IOWA STATE UNIVERSITY

Center for Industrial Research and Service



Volume 60 | Number 2

Plastisol-coated

steel benches.

SEE INSIDE >

- 4 Barron Equipment Boosts Sales through Enhanced Digital Strategy
- 6 Serving All 99 Counties
- 8 Finding the Inventory and Warehouse Management Sweet Spot

ADA Enterprises Expands with Strategic Guidance from CIRAS

The Northwood-based manufacturer of plastisol-coated steel products had strong sales but recognized that future growth was constrained by limited space and workforce availability. Their plans involved investing millions in land acquisition, a substantial building expansion, and integrating robotics. To ensure success, they sought guidance from CIRAS.

"Turning to CIRAS was a natural choice," said ADA Enterprises president and CEO Tom Stensrud. "We've had a long and productive partnership with CIRAS, and we value their expertise."

Continued on page 2



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Since 1963, we have delivered proven services to enhance the performance of industry. Our approach—Engage. Educate. Embed.—creates specific solutions that allow each business and its community to prosper and grow.

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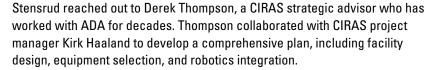
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 - · Center for Crops Utilization Research
 - · Center for Nondestructive Evaluation
 - · College of Engineering
 - Department of Environmental Health and Safety
 - · Engineering Career Services
 - · Extension and Outreach
 - · Iowa Grain Quality Initiative
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 - Structural Engineering Research Laboratory
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- · Community Colleges for Iowa
- Iowa Area Development Group
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- · Iowa Department of Transportation
- Iowa Economic Development Authority
- Iowa Farm Bureau
- Quad Cities Chamber

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"ADA had around 80 percent of the plan in place," said Haaland. "We helped refine the plan and provided clarity to confirm they were on the right path for such a high-stakes project."

"Partnering with CIRAS for guidance and expertise has become second nature for us. CIRAS is the perfect solution."

CIRAS broke the project into three phases. Haaland worked closely with ADA to optimize plant flow and layout, providing 2D AutoCAD designs to illustrate the proposed expansion and its functionality.

The \$5 million expansion is expected to generate \$9 million of economic impact for the company.

"Partnering with CIRAS for guidance and expertise has become second nature for us," said Stensrud. He

noted that while ADA is not large enough to employ a full-time engineer, they frequently need engineering and manufacturing advice. "CIRAS is the perfect solution," he added.

When seeking strategic input, Stensrud appreciates that CIRAS' primary mission is to help lowa companies succeed. "Their focus is on our success—not on selling us something," he explained.

This client-centric approach is a core value of CIRAS. "We're here to help companies make the best decisions, not to push specific products," Haaland emphasized.

ADA specializes in a niche market: outdoor picnic tables with unique plastisol coatings. Recently, CIRAS connected ADA with an Iowa State professor experienced with plastisol in another industry, sparking innovative ideas.





ADA ENTERPRISES

FOUNDED: 1974 | EMPLOYEES: 62

OVERVIEW: Manufactures plastisol-coated steel products.

IMPACT: \$3 million in increased sales, \$3 million in retained sales,

\$3 million in new products and processes.

"It's been transformative," Stensrud said. "Their insights have helped us think creatively about our processes."

ADA also benefits from CIRAS programs like the Iowa Lean Consortium (ILC), which provides education and collaborative learning to enhance efficiency and profitability.

As part of a previous expansion, CIRAS alerted ADA about surpassing the 50-employee threshold, triggering compliance with the Family and Medical Leave Act. CIRAS guided ADA through the process, ensuring a smooth transition.

CIRAS also supported ADA's adoption of robotics, assisting with grant applications, process design, equipment selection, and implementation coaching.

"One memorable project involved redesigning our plastic coating process," Stensrud shared. "Iowa State tested our proposed changes, helping us assess durability and make informed decisions."

Reflecting on the partnership, Stensrud said, "CIRAS has been instrumental in reducing risks and enabling our growth."

Above right: Close up of outdoor blue-colored bench. Below: ADA Enterprises outdoor picnic tables with umbrella.

"lowa State tested our proposed changes, helping us assess durability and make informed decisions."

For more information, contact Derek Thompson at thompson@iastate.edu or 515-419-2163.





