CENTER FOR INDUSTRIAL RESEARCH AND SERVICE

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Jim Black, CIRAS, meets with Darin Smith, Grimm Brothers Plastics.

While working with client companies, it's not unusual for the success of one project to lead to another project. The following tale of two companies, Grimm Brothers Plastics and Midwest Industries, illustrates the valuable resources and expertise that CIRAS can generate for its clients.

Grimm Brothers Plastics

Objectives

The journey into lean manufacturing practices undertaken by Grimm Brothers Plastics began during the spring of 1999. Bill Barrett, General Manager of Grimm Brothers Plastics, read about the benefits of Kaizen (continuous improvement) in the CIRAS News Winter 1999 issue and contacted Jim Black to discuss starting a Kaizen team in the routing department at Grimm Brothers.

After selecting team members and scheduling the project, Barrett and Black met to set the following objectives for the team:

- · increase throughput in the router area
- improve set up times in the router area
- reduce process variability (i.e., improve quality) through process documentation

GRIT in action

The Kaizen workshop brought together a mix of people that included experts with knowledge of the routing process, suppliers and customers of the routing department, and support staff from other departments in the company. The Grimm Routers Improvement Team (GRIT) learned the principles and concepts of Kaizen and generated over one hundred ideas during two brainstorming sessions.

Next, the team developed a plan of action to implement its ideas, establishing priorities based on those objectives that would be impacted and the extent of this impact. After each learning segment, GRIT members proceeded to apply their newly gained knowledge and strategy in the workplace.

The primary benefits obtained by using this new strategy were in the areas of:

- reduced scrap (and the resulting increase in throughput)
- improved set up times (through the 5-S process for workplace cleanliness and organization)
- reduced reprogramming expense

According to Barrett: "Because of Jim Black's training techniques, he was able to motivate several of our employees to do training and problem solving well beyond the actual project—and this motivation is still continuing."

Over \$103,000 in savings were documented. Implementing standardized work—the best and safest way of doing the job—contributed significantly to reducing process variability. Company management was amazed at the ripple effect that took place in other areas generated by team-member enthusiasm.



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CIRAS Mission Statement

The mission of CIRAS is to enhance the performance of Iowa industry, and associated entities, through education and technology-based services.

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New award will recognize performance excellence

by Gary Nesteby, Woods Quality Center Coordinator

For over a decade, the Malcolm Baldrige National Quality Award has recognized organizations throughout the United States for performance excellence. Data indicates that publicly traded Baldrige-winning organizations outperform the Standard and Poor's 500 by a 3-to-1 margin.

Just as the Baldrige Award has recognized organizations throughout the nation, state awards have been designed to recognize organizations within the state. Iowa is one of eight states that has not had a state quality award. That's about to change.

The Woods Quality Center (WQC), in partnership with the Iowa Business Council, has announced the implementation of the first Iowa Recognition for Performance Excellence process.

The Iowa Recognition for Performance Excellence process is designed to follow the criteria and framework of the Baldrige award. The process will recognize organizations (manufacturing, service, retail, government, health care, education, not for profit, all sizes) that demonstrate performance excellence and improvement through self-assessment. It is designed to be non-competitive.

At a glance, the national Baldrige Award can be quite intimidating; organizations are often doubtful about spending the time, effort, and money to go through the process. The WQC team took that factor into consideration, designing a Self-Assessment Capacity Matrix to "drive out" that fear. Leadership, strategic planning, customer focus, a focus on human resources, process management, information and analysis, and business results are addressed in the matrix and provide a picture of the organization's level of performance. The self-assessment matrix is available on the WQC web site: www.wqc.org.

The Woods Quality Center is currently accepting applications for the process. Companies may apply for the year 2000 process, selecting one of two options:

Option 1: Companies may self-assess their organization using the Baldrige criteria, and notify the Woods Quality Center that they have completed the self-assessment.

Option 2: Companies may complete the self-assessment and submit a written report with the results. They then will receive feedback from a team of examiners.

