Entrepreneurial Organization of the Month

West Central Initiative

Location: Fergus Falls, Minnesota

President: Nancy Straw
Principal Contact: John Molinaro

Started: 1985

Funding: Primarily from the McKnight Foundation

Mission: WCI is a public foundation that brings people and resources together to

maintain and enhance the viability of west central Minnesota.

Vision: WCI is an independent public foundation, created to proactively serve the

people of the region. WCI provides flexible, accessible, needs based

programs designed to have lasting impact.

WCI attracts financial and human resources from diverse sources and directs them toward existing and emerging needs to improve the quality of life in west central Minnesota. WCI, in its regional leadership role, develops collaboratives and partnerships initiating, facilitating and motivating action

for a better tomorrow.

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West Central Minnesota's Manufacturing Mentor

In the mid-1980s, rural America was in crisis. Due to low farm prices and overwhelming debt, thousands of farm families lost their land and livelihood. Other sectors of the economy suffered alongside agriculture. In the midst of this devastation, the McKnight Foundation worked with local citizens throughout Minnesota to set up six Minnesota Initiative Foundations to support rural community development.

In the west central part of the state, McKnight encouraged a grassroots group to determine needs of its residents. The group was awarded a two-year, \$2.1 million grant to fund and establish what is known today as the West Central Initiative (WCI).

"When McKnight helped convene citizen groups across the state in the 1980s, they asked people how to better serve each region," said John Molinaro, one of two vice presidents and the principal contact at WCI. "Their answers were to decentralize decision-making and support economic development."

These ideas – born in crisis – still provide the bedrock for operations at WCI.

With continued support from McKnight, WCI uses grants, loans and technical assistance to meet current needs of residents in their region. The west central region is defined as nine counties

encompassing 8,615 square miles. Most communities in the area have a population less than 1,000. Total regional population from the 2000 census was 210,059.

"Our underlying purpose is to offer opportunities for low- to medium-income families," Molinaro said.

To serve this purpose, WCI supports communities through a variety of projects, including loaning nearly \$1 million per year to help the manufacturing sector.

Manufacturing Better Businesses

Born in 1972 in Carlos, Minn., a company called ShoreMaster began by selling all-aluminum boatlifts. The company has covered the waterfront with world-class equipment for more than 30 years now.

In the mid-1980s, ShoreMater relocated to Fergus Falls, and WCI was there to help with financing, expansion and equipment purchase.

WCI stepped up again in the 1990s to help ShoreMaster buy rotational molding equipment – and train them to use it. For their floating docks, the company uses molded plastic. After they purchased the rotational molding equipment to help them make their own molded plastic, ShoreMaster had a problem: "They found that they couldn't produce these products cheaper than they could buy them," Molinaro said.

In partnership with Minnesota Technology, Inc. (MTI) – an economic development organization – WCI helped identify three experts in North America to train ShoreMaster employees on efficient use of the rotational molding equipment.

"They so improved productivity that the on-site molding process became the most profitable part of their operation," Molinaro said.

ShoreMaster is just one example of how WCI reaches out to the manufacturing sector through its Workforce Initiative.

The Workforce Initiative – one of WCI's core programs – aims to "assist workers in attaining skills that enable them to earn a living wage while strengthening the region's economy by addressing long-term shortages and gaps in the availability of skilled labor," according to the WCI website.

The initiative involves helping local educational institutions start and expand programs to train employers for local manufacturers and a running program called Workforce 2020.

In developing the Workforce Initiative, WCI found that the labor supply in their area could essentially dry up. The trend began several decades earlier as young families moved out of the region, leaving large numbers of older workers nearing retirement age and too few people to replace them. The labor force analysis predicted that the region would lose about 1 percent of its core workforce per year for 20 to 25 years, after which the trend would accelerate.

In July 1992, WCI unveiled Workforce 2020, a new grant making program to address these projected shortages of skilled workers.

The program focuses on supporting the cost of industry-specific retraining of existing workers to take on new technologies in the manufacturing sector. It's a partnership among WCI, MTI and individual businesses, which are required to match funds.

"The program began supporting more physical improvements, such as the molding machine for ShoreMaster," Molinaro said. "But we also needed to look at global competitiveness and to position our companies to compete on something other than low labor costs. If we could drive up productivity and knowledge base, the companies could become much more valuable partners to firms buying their services and less volatile with market fluctuation."

Thanks to WCI, these west central Minnesota companies have certainly beaten the national trend. Molinaro said they have completely eliminated mass lay-offs as a way of cost-cutting because companies now see value in their highly skilled workforce.