Barron Equipment Boosts Sales through Enhanced Digital Strategy

A growing focus on digital transformation has helped Barron Equipment, a Davenport- and Des Moines-based material handling equipment company, significantly expand its reach and customer engagement. With support from CIRAS, Barron overhauled its online presence, achieving a sixfold increase in monthly leads and measurable growth in new markets.

Barron specializes in industrial doors, truck equipment, and loading dock solutions. Until recently, the company's digital presence did not fully align with its growth ambitions. Recognizing the need for improvement, Amanda Clark, marketing manager at Barron, sought assistance. Based on their needs, Neal Rabogliatti, a CIRAS third-party resource specializing in search engine optimization (SEO) and digital strategy connected Clark with CIRAS project manager Paul Gormley.

"We needed to make our website a more powerful tool for sales," Clark said.

With Rabogliatti as the initial point of contact, Barron took a strategic approach to enhancing its digital footprint. His guidance, combined with CIRAS expertise and resources, helped Barron reorganize its website structure to better meet customers' needs. By refining product categories and optimizing content, Barron targeted specific search terms aligned with customer purchasing behavior.

"We've built web personas based on data from our customer relationship management and enterprise resource planning

systems," Clark explained. "This helps us tailor our website to the people most likely to buy from us."

After establishing a strong SEO and web optimization foundation, CIRAS project manager Paul Gormley worked with Barron to expand its digital strategy. CIRAS connected the company with partners to create Google ad campaigns targeting customers in Iowa and Illinois.

"We focused on promoting industrial doors as well as truck and loading dock equipment," Clark said. "The results have been very positive, generating leads for our sales team and delivering a strong return on investment. A year ago, we were getting just a couple of leads per month through our site. Now, we receive 12 or 15 leads a month, and half of those are for doors."

"Barron has made tremendous strides in digital marketing by leveraging CIRAS' network and their own initiative," Gormley said. "Our role is to ensure lowa companies have access to vetted expertise they need to tackle whatever challenges they face."

For more information, contact Paul Gormley at gormley@iastate.edu or 319-721-5357.

Above: Barron Equipment Company Inc. building. Above Right: Barron Equipment website.

BARRON EQUIPMENT

FOUNDED: 1979 | **EMPLOYEES**: 75

OVERVIEW: Provides material handling solutions, including industrial doors and loading dock equipment. **IMPACT:** A revamped digital strategy boosted online leads, generating up to 15 monthly inquiries and expanding their reach with a positive return on investment.



In June 2024, historic rainfall caused flash floods across northwest Iowa, Minnesota, and South Dakota, leading to record-breaking river overflows. Homes, farmland, and companies near the West Fork of the Des Moines River faced devastating impacts. State and federal response teams, including FEMA, mobilized quickly to address the crisis.

Recognizing the urgent needs of Iowa communities, FEMA contacted Lindblom Services, Inc., a family-owned business in Sioux City specializing in waste removal solutions for

residential and commercial customers since 1969. During the flooding crisis, Lindblom provided critical services like portable toilets and wastewater removal, helping alleviate logistical challenges for FEMA responders and residents. The CIRAS APEX Accelerator program played a key role in helping Lindblom prepare for this opportunity by assisting with their System for Award Management (SAM) registration.

"When FEMA requested help with Lindblom's SAM registration, we were ready to assist," said John Michel, a government contract specialist with the CIRAS APEX Accelerator. "Our goal is to simplify the government contracting process and ensure companies like Lindblom are fully prepared to respond in emergencies."

During the floods, the APEX team collaborated with FEMA to identify additional vendors in the area, enhancing the agency's response efforts and positioning APEX as a key connector of resources in disaster preparedness in future emergencies.

"We were happy to assist during such a critical time," said Carl Lindblom, director of Lindblom Services. "We had the availability and manpower to do it. This was an opportunity to step up for our community."

For more information, contact John Michel at jmichel@iastate.edu or 515-686-0279.

When devastating floods struck northern Iowa, CIRAS, America's Small Business Development Center (SBDC), Iowa, and the University of Northern Iowa's Business and Community Services

Response to Northern Iowa

Floods

and Community Services
(UNI BCS) quickly mobilized
together to assess damage
and support affected
companies.

While direct impacts to manufacturers were limited, recovery was hindered by workforce shortages, housing challenges, and infrastructure disruptions. Small businesses felt the greatest impact with significant financial burdens, property damage, and cleanup delays. Many continue to face recovery challenges.