Organizations completing the process will be recognized at the Iowa Recognition for Performance Excellence Conference October 17, 2000, in Cedar Rapids. Several organizations across the state have completed the self-assessment and will be recognized for that achievement. Conference attendees will hear a keynote speech by the Vice President of Human Resources from Ritz Carlton Hotels, winner of two National Baldrige awards. Also, breakout sessions in all sectors and areas of the Baldrige process will be offered.

Companies wanting to participate in the complete Iowa Recognition for Performance Excellence process can apply at any of three tiers. The top tier, "Leadership," is based on the applicant providing a 50-page application addressing the Baldrige criteria. A team of state examiners will review the application and may conduct a site visit.

Based on the guidelines provided in the Baldrige criteria, each application will be scored and values will be assigned. Bronze, silver, and gold awards will be given to all organizations reaching predetermined levels.

This process is non-prescriptive and non-competitive; all organizations regardless of size are scored according to the criteria. In other words, multiple gold awards can be given if more than one organization achieves the required level of performance.

Those organizations that apply for the complete Iowa Recognition for Performance Excellence (all three tiers) will be recognized at a celebration in February 2001.

The benefits to the state of Iowa will be the ability to link best practices around the state to improve the lives of citizens, communities, organizations, and state government. Through this partnership with the Iowa Business Council, the Woods Quality Center will move closer to achieving its mission of integrating continuous quality improvement into the culture of our area.

The Iowa Business Council and the Woods Quality Center is seeking funding and support for the Iowa Recognition of Performance Excellence process. Organizations or businesses interested in providing support should call Gary Nesteby at the Woods Quality Center, 319-399-6583 or e-mail gnesteby@wqc.org.

CIRAS is available to support organizations who participate in the IRPE. Rudy Prutszco and Don Brown haven completed the examiners training and other members of our staff can work on specific gap areas discovered during the organization's self-assessment process.

Baldrige winner to speak

Michael A. Luker, President, Sunny Fresh Foods, will conduct a two-hour breakout session at the Iowa Recognition for Performance Excellence Conference. Sunny Fresh Foods, the 1999 winner of the Malcolm Baldirge National Quality Award in the small business category, is a subsidiary of Cargill, Inc., and manufactures processed egg products. With headquarters in Monticello, Minnesota, and nearly 380 employees in Minnesota, Iowa, and Michigan, the company dramatically increased its market share from 14th in 1988 to second in 1999.

New global standards emerging for food production

by Reg Cluase, CIRAS

A little over a year ago, CIRAS members learned that a new standard was being set for establishing quality in agriculture. The concerns of European consumers about the environment and animal welfare had resulted in major retailers labeling their products with new consumer-demanded traits in food products. Bovine spongiform encephalogy (BSE) or "mad cow disease" in beef and dioxin residues in Belgian pork had consumers focusing on food safety assurance as never before. In the wake of these developments in European markets, U.S. producer groups and marketing companies began contacting CIRAS about incorporating ISO 9000 into their businesses.

To better understand the situation, CIRAS organized a group tour in May 1999 to investigate production and marketing trends in Denmark, the Netherlands, and the United Kingdom. The goal was to observe supply chain management and ISO 9000 application to the agriculture and food industries in these countries. What the group discovered was startling.



Denmark

In Denmark, ISO 9000 and ISO14000 implementation takes place at the farmer level. Despite problems of cost and acceptance, Danes clearly understand the need to move to this level of management. For example, in spite of higher production costs than U.S. Midwestern producers, Danes are dominant players in the pork export market and are also dependent upon it. They have effectively emphasized quality to enhance value to the customer. ISO is an element in this effort.

Denmark is rapidly moving to organic food production, where, again, certification of quality is a major issue. Over 20% of their dairy production is already organic. Organic farming retains a premium market in all classes of meat, dairy, and other food products. Danes are experimenting with the "food with a face" concept. To keep consumers informed about the foods they buy, Danes have installed computer kiosks that read bar codes to give the consumer comprehensive information about how a product was produced. Bar code identification can go so far as to provide a picture of the farmer who grew the crop. The consumer interface or retailers are a driving force behind this change.

