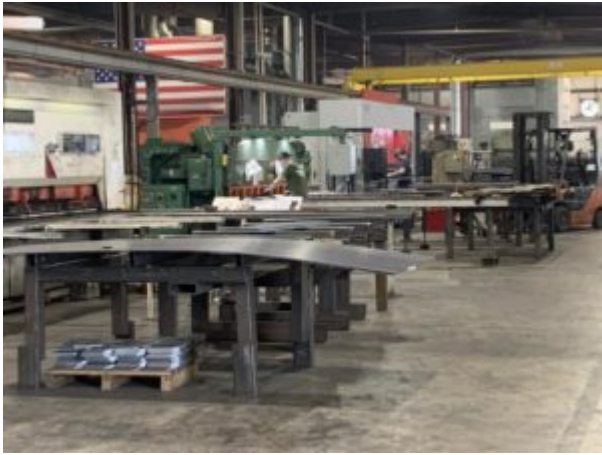
IMC has been working with Custom Container Solutions (CCS), an area manufacturer of industrial roll-offs, for several years. Past projects have included operational improvements, ERP selection, HR policies, hiring and selection practices and improved job training.



As CCS has grown, they transitioned to a larger facility and now have three production lines instead of one. Each line makes a certain type of unit.

One of the lines makes smaller roll-offs and has proved to be most challenging in terms of reaching desired throughput quotas. The company contacted IMC to provide support for their efforts to improve production results on the small roll-off production line.

IMC proposed a 3-day value stream mapping (VSM) initiative that also included the supporting fabrication area. The VSM involved workers and supervisors from both production and fabrication along with CCS management and IMC facilitators. The VSM effort started with a map of the current state of both the fabrication support and production operations including critical facts and data on task times, wait times, throughput history and layout, sequence and flow.



A direction and quantitative goals were established, and a future state map developed. Within the initiative, numerous opportunities for improvement were identified, prioritized and structured to ensure successful implementation. Included were multiple visits to the factory floor and many coaching opportunities by IMC's VSM facilitator.

The result to date (2 months following the end of the initiative) is that the line has surpassed the production objectives and is now operating at a consistent level of 25-30% above pre-initiative throughputs. The improvements made in fabrication have also led to improved operations for the other production lines.

"IMC has played a crucial part in the success of CCS - it's like the gift that keeps on giving. IMC has helped us recognize system failures and ask the right questions of our team members without fear. Jeff, Russ and Jen spent multiple days working with our team digging deeper than we could ever dig because we needed outside eyes to see the problems. By implementing workflow processes that are cyclical, we are able to pull the work down the line versus pushing it down the line, which creates a more efficient and happier workforce which, in turn, increases productivity and reduces absenteeism significantly. As we identify areas of improvement, we utilize IMC and its expertise to improve. We are grateful for the help and we look forward to working with IMC again in the future." Chuck Williams, General Manager, Custom Container Solutions

This project was funded, in part, by a grant made available by PennTAP.

Success Story: IMC Client Achieves Highest Safe Quality Food 9.0 Certification Rating of “Excellent”

written by Lauri Moon | February 21, 2022

Founded in 2006, Lang’s Chocolates LLC is a family owned and operated manufacturer of handcrafted fine chocolate confections sold at their retail location in downtown Williamsport, PA, as well as, sold and shipped to a worldwide customer base via their online storefront. Father and son, Robert and William Lang (Master Chocolatier) create and oversee the gourmet products, ensuring the highest quality ingredients are used in production.



Over the past two years, the company has been expanding into providing their own products, such as chocolate chips, as ingredients to other manufacturers of food products. This led to a substantial opportunity to increase company revenues by opening new markets in the US and worldwide as an ingredient manufacturer/supplier.

Due to regulations and standards that are required and requested as conditions of doing business with this market and to fully develop and execute on this substantial new market opportunity, Lang’s Chocolates was required to develop a Hazard Analysis and Critical Control Point Plan (HACCP) and become SQF (Safe Quality Food) trained and certified, as recognized by the Global Food Safety Initiative (GFSI), and ultimately required by the Food & Drug Administration’s (FDA) Food Safety Modernization Act (FSMA) by 2021.