Collaboration between CIRAS, the SBDC, and UNI BCS streamlined messaging between community leaders, assistance providers, and public agencies. This ensured resources were directed to those in need and limited duplication of efforts.

If your business is facing a disaster and isn't sure what to do, contact CIRAS for guidance.

LINDBLOM SERVICES, INC.

FOUNDED: 1969
EMPLOYEES: 13
OVERVIEW: Provides portable toilets, septic treatments, roll-off containers, and recycling removal services.
IMPACT: Secured FEMA contracts, enabling the company to deliver essential services during a regional flood crisis.

Serving All 99 Counties

Trevor Bollers, owner of Letter B LLC, praised the Midwest Manufacturing & Networking: Find Your Competimates & Collaborate event on October 1 in Davenport. "I loved the Competimates event because you actually had a chance to connect with attendees and share your story," he said.

With 72 attendees, the event fostered networking and collaboration. Plans are already underway for the next session on October 1, 2025.

- When contamination impacted the lifespan of costly filters used to improve air quality for employees, Double HH Manufacturing in Rock Valley turned to CIRAS. Discussions led to strategic sampling, with measurements taken at Iowa State University's Chemistry Instrumentation Facility using FTIR (Fourier transform infrared) spectroscopy to pinpoint the source of the issue. With CIRAS' expertise and specialized equipment, Double HH identified contamination pathways, enabling rapid corrective action within days—the result was extended filter life and reduced downtime for filter changes.
- KT Pacer, led by Iowa State alumnus Carl Kirpes, is the nation's largest producer of aluminum feed trailers, supporting nearly 50 percent of U.S. livestock feed transport. Collaboration with Iowa State University's IMSE Capstone Program has helped KT Pacer drive agricultural innovation, engineering excellence, and economic growth—demonstrating the value of Capstone projects to Iowa communities. Recognizing this value, KT has hosted nine teams consisting of more than 30 students.

"ISU Capstone teams have been a catalyst for KT Pacer's continuous improvement, adding value to our company while providing students with real-world experience to launch their careers."—Carl Kirpes, President

Rocky Vest of Harvey Scott Midwest, LLC, turned a CIRAS "Meet the Buyers" event into a \$200,000 success. Connecting with a DMACC procurement agent, the company

showcased its AED products, leading to an introduction to safety leaders. Though DMACC was not actively seeking changes, the pitch inspired DMACC to explore new possibilities. Harvey Scott Midwest responded to a competitive bid and won, demonstrating the value of networking and delivering innovative solutions.

Since its start in 2010, the **lowa Lean Consortium (ILC)** has grown into a network of more than 100 organizations, spanning 69 lowa counties and 8 states. Dedicated to fostering continuous improvement, the ILC connects members from all sectors of the economy to share best practices and advance Lean principles, driving innovation and success across companies and communities.

IMPACT
More than \$2.8 billion

CONNECTIONS
More than 4,600
distinct lowa clients served by CIRAS and our partners

JOBS
More than 33,900 jobs created or retained

LOCATIONS
Serving all 99 counties

LYON	08	SCEOLA			DICKINSON				
14		15			16				
SIOUX	0	'BRIEN			CLA				
94		20			30				
PLYMOUTH	СН	EROKEE			BUENA VIS			P	
16		8			16				
WOODBURY		.	IDA		SAC				
127			16			1(10		
MONONA		CRAWFORD			CARRO				
7		11			40				
HARRISON			SHELBY			1	AUDUBON		
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РОТТА			WATTAMIE			CASS			
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CIRAS Serves Iowa: 2020-2024