Netherlands

In another instance, the group saw how the "passport" system was applied to beef and veal production in the Netherlands. Each animal is identified from birth, an identification system that is carried through the processing plant and extended to the retail shelf. Traceability is complete. To ensure no hormones or illegal antibiotics were used, consumers can ask for an extensive audit of the producer's operation Environmental regulations play a role as well. For example, the Dutch have to be very careful about how many animal units are raised on the available land, and how the waste is handled. Documentation is very thorough.

United Kingdom

The U.K. beef industry was devastated by the BSE debacle. As a result, animal welfare and environmental concerns have increasingly dominated the consumer psyche. The CIRAS touring group observed supply chains, established by major retailers to certify quality. These measures are applied to all animal agriculture, particularly beef and pork. To control e-coli and salmonella outbreaks, extreme standards of cleanliness are set for animals entering a processing plant. Animal feed was also carefully regulated and documented. The retailer was able to label meat as raised under environmentally-friendly conditions, ensuring the welfare of the animal. These systems required considerable documentation and third-party auditing.

CIRAS has the resources to bring proven industrial concepts of quality and supply chain management to Iowa agriculture and food processing. These dominant industries in Iowa will need to change existing practices to meet new European market standards. Hence, it seems natural to incorporate core competencies of the CIRAS team into a new focus on value-added agriculture that will make the Iowa food industry competitive with emerging global standards.

CIRAS adds value-added agriculture to mission

by Reg Clause, CIRAS

IRAS has recently increased its capacity to serve Iowa's vital industries by adding staff and content that focus on value-added agriculture. This enlargement of the CIRAS mission is very important to Iowa and the Midwest region. It is a concept, however, that is not fully appreciated or incorporated into the thinking and approaches in Iowa's agriculture, food, and kindred products industry. Here lies the challenge and question for CIRAS and its partners: How can we creatively adopt tools and principles that will improve efficiency, profitability, and competitiveness in Iowa's agriculture and food industry?

Globalization and Iowa agriculture

Agriculture has long operated in a global market. Iowa agriculture, in particular, has enjoyed many competitive advantages in production due to a massive adoption of technology and an outstanding resource base that includes not only land but infrastructure. As a result, for many decades, Midwestern agriculture has played a dominant role as an exporter of base commodities. No other country has been such a reliable supplier of food and fiber to the world market.

During the past decade, the cold war environment gave way to a flood of capitalistic ventures. Nations that previously focused on self-sufficiency, now look to the global economic market for development. Technology and capital are no longer constrained by borders, and competitors now operate in the international market. Consumers enjoy vast choices and are exerting unprecedented influence on the market. They now have the power to demand innovation at many levels that force marketers of base commodities to look well beyond their traditional modus operandi. In much of the developed world, the consumer's value equation has become dynamic in nature and has moved well beyond base need. This new value equation, therefore, offers the smart marketer tremendous opportunity to reach for additional value in areas that previously lacked importance.

Value-added agriculture and CIRAS

Value-added agriculture is the broad term that defines capturing value in the marketplace and transferring it directly to the producer. This system was established because many farmers faced dismal profit margins for producing base commodities by merely selling into a consolidated processing sector that controlled consumer information and price discovery. The commodity systems, structured like an hour-glass, allowed processors to control the narrow curve of the glass. These days the consumer/customer is king, and the power is constantly shifting from the processor to those who control the interface with the consumer.

But, more is required to control this new consumer interface than ever before. It takes aggressively coordinated systems to meet demand in a very dynamic market. At CIRAS, we are equipped with the marketing and technological knowledge to do just this.

The need for change

With the complexities brought about by extreme competition, consumer domination, a newly emerging global environment, and very low producer margins in agriculture, the crisis is deep enough for the food and agriculture industry to move towards a change in how things are done. Today we are seeing producers utilize information technology to enhance their understanding of costs and improve production efficiency. To effectively compete for the consumer's value demands, the farmer must have a way to understand the dynamic nature of these demands. To meet the demands, the farmer must coordinate all activities coming from the demand signals, which means that the farmer will need to let the customer define "quality." Much like the transformation in the U.S. auto industry. Iowa agriculture must change to remain competitive in a global market. Since the U.S. is the world's largest consumer market, all countries will seek to trade here. The change will be dramatic and has potential to transform the face of Iowa agriculture.