The company reached out to IMC, who was able to partner with Lang’s and an exceptional third-party consultant to successfully prepare them for the audit, ultimately resulting in the highest SQF 9.0 certification rating of “Excellent”. The

company is currently 1 of only 37 confectionary companies to achieve this level of certification in Pennsylvania. This also allowed the company to execute a planned 6300 square foot expansion into a new manufacturing facility and resulted in more than \$500,000 in new ingredient market sales (and growing), as well as the creation of several new jobs.

Robert Lang enthusiastically credits the skill and experience of the SQF consultant, Martin Ziegler, with their successful certification efforts. “His background and knowledge were so relevant, and his delivery set a solid foundation upon which we could build for our re-certification as well.”

Kwik-Care, LLC Readies for Launch

written by Lauri Moon | February 21, 2022

An Unconventional Approach to Lean Manufacturing



Laurie Fontaine Jenkins, Owner with husband Bingo Jenkins

Located in Muncy, PA, Kwik-Care LLC was founded in 2019 as a start-up manufacturer of a patent pending line of “feel better convenience kits”, which are designed to provide consumers with a cost-effective, comprehensive approach to the treatment of minor illnesses.

The owner has been working with IMC on several initiatives since starting the business, including business planning, financial forecasting, product development, supply chain sourcing, and market and sales development planning. As the official product test launch was unfolding in spring of 2021, the company was beginning to secure initial orders across the country; however, the Kwik-Care team was struggling to efficiently set up an assembly process, as the kits contain over a dozen components that must be placed in a specific way to properly fit within the packaging.

With the goal to maximize assembly time and layout to determine labor needs and scalability of production while meeting the specific assembly placement of products within the retail package for visual and space needs, the IMC team incorporated a creative in-field approach to tackling the client’s challenges. An onsite, class field project was arranged with IMC’s in-progress Lean Manufacturing Level One Certification class. The class spent an afternoon at the Kwik-Care production facility and tackled different challenges for each workflow and job breakdown.

The real-time results produced by the class efforts were outstanding, which included: decreasing assembly time by 45% resulting in significant labor cost savings and the proven scalability of production to the target goal and beyond; addition of a simple label machine and digital scale to allow for package design simplification and greater quality control, resulting in additional cost and time savings.

It was an extremely successful experience for Kwik-Care, the Lean Manufacturing Certification class and the IMC team and will be used as a model for future projects.

Laurie Fontaine Jenkins, Owner of Kwik-Care LLC says, “Working with IMC has afforded us great insight into areas that we were lacking knowledge for our business to move forward and do it with efficiency. The value and resources that IMC has brought to our new company has played an integral part in our business launch and

getting to market this past spring. We are now in retail locations, vacation/campground stores and university bookstores across the country and we would not be here without IMC.”

IMC Assists Hermance Machine Secure GAT Funds to Plan and Grow Two New Product Lines

written by Lauri Moon | February 21, 2022

Located in Williamsport, PA, Hermance Machine Company is a 100+ year old, family owned and operated industrial machine company specializing in the sale, distribution and manufacture of equipment used primarily in the woodworking and wood products manufacturing industries, with the majority of sales in the mid-Atlantic and northeastern US. The business currently employs approximately 40 full-time skilled employees, many of whom have been with the company for 10 or more years.

The Hermance management team had begun the implementation of a project plan to launch and grow two new product lines through acquisition and product development to complement, deepen and further develop the broad product and customer base in the core industrial equipment business, which had realized consistent year-over-year (YOY) growth. Because of the success of these initiatives to date, as well as, increased revenues and geographic market expansion of the core business, Hermance Machine Company was outgrowing its current facility and was also preparing to purchase additional capital equipment to move forward. With many initiatives in partial progress, coupled with an internal transition in management of the company from parents to sons, the executive management team was seeking assistance and options for planning and implementation.

