MANUFACTURING-WORKS

For more than 20 years Manufacturing-Works has been delivering training, experience, and solutions for creating value. With our partners we’re here to help Wyoming businesses to grow to their full potential. We provide broad technical assistance, engineering solutions, general business assistance, marketing assistance, and financial counseling. We are committed to helping businesses by delivering solutions for creating wealth and, in conjunction with others, we can deliver complete solutions for companies. Manufacturing-Works is a not-for-profit organization with professionals positioned throughout Wyoming, with current offices located in Laramie, Casper, Cheyenne, Sheridan, and Afton. Manufacturing-Works' mission is to assist Wyoming manufacturers, producers and entrepreneurs, in growing their revenues, increasing their productivity and performance, and strengthening their global competitiveness. We are Wyoming’s most trusted resource for manufacturers.

ECONOMIC IMPACT

MEP Center impacts are based on clients surveyed in FY2018

- **$8.4 Million**
  - Total Increased/Retained Sales

- **47**
  - Total Increased/Retained Jobs

- **$991K**
  - New Client Investments

- **$660K**
  - Cost Savings

CONTACT US

Department 3362
1000 East University Avenue
Laramie, WY 82071-2000
(307)766-4811
www.manufacturing-works.com

The MEP National Network™ is a unique public-private partnership that delivers comprehensive, proven solutions to U.S. manufacturers, fueling growth and advancing U.S. manufacturing.
TRUSS CRAFT - REGRESSION MODELS BOOST THE BOTTOM LINE

ABOUT TRUSS CRAFT. Truss Craft, Structural Components, Cheyenne manufacturing facility is geared to today’s versatile building industry. Their hi-tech facilities enable them to meet the demands and time schedules of large commercial and residential contractors. They utilize the Mitek suite of design and shop software as well as the Wizard PDS automated jigging system and a Monet DeSauw automated component saw. Truss Craft is a certified manufacturer of metal plate connected wood trusses for residential and commercial roof and floor systems. They are a member of the Truss Plate Institute (TPI), which assures quality control on every truss they make.

THE CHALLENGE. Truss Craft, Cheyenne was limited to bidding on small roofing construction projects under 50 roofs as management lacked confidence in their cost projection system software and the data it relied upon for cost estimation and could not risk the lack of return on investment (ROI) and potential loss in revenues on large projects. Consequently, they needed data analysis study of their historical truss manufacturing data and their multiple truss designs to review all their truss variables’ costs estimation data to determine if there was the ability to narrow errors in their cost estimation procedures thus ensuring their ROI. The objective was to identify the errors in their historical data, correct it and apply the changes in their CRM software thus enabling them to bid on larger construction projects.

MEP CENTER’S ROLE. The Manufacturing Works provided a data analyst to review their historical data and various truss designs and understand their CRM software algorithms. The Manufacturing Works data analyst worked in concert with the management to determine where data could be refined to better serve the cost estimation system and reduce error. After multiple regression model designs and runs the error in cost estimation was reduced satisfactorily and the data will be presented to their Board of Directors in hopes of updating their data models for future use.

"We had a unique challenge that required a special talent for understanding data and applying an understanding of advanced mathematics to a CRM software model to improve cost estimation on increasingly larger roofing projects. We asked Jim Lee at Manufacturing Works if he could find such a talent and help us improve our estimation and control our ROI. Jim and Manufacturing Works came through at very reasonable cost and produced a solution that I will brief my Board on for further implementation to improve our Company’s position."

-Ken Veltkamp, Operations Manager

RESULTS

- new regression models reduced errors by 20% plus saving thousands of dollars in larger project
- new models facilitated bidding 50% larger projects that may increase sales by 30% or more
- the new models enabled the company to bid on larger projects in Colorado
- new models facilitated increasing ROI by 10% or more thus sustaining a viable workforce
- new models enabled the company to bid on larger projects containing new truss designs