A case in point

CIRAS is working with Iowa-based co-op elevators to implement supply chain management and ISO 9000 quality management systems. The genetically modified organisms (GMO) issue has presented marketing co-ops with the challenge of market access when the customer demands non-GMO products. Currently, the testing process is slow, costly, and imperfect. Additionally, the standards that some markets are demanding are impossible to meet on the basis of inspection and testing alone. It is here that the principles of ISO come into play. By controlling the process through documented procedures and ensuring the process through certification, these companies will have a distinct advantage dealing with new customer demands. The customer will recognize the initiatives that the company is making in using these sophisticated disciplines for quality control. In addition, customers will have access to that market and whatever premiums are offered.

This process results in significant value added for the coop members, who will have a company that can certify any output traits a customer might demand. The company will create a new "culture of quality" to transform how it is managed. The market for

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Due to the success of the Kaizen team, Barrett and Black discussed options for proceeding with further lean manufacturing projects. The company targeted reduction of set-up times in the forming department for the next phase. In the spring of 2000, a set-up reduction team was assembled with the following team objectives:

- reduce set-up times in the former area
- · improve quality in the former area
- reduce process variability (i.e., improve quality) through process documentation

Operation GOLF

Using a similar approach, a Grimm Organization for Logical Forming (GOLF) team was activated. Members documented the original set up method on videotape to allow classification of each task as internal (i.e., machine must be shut down) or external (i.e., can be done while the machine is still running).

First, the team removed external elements from the set-up—these elements could be done before or after the set-up. Second, the team standardized and practiced the set-up, charting the time for each set-up. Third, the team analyzed ways to reduce internal elements. Action plans were developed for each idea, along with responsibility and target dates.

From an initial set-up time of 330 minutes, the team has recorded recent times that range from 96 to 153 minutes, with an average time of about 130 minutes. GOLF believes it can reduce the average set-up time to 90 minutes. Efforts to further reduce set-up time will continue.

Other changes implemented by GOLF were:

- improving maintenance (developing an open work order priority-setting process and establishing operator preventive maintenance logs)
- creating a set-up checklist for the formers (detailed version for training and abbreviated version for experienced operators) including machine illustrations with set-up specifications
- plotting a chart showing reduction in rejects during set ups (from 3.61 average rejects per set up down to 1.20 average rejects per set up)

Midwest Industries

Customer relationship surveys

In spring 1997, Merle Pochop, field agent in northwest Iowa, sent a mailing to companies in his area informing them of CIRAS services. Midwest Industries, a company that manufactures boat trailers and hoists, expressed interest in one of these services—specifically, the customer relationship survey. To further investigate the need for this service, Pochop followed up this request by meeting with Tim Sullivan, the field agent in Des Moines, Andy Brosius, president of Midwest Industries, and Don Rusch, marketing director for Midwest. The project, which

began in June 1997, led to a survey of dealers served by Midwest and its distributors. The results of the survey revealed a clearer picture of what dealers valued most and the strengths and weaknesses of Midwest and its distribution network in addressing these needs. The project was completed in July 1998.

TOC workshop

Another CIRAS service, adopted by Midwest, occurred in September 1998. Sullivan conducted a half-day workshop in Cherokee, Iowa, introducing the theory of constraints (TOC). Bruce Olson and Dale Henrickson, representatives from Midwest, attended the workshop, fueling the company's interest in TOC. Again, in March 1999, when CIRAS facilitated the Goldratt Satellite Series on TOC, Midwest sent 10 people to participate in the proceedings. The company eventually decided to implement TOC and requested a proposal from Sullivan, who presented two alternatives for implementation. Midwest chose the three-day breaking organizational constraints workshop, which was provided jointly by CIRAS and TOC Solutions (David and Suzan Bergland, 515-965-1379). The workshop convinced Midwest to implement TOC in its production system.

Transition

The shift to TOC was completed in different phases. After project boundaries were established, an implementation team to facilitate the process was put into place. They are known as the TIGERS (Team for Implementation Guidance, Education, Reporting, and Sustaining enthusiasm). A cross section of top managers, departmental leaders, and floor workers constituted this 20-person team.