Through an on-going client relationship with Hermance Machine Company, IMC recognized an opportunity to present the company for consideration to the Pennsylvania Governor's Action Team, which provides assistance packages to select companies looking to locate, grow or expand in Pennsylvania with an emphasis on quality job creation. To implement the initiative, IMC conducted a series of strategic planning sessions with the Hermance Executive Team to develop a detailed Strategic Project & Business Plan that would result in the creation and retention of nearly 60 full-time jobs, an estimated revenue increase of 20% YOY with a total project investment of \$3.2 million. The strategic plan and proposal were successfully submitted and approved by the PA Governor's Action Team. In addition to providing direction and clarity for the Hermance leadership team, this process also resulted in an assistance package offering from GAT that included a robust combination of grants, low interest financing, tax credits and employee training reimbursements totaling more than \$2.1 million. Hermance Machine company continues to implement these plans.

In local media articles and published press releases from PA GAT, owners Joe and Claire Strouse expressed their appreciation for IMC's assistance by saying, "Our local Innovative Manufacturers' Center personnel were instrumental in assisting us to prepare and qualify for this opportunity." (<https://imcpa.com/imc-helps-hermance-machine-secure-state-funding-expandsupporting-nearly-60-jobs/>) They also stated, "We would have been hard pressed to complete our appeal to the Governor's Action Team without IMC doing the heavy lifting and having their backing and support." (<https://www.sungazette.com/news/topnews/2019/10/local-company-to-expand-with-state-grants/>)

IMC Hosts Quick Response

Manufacturing Event with QRM Founder Dr. Rajan Suri

written by Lauri Moon | February 21, 2022



Rob Bargo and members of the Videon team with Dr. Rajan Suri, Founder of Quick Response Manufacturing.

IMC hosted its first Quick Response Manufacturing (QRM) and POLCA training events with QRM Founder, author and *IndustryWeek* Manufacturing Hall of Fame Member, Dr. Rajan Suri.

During this day and a half of training, Dr. Suri and guest presenter, Rob Bargo, VP of Manufacturing Operations at Videon Central, shared:

- An Overview of QRM Principles & Strategy
- Practical Hands-on Manufacturing Critical-path Time (MCT) Mapping Exercises
- An Overview of POLCA along with Computer Simulation Demonstrations

30 individuals were on hand for both QRM and POLCA from half a dozen unique manufacturers from Central PA.

Curry Rail Services Completes IMC's ISO 9001:2015 Internal Auditor Training

written by Lauri Moon | February 21, 2022



Curry Rail Services has been in operation for eight decades with three generations of owners, with the company evolving into a multi-company operation. Their state-of-the-art coating and paint facility opened in September 2015. Located in the heart of Central PA in a community with roots dug deep into the railroad industry, CRS and their 75 employees respect and take pride in supplying products and services to the railroad industry every day.

With a multi-company operation, CRS identified the need to have employees trained to the ISO 9001:2015 Standard, which requires companies to conduct internal audits of their management system. IMC contracted The Bonney Ziegler Group to provide Internal Auditor Training, which is designed to train personnel to become qualified and confident to conduct internal audits in a positive, constructive approach consistent with the objectives of a companies' management system. The company received two days of teaching in the fundamentals of the audit process, which included a number of case studies to facilitate the learning process.

At the conclusion of the training, the company participants received a certification of ISO 9001:2015 Internal Auditor Training completion. This is a requirement for a

success external audit. The client also received follow-up services to create a plan of action for certification.

Testimonial:

“As we continue to grow our businesses we battle how to properly train our managers for the challenges ahead. As with all of companies, we struggle to get our managers to see the forest and not just the trees. IMC was willing to listen to our needs and then tailor the training to what was really needed. Everyone expressed their gratitude towards IMC and walked away with an understanding of what it takes to be a better manager. We look forward to working with IMC in the future on other areas of training necessary to continue our path of success.”

Mark Ritchey, President, Curry Rail Services

Overhead Door Completes IMC Lean Manufacturing Certification

written by Lauri Moon | February 21, 2022

Overhead Door Corporation in Williamsport, PA is a manufacturer of metal garage doors employing approximately 150 individuals.