Distinct Clients Served WORTH **EMMET** KOSSUTH WINNEBAG0 MITCHELL HOWARD WINNESHIEK 12 21 12 **17** 22 15 PALO ALTO HANCOCK CERRO GORDO 29 FLOYD CHICKASAW ALLAMAKEE 23 **FAYETTE** CLAYTON 8 60 14 16 23 23 **DCAHONTAS** HUMBOLDT WRIGHT FRANKLIN BUTLER BREMER 26 23 19 13 12 8 DUBUQUE BLACK HAWK BUCHANAN DELAWARE WEBSTER GRUNDY **CALHOUN HAMILTON** HARDIN 24 143 **170** 41 **50** 11 7 27 29 JONES JACKSON TAMA BENTON LINN GREENE BOONE MARSHALL LL STORY **20** 21 10 17 365 13 229 32 30 CLINTON **CEDAR** 46 GUTHRIE DALLAS POLK JASPER POWESHIEK **IOWA** JOHNSON 15 243 18 102 1.086 35 32 23 201 SCOTT MUSCATINE 50 ADAIR MADISON WARREN MARION MAHASKA KEOKUK WASHINGTON **59 52** 23 25 4 14 LOUISA 9 JEFFERSON **ADAMS** UNION CLARKE **LUCAS MONROE WAPELLO** HENRY DES MOINES 15 6 23 8 8 19 41 16 49 TAYLOR RINGGOLD DECATUR WAYNE **APPANOOSE** DAVIS VAN BUREN 7 7 12 6 16 8 41





Left to right:

Attendees at the Competimates event; Carl Kirpes, president of KC Pacer, on production floor (photo credit: Richard Pratt, *Corridor Business Journal*); Employee from Double HH Manufacturing in a weld cell.

Finding the Inventory and Warehouse Management Sweet Spot

Dutchland Foods, a pastry producer based in rural Lester, lowa, has built its reputation on crafting delectable pastries like the cinnamon kouign amann—a fusion of croissant and cinnamon roll. Behind the scenes, balancing ingredient and packaging material levels efficiently without overstocking presents a complex challenge.

To address these needs, Dutchland turned to CIRAS.

"Like any manufacturer, Dutchland is focused on making its products and fulfilling customer needs," said Marc Schneider, CIRAS project manager. "Accurate, efficient inventory and warehouse management are essential to their bottom line."

Dutchland staff attended Inventory
Management 101 and Warehouse
Management 101 hosted by CIRAS,
focusing on fundamentals, inventory
accuracy, and optimization. "A 101
session is not intended to be a deep
dive," Schneider explained. "We start at
a ground level, beneficial for companies

with staff who lack formal training or have outdated knowledge."

Following the training, CIRAS provided coaching and developed an inventory-carrying cost calculator to guide Dutchland's purchasing decisions. The tool proved essential when Dutchland considered exporting kouign amanns to the United Kingdom, determining the optimal number of baking cups to stock.

"There's a risk of overstocking. Items have expiration dates, and this was a new item requiring significant space," said Matt Hartter, Dutchland's manager of shipping and inventory control. "We decided on six pallets—enough for a price break without excess storage costs."

Dutchland also reviewed safety stock levels using Economic Order Quantity (EOQ) and Maximum Daily Usage (MDU) methods, ensuring cost efficiency. An inventory accuracy self-assessment highlighted Dutchland's strengths and

opportunities, such as improving internal inventory tracking.

"Working with CIRAS was helpful, and there were a lot of applications

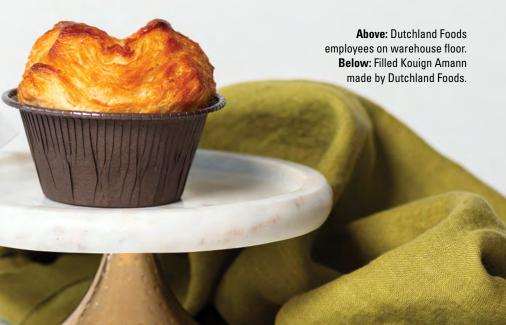
to consider for different departments," Hartter said.

The company also used export expertise from CIRAS when working on an international Accurate, efficient inventory and warehouse management is vital to their bottom line.

business deal to export pastries to the United Kingdom.

"Dutchland is a great example of how CIRAS can build strong relationships by starting with a focused area and expanding support," Schneider said.

For more information, contact Marc Schneider at maschn@iastate.edu or 563-221-1596.



DUTCHLAND FOODS

FOUNDED: 1992 EMPLOYEES: 83

OVERVIEW: Producer of a range of

pastries.

IMPACT: Reviewed inventory and warehouse processes to ensure optimal ingredient and packaging material levels.

FOR THE RECORD

CIRAS Support

- The Manufacturing Extension Partnership (MEP) program helps companies grow by implementing new technical and management practices.
 - Funding: U.S. Department of Commerce (\$2.5M in FY25)
- The Technology Assistance Program (TAP) provides expertise to Iowa businesses to reduce their risk of deploying technologies.