Implementation

TIGERS, trained in the concepts of applying TOC in production, began the task of mapping existing conditions in production. They identified the interweaving causes and effects that often made meeting the production schedule so challenging. They then created a detailed plan for how the TOC methodology, known as Drum/Buffer/Rope and Buffer Management, would be integrated into operations at Midwest Industries.

TIGERS then led the company through the next phase by designing training techniques for other associates within the company. Over 300 people attended a half-day session that introduced the

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lowa governor addresses variety of business issues

by Helen Randall, HKR Communications

Iowa Governor Tom Vilsack underscored both progress and needs on the state's business front when he addressed the monthly breakfast gathering of the Central Iowa Minority, Women and Small Business Owners in Des Moines in May.

The gathering, also held on alternating months in Iowa City, is hosted by the Iowa Procurement Outreach Center (IPOC), a part of the CIRAS program, and the Iowa Department of Economic Development (IDED). Channell Construction also sponsored the event.

"We are a state of small businesses, and we must encourage diversity," Vilsack noted. Vilsack also pointed to what has become a theme of his administration—that Iowa needs more people, and it needs younger people—tying this message into prospects he foresees for business success. Similarly, he said, Iowans need to create the kind of place where everyone can share in its prosperity.

"This is a global economy. The opportunities out there are enormous. It is in the state's economic best interest to ensure your success," said Vilsack. He stressed that his administration has scrutinized Iowa's Targeted Small Business (TSB) program, which is designed to encourage, promote, and support minority and women-owned businesses and small business.

"We set a goal to improve performance over what it has been in the past," said Vilsack, adding that the effort has brought about \$11 million in increased business with TSBs. He said the achievement was small, and more needs to be done.

Vilsack revealed findings of a task force, formed to study issues faced by TSBs. A formal report that included 11 key suggestions was due out later in the spring. Some salient features of that report appear below:

- create a multi-media state directory of personnel who purchase goods and services
- modify the Iowa Satisfaction of Performance Waiver program
- provide education for state purchasing employees at all levels about TSBs
- provide larger Iowa-based businesses with incentives to use TSBs
- create centralized and statewide procurement compliance procedures
- create an on-line bulletin board for all procurements of more than \$5,000
- establish a TSB certification process that is universally accepted by all state agencies
- discourage or minimize use of "bundling" of contracts
- utilize current assets and technology to market TSBs

- increase technical support for TSBs to encourage involvement
- create a multi-media directory of Iowa TSBs

Those interested in learning more about the Iowa Targeted Small Business (TSB) program, can call the Iowa Department of Economic Development (IDED) at 515-242-4721. Contacts with the Iowa Procurement Outreach Center (IPOC) can be made by calling 800-458-4465 or can be made through the CIRAS office.



Mike Channell and Dave Liebsack of Channell Construction visit with Bruce Coney, director of IPOC, at the May breakfast gathering in Des Moines.

Building success on success

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changes that were to take place during the implementation process. Company president Andy Brosius was the keynote speaker at these sessions, where plenty of time was allotted for questions and answers.

Results

Training of the TIGERS team began in late October of 1999. On January 31, 2000, the factory officially began production using TOC concepts throughout. The real work in implementing TOC began when significant changes occurred at every level in the production system—from order entry, purchasing, scheduling, and material release to batch sizes, fabrication, welding, painting, assembly, and shipping. Everyone was included!

What were the results of revamping the system? Although it's too early to assess the overall results of the new system, Midwest did report an immediate reduction in "work in process" inventory. It was also initially able to account for more work gained for the number of labor hours paid. However, the real proof will be in how well the production system performs during the peak season. Stay tuned for the results in a later issue.

IWRC offers environmental compliance assistance

by Jackie Mysak, Iowa Waste Reduction Center Public Relations Assistant

The Iowa Waste Reduction Center provides pollution prevention and waste reduction solutions to manufacturers, automotive body shops, dry cleaners, printers, and other small businesses in Iowa affected by environmental regulations. Established 11 years ago at the University of Northern Iowa, IWRC helps small businesses stay on target, offering free and confidential environmental compliance assistance.