Overhead Door wanted to have an employee trained on Lean Level One and Continuous Improvement concepts. This individual participated in a 64 hours of Lean Manufacturing training where he learned Lean tools and concepts as follows:

A3 Thinking and Value Stream Mapping – Learned and applied A3 Tools and Thinking

along with the Edwards Deming Plan-Do-Check-Act (PDCA) approach using a problem identified at Overhead Door. Learned the fundamental tool of Value Stream Mapping and built a VSM from customer order to shipping.

Effective Communication - Learned about social styles within the framework of working Lean/CI with teams of people from different functions and levels of the organization.

Root Cause Analysis & Standard Work - Learned problem solving tools, methods and Standard Work including tools for identifying root causes (SIPOC, 5 Why, Fishbone) and for taking corrective and preventative actions (Benefit-Effort Matrix, Design of Experiment, Poka-Yoke,). Standard Work was presented as the foundation of CI and key to all other improvement activities.

Change Management & Visual Workplace - This section of the training provided an understanding of change, how people view and respond to change and how to better facilitate change in an organization. It also introduced the visual plant. Ideas and examples included a detailed review of the 5S Workplace Organization System (Sort, Set in Order, Shine, Standardize, Sustain).

Total Predictive Maintenance (TPM) - TPM methods and examples for reducing downtime were presented and discussed.

Teams & Single Minute Exchange of Dies (SMED) - This session was an exercise on Team Building that provided answers to the challenges of developing teams for successful problem solving and continuous improvement activities. It utilized a NASCAR changeover simulation and teaching of SMED principles for achieving significant reductions in changeover times.

Principles of Kata - This session focused on applying what the participant learned from the previous sessions to reinforce learning. Included a team-based production simulation reinforcing a number of key ways reduction and productivity increasing tools and methods, such as inventory reduction, error-proofing, continuous flow, Kanban, etc.

At the end of the training, the participant showed that they did a “waste” walk within

Overhead Door and exhibited their learning by presenting a Process Map and improvements that have been made within their organization using the problem identified at the beginning of the training.

As a result of this training, the participant is equipped with the tools to continuously improve their organization such as being able to:

- Reduce waste (excess inventories, errors and rework, inefficient processes)
- Maximize productivity (quick changeovers, single piece flow, reduced variation)
- Increase responsiveness to ever-increasing marketplace changes
- Engage your employees in Continuous Improvement of your business

Then EQUIP YOUR PEOPLE WITH THE TOOLS TO CONTINUOUSLY IMPROVE with the Lean Manufacturing Level One Certification Program.

Impact Reported by Company:

- Retained Sales – \$1,00,000
- Employee Creation/Retained – 20
- Cost Savings – \$100,000
- Company Investments – \$2,500,000

Testimonial:

“IMC Lean Certification has been an excellent development tool for our up and coming Leaders. It gives them the knowledge and practical experience to improve our process.”

Eric Vitunac, Plant Manager, Overhead Door Corporation

“Employees with specific and limited job scopes can easily come to see that they are just a cog in the wheel whose work may not be that important. The Lean Training Certification program at IMC allows both the organization and individual employee to

develop and accelerate their net worth to an organization.”

Stephen Smink, Materials Manager, Overhead Door Corporation.

Success Story: Data Papers Expands Product Offerings with IMC's Innovation Engineering Services

written by Lauri Moon | February 21, 2022



Data Papers, Inc. began in 1969 and can provide virtually any product or service imaginable to communicate with your clients, employees, stockholders, or vendors. They are a manufacturer of various print materials such as business forms, catalogues, manuals, digital plotting files, etc. with headquarters in Muncy, PA.

SITUATION

Data Papers (DPI) realized many of their traditional products and services had become commoditized and as a result DPI had lost pricing leverage and profitability was suffering. Consistent with those realities, the industry was going through cost-cutting and consolidations. The highly experienced DPI Leadership Team recognized that if DPI was going to rise above these industry trends, they needed to develop new products and services that are both meaningful enough to customers to generate interest and unique enough to demand a healthy profit. As a result, they began working with IMC on a systematic “innovation how-to” from strategy to idea generation, to idea development and delivery that would leverage DPI’s strengths by focusing a portion of the organization’s time and energy specifically on innovation.