Since 1992, about 7,800 workers have been retrained through the Workforce 2020 program. A case study conducted by the University of Minnesota showed that average first-year wage increases received by retrained workers was four times the amount invested in training. Cumulatively, WCI's investment of approximately \$3.8 million over 12 years has resulted in an increase of approximately \$15.2 million in annual manufacturing wages in its service region.

Because of the manufacturing sector's significant impact on creation of new wealth in the economy, the economic multiplier effects are large, probably resulting in \$76 to \$106 million per year in increased economic activity in the region.

Lessons in Lean Manufacturing

Started in 1979, BTD Manufacturing, Inc., is a metal fabrication company that designs and improves manufacturing processes for a variety of clients.

The BTD website says, "Our work is 50 percent mental. The other half is machinery."

This brains and brawn attitude has paid off for BTD, especially as they joined forces with WCI to incorporate lean manufacturing into their business.

The purpose of lean manufacturing is to improve industrial efficiency and productivity by driving wasted time, effort and materials out of the manufacturing environment. The concept has its roots in an efficiency process originally developed by Toyota and building on ideas promoted by innovators such as W. Edwards Deming.

Molinaro said that the ideas behind lean manufacturing go back to the 1950s. After World War II, there was a huge global demand for products, and things were made in large batches, which made sense. But now products constantly change.

"Think of Target (stores) and how their products are constantly different," Molinaro said. "Product lifecycle times in our society have gotten shorter and shorter as people's desire for customized products has grown."

Some things will always be made in large batches, but Molinaro said that the place where U.S. manufacturers can compete is in the area of highly specialized products.

"For example, a kid on the west coast may decide one day that silver studs on jeans are cool, and two weeks later, all kids want silver studs on their jeans," Molinaro said. "We have an opportunity to compete here."

Back at BTD, lean manufacturing helped them substantially increased their competitiveness.

"BTD's desire to turn to lean manufacturing was driven by off-shore competition," Molinaro said. "If they could be lean, they could take advantage of proximity to markets. Now, this company successfully competes in a field dominated by foreign buyers."

As employed by WCI and MTI, lean manufacturing training is based on five concepts:

- 1) implementing a systems technology that eliminates non-value added activity, which is usually found outside of process activity;
- 2) focusing more on improving material flow than on labor elimination;
- 3) in the efficiency ratio of material/labor, focusing more on the numerator rather than the denominator;
- 4) transforming industry culture so all workers recognize waste and providing the environment for eliminating it on a regular, on-going basis; and
- 5) harnessing the minds of the employees as well as their physical capacities.

Taking companies down the "Lean Path" involves a number of steps, designed by WCI and MTI. First, companies receive training and live simulation focusing on eight wastes, including overproduction and under-utilized people.

Trainees then follow the Lean Path through Visual Workplace Organization (VWO), a process to create a more organized and safe work environment. VWO transforms the physical work environment.

Value Stream Mapping helps companies create a plan for implementing lean manufacturing in their environment by developing a map of the current state of how things are done in comparison to a map depicting how they would like things to be done.

In the next step – Kaizen events -- companies use regularly scheduled events for implementing improvement projects identified in the Value Stream Mapping exercise.

"This may involve taking apart an entire assembly line and putting it back together," Molinaro added.

Following that process, the Lean Path leads trainees into a three-part human development program, designed to teach production level supervisors and team leaders how to supervise in a lean environment.

"Supervision is probably one of the biggest problems that many companies have," Molinaro said. "Very few supervisors have significant training in how to relate to people and how to organize work."

The sixth step involves the Performance Management System, still in development. This system will provide incentive-based compensation. Finally, Advanced Lean 401 – or "Flow" – is a half-day training to teach how to create and manage flow, and break the batch mindset.

Lean manufacturing certainly has not hurt west central Minnesota.

The effects of the late-1990 recession on this area have been light. Employment increased by approximately 6 percent since 2000, leading all other regions in Minnesota in 2001, 2002 and 2003. Unemployment rates have been lower than the state as a whole in 2002 and 2003.

"The drivers of our economy have traditionally been extraction, agriculture and manufacturing," Molinaro said. "If you're going to have sound local economies, you need stability in these areas."

West central Minnesota has not only recovered from the 1980s farm crisis, but thanks to WCI and its continued support of the manufacturing sector, it has thrived.

-By Lisa Bauer, 0504

For more information on...

- ... the Center for Rural Entrepreneurship, go to www.ruraleship.org
- ... West Central Initiative, go to www.wcif.org
- ... the McKnight Foundation, go to www.mcknight.org
- ... Minnesota Technology, Inc., go to www.minnesotatechnology.org
- ... ShoreMaster, go to www.shoremaster.com
- ... BTD, Inc., go to www.btdmfg.com