One of the primary services that IWRC provides is its on-site review, or environmental audit. At the request of a small business, an IWRC specialist visits the business facility and analyzes its operations to determine environmental compliance. During the on-site visit, issues dealing with wastewater, air emissions, and solid and hazardous wastes are discussed. After the on-site visit is completed, the specialist prepares a detailed written report that explains environmental regulations affecting the facility, documents the compliance status of the business, and includes necessary permit and registration forms.

Recently, the IWRC initiated a two-step assistance program that has considerably enhanced its on-site reviews. For instance, during an on-site visit, specialists often make one or two specific suggestions that the business can implement to reduce waste. To help a business implement a specialist's recommendations, the IWRC offers pollution prevention or waste reduction equipment loans. Before making the initial capital investment, the business is given the opportunity to determine whether the equipment will work with its operations. The IWRC then assists with equipment installation or training processes as needed.

Other IWRC services include the Iowa Air Emissions Assistance Program, the Small Business Pollution Prevention Center, and the Iowa Waste Exchange.



Working closely with the Iowa Department of Natural Resources, the Iowa Air Emissions Assistance Program, develops regulations and policies that keep small businesses in mind. It provides air permit assistance and on-site reviews focusing on air pollution issues.

The Small Business Pollution Prevention Center targets small businesses with its training, education, and applied research opportunities. The IWRC's Mobile Outreach for Pollution Prevention (MOPP), for example, is a 34-foot motor homes filled with pollution prevention and waste reduction equipment for the manufacturing and automotive industries. It travels around the state and nation to bring waste management and recycling solutions to manufacturers, body shops, and vehicle maintenance facilities. MOPP offers hands-on training and free demonstrations hosted by local sponsors at community colleges, trade association workshops,

and industry conferences.

The pollution prevention center also publishes various waste management and compliance curricula and manuals for industries.
Compliance guides are available for the manufacturing, electroplating, dry cleaning, agribusiness, printing, and vehicle maintenance industries.

The Iowa
Waste
Exchange
is a
statewide
network of
community
colleges,
government
councils,
and other
agencies
that



provide recycling and reuse options for all businesses in Iowa. The exchange's resource specialists help businesses reduce disposal costs by identifying wastes and by-products that still have value and then facilitating the transfer of these materials to other organizations and businesses that can use them.

Since it was founded in 1990, the exchange has saved businesses over \$12.3 million in disposal costs and prevented 504,000 tons of material from entering Iowa's landfills. Common products posted to the exchange include materials left over from manufacturing and packaging processes.

To keep businesses up-to-date on environmental regulations and other information that may affect their operations, the IWRC publishes several free newsletters, both in print and electronic format. To subscribe, contact Chad Gookin or Glee Kidder at 800-422-3109 or visit the IWRC web site at www.iwrc.org.

For more information or to schedule a free on-site environmental audit, call the IWRC at 800-422-3109 or 319-273-8905.

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commodities is segmenting and the undifferentiated commodity will have a market with its discounted pricing, while the specific trait commodity will seek a higher price in a market restricted by quality standards.

To test this procedure, CIRAS has been working with a producer-owned marketing company in beef production. The company anticipates markets for hormone-free beef into the EU. Since there is no way to test for the presence of synthetic or supplemental hormone use, there is a need to certify the process. For this purpose, the USDA-AMS has developed a version of ISO principles that are acceptable to the European Union. CIRAS will work to implement this system from the producer all the way down to the end user. Ultimately, it will lead to new applications in the domestic market for this level of quality certification.

Meeting consumer demand

Value-added was once viewed as building a processing plant, which led to the making of a product. Today, the real value added is in discovering the customer's definition of quality and satisfying that demand. Consumers will pay for safety assurance. They will also pay additionally for "food with a face" because increasingly consumers will want to know if their food was grown in an environmentally friendly way. Animal welfare will also receive similar concern.

In essence, developing a management system based on value-added agriculture principles will lead to a relationshipwithin marketing, where a brand and its label creates a sense of trust for the consumer. There is value in that that can accrue to the farmer/marketer who wants to compete in today's opportunistic marketplace.

For more information on value-added agriculture, contact Reg Clause by e-mail at reclause@ciras.iastate.edu., or call 515-576-0099 ext. 2730.