SOLUTION

IMC utilized Innovation Engineering (IE) tools and techniques that guided DPI through a series of steps with the aim of identifying strategic directions for innovation focus; generating ideas that support these strategic directions, educating and training a core group of DPI employees on IE tools, concepts, roles, responsibilities and how-to's; and assisting DPI on initial creation of their own "DPI Innovation System". Under IMC coaching, the team identified two projects to move through a development phase.

As projects moved through the Development Stage, all facets of the business opportunity, including Customer, Problem, Promise, Proof and related Financials, Markets, Technologies, Skills and Knowledge risks and rewards were worked on and evaluated.

One of the projects was a new business that leveraged DPI's considerable data management capabilities to be able to offer non-profits a suite of data management services that many non-profits currently do in-house. The realization was that DPI could perform these services much more efficiently and effectively and that in turn would allow DPI to provide improved print materials for the non-profit that could provide donors with more specific and more timely information about how their donations are being applied. That information is quite meaningful to donors and supports donor retention and additional donations. All of that made possible by more effective data management that is beyond the data management capabilities of the non-profit.

During the Innovation Engineering project DPI added a second customer for this service and using the IE tools and methods, DPI has turned this into a formal business offering. Per DPI's objective, this business service offers higher value to customers (meaningful) and fewer companies can provide this service (unique). That higher value has provided significantly better pricing leverage and this service is providing margins well-above DPI's traditional products and services.

RESULTS

The company is now applying IE practices to more purposefully take this service to

the marketplace and add more customers. Reported specific impact results:

- Increased Sales - \$150,000
- Employee Creation/Retained - 53
- Cost Savings - \$100,000
- Company Investments - \$200,000

TESTIMONIAL

Jerry Wertz - President & CEO, Data Papers, Inc.

“IMC took our innovation team to places we never imagined we could go. Their deep knowledge of manufacturing and process development helped them to speak our language and guide us to simplify and improve.”

Success Story: IMC Transforms Ralph S. Alberts Co.’s Business Processes

written by Lauri Moon | February 21, 2022

For over half a century, the Ralph S. Alberts Company has been one of America’s most resourceful, full-service, multifaceted custom molders. Their departments and capabilities include CNC Machining, Custom Molding, Foam Molding, FRP Molding, Hand Casting, Injection Molding and Roto-Casting. Over 50% of their gross business involves manufacturing seating and padding devices for the amusement industry.

IMC has been working with Ralph S. Alberts Company for several years, but more frequently in the past two years in order to transform their business processes through lean and continuous improvement.

Situation

Due to the variation and large volume of amusement parks, rides and themes, Ralph S. Alberts has manufactured over 3,000+ tools to satisfy the needs of that industry over time. It is much more cost-effective to keep and store the tools for future reuse than it is to create a new one. Hence the significant number of tools.

These tools were stored randomly on solid wooden racks and on the floor in a low overhead mezzanine area, adjacent to the primary production area with limited space. There was no standard method for storing or finding a tool, rather each tool was stored where they could find space on the self-constructed wooden shelves.

In addition to being randomly stored, there was no comprehensive list of inventory. Specifications for all of the tools were not recorded in one central location, nor did the individual tools have any unique identifiers. There was a complete lack of organization, and the process for finding any given tool was completely manual.

Since the quantity of tools is significant, and there was no organization system in place, it took multiple employees, together, up to an hour to find the tool they needed. Sometimes, when they finally found the tool they needed, it was damaged, as a result of the ad hoc storage.

In addition to the primary concern of tool storage and organization, the mezzanine area in which the tools were located was poorly lighted, mostly as a result of the wooden shelves blocking the light.

Seth Alberts, the third generation owner, recognized the company could be more efficient in their tool storage and organization. Each summer, the company set a goal to reorganize and inventory the tooling mezzanine, but due to the demands of everyday business, they never made much progress. An overhaul was needed. Seth did not want to expand their facility, but rather explore options for maximizing their current storage space. In addition to maximizing their current storage space, they wanted to evaluate their current ERP system for possible scanning and location technologies that could help centralize the specifications and location of each tool.

Solution

IMC served as the systems integrator for this project. Since IMC and Ralph S.

Alberts Company have been working together for several years, IMC understands the bigger picture of the company – where they've been, where they're going, trends, what works and what doesn't.

The first step was to complete a comprehensive inventory of all existing tools. This inventory resulted in a complex spreadsheet that included the weight, dimensions and information pertaining to the OEM, park customer, ride name and any other relevant information. Each tool was also assigned a unique identifier. While it is cost-effective to keep the tools that haven't been used in several years, they could be separated and stored in sea crates, the first step toward maximizing their current space.

The second step was to address the logistics, with the help of their current ERP system, EstiTrack. IMC contracted Gil Vierra of Business Imperatives Consulting Group, LLC, (BICG) to lead cataloging, defining the best system and evaluating EstiTrack's capabilities as it relates to a more efficient tool storage and organization.

Once Gil had narrowed down the information and categorized what was needed for the shelves, he worked with Seth and Bill DeHaan of APEX Storage, Inc. to research and design the physical shelving. Once the ideal shelving was determined and built, Gil managed the installation process with the help of Melissa Timco, director of operations and sales, and Jason Francis, production coordinator, from Ralph S. Albert Company to ensure tool availability. The company shut down for one week, as employees removed old shelving, installed new lights and the new shelving. Once the shelving was installed, identifiers were added to each of the shelves, and tools were sorted and organized into their new location.

The project was completed in eight months, with a total expense of just under \$50,000.

Results

An investment of just under \$50,000 likely saved the company upwards of \$500,000.

The process of identifying and locating tools, which had previously taken multiple individuals up to an hour, was reduced to taking one person a matter of minutes. As

a result, they have been able to schedule work more efficiently, which has enabled them to reduce lead times, in some cases by two weeks. The reduction in time and labor connected to the increased efficiency will also allow them to increase their overall net profit margins.

Furthermore, by maximizing their current space, they eliminated the need for a building expansion to accommodate their growing number of tools.

In summary, their notable results to date include:

- Increase storage capacity by 125%
- Eliminated the need for building expansion
- Reduced tool find and retrieve process from one hour to minutes
- Reduced time and labor costs
- Created two new Tooling Librarian positions
- Reduced lead time (by up to two weeks)

In addition to the dramatic improvement to their tooling inventory and organization, many employees were inspired and empowered as a result of helping with this project. Through the process, employees learned ways to improve their own workspaces, and are more conscious of the difference maximizing space and organization can make. With the help of IMC, the culture at Ralph S. Alberts was improved.

“We believe this will be a step towards decreasing our COGS, increasing our sales and ultimately maximizing our margins,” said Seth. “These larger margins will allow us to invest in similar projects in the future, so we can carry on in our journey of continuous improvement. We want to thank IMC for all of their efforts in helping us accomplish our goals.”

Success Story: IMC Helps FOXPRO Improve Operations and Customer Service with Broadband Grant

written by admin | February 21, 2022

SITUATION

FOXPRO is a small but growing Lewistown, PA based manufacturer of digital game calls, decoys and accessories used in predator hunting. They are the Worldwide Leader in sales of goods within the predator industry.

The company's internal operations and external contacts with customers, partners and vendors were significantly hampered by FOXPRO's 3Mbit DSL Internet service, which was divided into three channels of 1Mbit DLS each. The limited connection was unable to keep up with the company's information technology needs and when it became saturated, operations came to a standstill.

Employees frequently complained they were unable to perform routine job duties and had to wait until other company functions requiring Internet traffic had been accomplished and sufficient bandwidth became available.