CIRAS staff receive honors

Merle Pochop, CIRAS Industrial Specialist in Sioux City, received the ISU Extension New Professional Award. This award honors new Extension professionals who have made significant contributions in achieving the goals of ISU Extension. Pochop has enhanced the perception of ISU as a high quality, responsive problem solver in the eyes of businesses and industries in northwest Iowa. He has initiated professional development chapters, provided increased services to clients, expanded the awareness of CIRAS and IMEP, and generated fee for services on a regional basis.



From the left are Rollin Richmond, Stan Johnson, and Merle Pochop

Dan Meyer, CIRAS Industrial Specialist in Ottumwa, received the Lloyd E. Anderson Superior Service to Industry Award. Lloyd E. Anderson is a well-known friend of Iowa industry who served ISU for over 30 years. As interim director of CIRAS from 1989-1995, he established the structure that has allowed CIRAS to provide services to Iowa industries. This award recognizes faculty and staff at ISU who serve industry in the state by assisting them with their products and processes. Meyer has served many companies in southeast Iowa through personal project work, education, technology transfer, and networking. He has drawn upon his years of experience in manufacturing as a business owner to assist farmers and other businesses with start-up issues and product development issues. He assisted companies in the implementation of ISO 9000, the marketing of new products and the formation of a unique NetSourcing group. Meyer's leadership, commitment to Iowa industry, and dedication resulted in improvement to manufacturers in his area.

Meyer retired from CIRAS on May 15, 2000.

He and his wife Barbara live in Ottumwa. During his retirement, he will continue to consult for CIRAS part-time and travel.



From the left: Lloyd Anderson and Dan Meyer

Industry Outreach Center opens in Cedar Falls



Officials from the Cedar Falls Chamber of Commerce assist in the ribbon cutting ceremony. From the left are Tom Damgaard, Heather Woody, Paul Brown, ISU Extension Area Director, Rollin Richmond, ISU Provost, Mike Willett, CIRAS Industrial Specialist, Floyd Winter, Jim Coloff, and Brad Lee.



The Iowa State University Industry Outreach Center held a ribbon-cutting ceremony and open house on June 28. The center is located in the Cedar Falls Industrial and Prairie Technology Business Park at 7103 Chancellor Drive, Suite 200, Cedar Falls.

Ninety guests attended the opening program at the Center. ISU Provost Rollin Richmond discussed the role of engagement and the ISU Strategic Plan. Ambassadors from the Cedar Falls Chamber of Commerce conducted the ribbon-cutting ceremony following the formal program. Approximately 200 guests visited the center to view displays that showcased the programs to be offered by the partners who will be available to assist northeast Iowa industry and entrepreneurs.

CIRAS is one of the partners committed to merging the strengths of ISU faculty and research centers in one location. As a part of both Iowa State University Extension and the ISU College of Engineering, CIRAS offers onsite assistance, mentoring, technology transfer, and education to those looking for increased competitiveness and positive results. For more information, contact Mike Willett, CIRAS Industrial Specialist, at 319-266-3260 or email mwillett@ciras.iastate.edu.

Students Brennan Fehr and Jason Reber demonstrate rapid prototype equipment to Dawn Hines at the ISU Industry Outreach Center Open House. Rapid prototyping is just one of the many technologies available at CIRAS.

Clarification

The management guide, "Simplified Systematic Plant Layout," that appeared in the Fall 1999 issue of CIRAS News, was based on a six-step process called Simplified Systematic Layout Planning (Simplified SLP) developed by Richard Muther and John D. Wheeler. The six-step process and the sample charts included in the article appear courtesy of Richard Muther of Richard Muther & Associates.

The CIRAS News article implies that large-scale plant layout projects can only be accomplished with the use of software. On the contrary, large-scale facilities planning projects have been carried out manually for years. One method of accomplishing such projects manually is with the use of Muther's full SLP process. In actuality, the software referred to in the article, Engineering Animation's FactoryPLAN \otimes , is based on Muther's full SLP process.