Likewise, customers faced lengthy waits to place orders and have credit card information processed, resulting in dropped calls, aborted online transactions and lost business. Customers who succeeded in placing orders but who later called to check the status of their orders also faced exceptionally long waits as FOXPRO attempted to access the external portals of its shipping partner to determine the status and location of packages.

In addition, an integral component of the company's customer service and marketing efforts involves the uploading of very large data files containing video and audio of animal calls. The company frequently experienced problems when attempting to upload these files to YouTube and other social media sites or send them to customers. Due to insufficient bandwidth, these attempted data exchanges would often crash or take tens of minutes to succeed.

FOXPRO also has an onsite studio in which the company produces a television show for the Outdoor Channel. The company's poor Internet connection affected FOXPRO's ability to download and evaluate clips of audio and video content for potential use on the show and limited the company's ability to view portions of its own program content.

Finally, the company's online banking functions — a significant component of FOXPRO's accounting processes — often required the company to reduce its Internet traffic manually to accommodate these transactions.

SOLUTION

Determined to overcome the obstacle that was stymieing its business, FOXPRO sought information and resources that could resolve the company's bandwidth woes. The company contacted The Mifflin County Industrial Development Corporation (MCIDC) for help and also searched on its own to identify an Internet service provider that could install and deliver the upgraded data connection needed to replace the company's insufficient 3Mbit DSL line.

Once aware of FOXPRO's issues with its Internet service, MDIDC's Rob Postal contacted SEDA-COG and Comcast to determine what solutions may be available to help the company obtain a broadband connection. Unfortunately, Comcast said it was unable to provide the fiber optic line the company needed. FOXPRO's requests for proposals from several other Internet providers resulted in only one company, Nittany Media, indicating it was able to install and deliver the level of service improvement FOXPRO required. Unfortunately, the \$25K, 1Gbit burstable fiber optic solution was cost prohibitive.

SEDA-COG and MCDIC then reached out to other Partnership for Regional Economic Performance (PREP) organizations, including the Innovative Manufacturers Center (IMC) and PennTAP for help. PennTAP provided an Internet assessment of FOXPRO's situation and IMC Business Advisor Dana Gordon used the results of the assessment to develop and submit a Broadband Technical Assistance Mini Grant Program application to the Commonwealth of Pennsylvania's Department of Community and Economic Development (DCED) requesting funds to help offset the cost of the improvement.

DCED approved IMC's grant application on behalf of FOXPRO and provided the company with more than \$9,000 toward the effort. IMC also committed \$2000 in project funds.

In the fall of 2015, Nittany Media successfully installed and began providing service for an 11,585 foot-long, 1Gbit fiber optic line, which is burstable to 1000 Mbps, for FOXPRO.

RESULTS

As a result of the increased bandwidth:

- FOXPRO's IT department no longer receives complaints about employees being unable to do their jobs due to lack of Internet access and employee productivity has increased.
- The company has experienced a decrease in the number of lost calls - calls employees previously had not been able to answer quickly enough before customers grew weary of waiting and ended their calls.
- The improved voice and data connection will allow FOXPRO to move forward with plans to implement an automated voice-services system for customer calls that will help the company reduce costs.
- FOXPRO is now able to provide faster online credit card approvals for customers, thereby significantly reducing lost and aborted transactions.
- The company can now download and preview short clips of video content rather than having to wait for the download of much larger, complete files and is able to share more of its video on YouTube and other social media sites.
- The company has been able to retain and begin to grow its customer base. FOXPRO anticipates a modest annual increase in sales of \$140K and estimates retained sales of \$500,000.
- In the next 12 months, the company projects a cost savings of \$50,000, the retention of two jobs and the creation of two additional positions.
- FOXPRO's online banking functions, access to external servers and interactions with its shipping partner are no longer held hostage to insufficient bandwidth.

“In general, everyone has increased their personal productivity,” said Nathan Smith, FOXPRO’s Director of Information Technology. “We no longer get complaints about the internet speed.”

Due to the success of this project, IMC has replicated this model for another small company in an adjacent county and is actively searching for companies that have a need for the same solution.