The booklet Simplified SLP – published in 13 languages – contains instructions on each of its six steps, examples, and appliction worksheets. It is available from Management & Industrial Research Publications. Tel. 816-444-6622; Fax 816-444-1140. If more detailed information on systematic layout planning is desired, reference Systematic Layout Planning by Richard Muther.

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Midwest



E-BUSINESS Conference

September 18-20, 2000 Howe Hall Iowa State University Ames, Iowa

Keynotes:

Daniel Amor Dr. Kristi Branson Dr. Bruce Brorson, Jay Krames Dr. Vadim Levitin

Pre-Conference Introductory Session

This presentation will empower you with a basic understanding of the digital economy and your place within it. This four-hour primer will define E-business and answer the question: "What does it mean to me?" Dr. Brorson's applied research in E-business has opened the way for many companies in Minnesota to participate in the worldwide digital economy. He's also amassed a wealth of knowledge on the strategies and technologies that lead to success. Dr. Brorson will explain how small businesses can leverage the electronic marketplace to expand their markets, communicate more efficiently with suppliers and customers, and exploit untapped opportunities.

Midwest E-business Conference

The Midwest E-business Conference offers a prime opportunity for individuals interested in E-business to learn about the field and network with leading academics and practitioners.

The conference is divided into two tracks: managerial strategies and the technologies that drive E-business. Each track will consist of eight presentations. In addition, five keynote addresses will explore topics of interest to all attendees. Two networking meetings will allow attendees to interface with each other, presenters and exhibitors.

This hybrid conference features leading players in the E-business world, as well as nationally recognized researchers and authors. Attendees will leave with an understanding of the opportunities that E-business offers in today's digital economy.

Sponsored By:

Center for Industrial Research and Service (CIRAS), Iowa State University College of Business, Iowa State University College of Engineering, Iowa State University Iowa Manufacturing Extension Partnership (IMEP) Iowa Procurement Outreach Center (IPOC) Iowa Small Business Development Center (SBDC), Iowa State University North Central Regional Center for Rural Development (NCRCRD)

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CALENDAR

August 15, 2000: Eastern Iowa Women/Minority/Small Business Owners Networking Breakfast

Radisson Hotel, Iowa City. Cost \$9.00. Register with Kathy Bryan, 800-458-4465 or email kbryan@ciras.iastate.edu.

August 16, 2000: One-day workshop "Managing the Purchasing Function of a Firm" by Harold Zarr Cost \$399. For course details, please contact Mike Willett at 319-266-3260, mwillett@ciras.iastate.edu.

September 13, 2000: One-day workshop "Constraint Management: Applying the Theory of Constraints (TOC)" by Tim Sullivan

Cost \$399. For course details, please contact Mike Willett at 319-266-3260, email:mwillett@ciras.iastate.edu.

September 15, 2000: Central Iowa Women/Minority/Small Business Owners Networking Breakfast

Downtown Holiday Inn, Des Moines. Cost \$9.00. Register with Kathy Bryan, 800-458-4465 or email kbryan@ciras.iastate.edu.

September 6, 2000: Iowa Venture Capital Conference

This conference is presented by the Iowa Department of Economic Development, The John Pappajohn Entrepreneurial Centers, and Equity Dynamics. There will be 6 sessions covering such topics as "Financing Entrepreneurial Ventures" and Entrepreneurial Success in Iowa". Keynote speakers are Governor Thomas J. Vilsack, Clark McLeod, and John Pappajohn. Registration cost: \$30. Contact 1-800-245-IOWA, Ext. 4730.

September 18-20, 2000: Midwest E-Business Conference

This conference will offer an opportunity for individuals interested in e-business to learn and network with both academics and practitioners in the field. The conference will be divided into two tracks; one focusing on managerial strategies and the other on technologies that drive e-business. Cost: Preconference \$50, Conference \$225 (After 8/15 \$75 & \$275). For more information visit website: http://www.ebusinessconference.org or call Paul Gormley 319-377-9839 (email pgormley@ciras.iastate.edu)

October 11, 2000: One-day workshop "Manufacturing Resource Planning (MRPII)" by Chuck Stewart

Cost \$399. For course details, please contact Mike Willett at 319-266-3260, or e-mail: mwillett@ciras.iastate.edu.

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