Funding: Iowa Legislature, Economic Development Appropriations Bill (\$1.4M in FY25)

The APEX Accelerator assists companies in navigating the contracting processes for federal, state, and local governments.

Funding: U.S. Department of Defense Small Business Programs (\$893,000 in FY24)

The Department of Energy (DOE) State Manufacturing Leadership Program supports deploying emerging smart manufacturing technologies.

Funding: U.S. Department of Energy (\$600,000 in FY25)

The Disadvantaged Business Enterprise (DBE) Supportive Services program helps business enterprises find success in competing for and performing on Iowa DOT contracts.

Funding: U.S. Department of Transportation (\$182,000 in FY24)

The University Center (EDA) program provides resources to help construction companies navigate the complexities of emerging technologies.

Funding: U.S. Department of Commerce (\$150,000 in FY24)

New CIRAS Advisory Board Members



Nicole Crain, President, Iowa Association of Business and Industry (ABI) Des Moines, IA



Darin Massner, CEO, Country Maid West Bend, IA

For more information about the CIRAS Industry Advisory Board and members, visit go.iastate.edu/QIO1DJ.



Upcoming Events

■ Gaining An Edge With The Strategic Marketing Blueprint

March 11, 2025 Virtual

Discover how to craft a winning marketing strategy using the Strategic Marketing Blueprint framework.

2025 Voorhees Supply Chain Conference

March 27, 2025 In Person, Ames

Engage with industry leaders and connect with fellow supply-chain professionals. This year's conference highlights three dynamic speakers and research updates from Iowa State's internationally recognized supply-chain management faculty.

Mastering Workplace Communication

April 9, 2025 Virtual

Strengthen your communication skills to improve teamwork and management. Gain insights into key principles, strategies, and tools that enhance productivity.

■ ILC Value Stream Thinking with Karen Martin

April 15, 2025 Virtual

Explore ways to break down silos, improve workflow, and drive performance with value-stream thinking and mapping.



Visit go.iastate.edu/BOEFSU for details on upcoming events.



An lowa State University micro-credential workgroup has spent the past several months building a foundation for the micro-credential program in preparation for a rollout in summer or fall 2025. Led by Tanya Austin, professional development and micro-credential program specialist at the Center for Excellence in Learning and Teaching (CELT), the workgroup established processes and standards for quality, as well as centralized branding and technology to ensure consistency across the university.

A major piece of the foundation is the micro-credential resources and support CELT staff developed for students, faculty, and employers, which includes a comprehensive micro-credential toolkit to help faculty understand and design micro-credentials.

"We are excited about the progress we've made since the announcement of micro-credentials in January," said Sara Marcketti, assistant provost and CELT executive director. "Based on months of research, collaborations with other institutions, and internal faculty feedback, we are eager to share our initial procedures, which we will continue to adapt as the program evolves."

Over the coming months, expect to see more opportunities for professional training through Iowa State University that include options for micro-credentials.

For more information, contact Tanya Austin at tjaustin@iastate.edu or 515-294-2016.

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Exploring the Future of Al in Iowa: Al Summit Drives Industry Adoption

Artificial intelligence (AI) is transforming industries, and CIRAS is helping Iowa companies adapt to this new era. At the inaugural Iowa Artificial Intelligence Summit for Industry, CIRAS brought together more than 130 attendees and 24 speakers in collaboration with partners, including Iowa State University's Ivy College of Business, Iowa State's Translational Artificial Intelligence Center, the Iowa Association of Business and Industry, and the Technology Association of Iowa.

The event featured 20 expert-led sessions showcasing case studies and practical applications in automation, machine learning, marketing and sales, and strategic decision-making. One participant remarked, "This event provided practical, relevant information and left me with new ideas to consider. I was surprised by the range of Al applications beyond the obvious."

Learn more about the AI Summit this May and other AI learning opportunities at go.iastate.edu/VEYNSL.

For more information, contact Paul Gormley at gormley@iastate.edu or 319-721-5357.

Superior Tube Products Develops a Model Internship Program

Superior Tube Products (STP), a Davenport-based metal tube fabricator, created an internship program for industrial and manufacturing systems engineering (IMSE) students with assistance from CIRAS. This initiative goes beyond providing students with real-world experience; it strengthens STP's operations and workforce.

SUPERIOR TUBE PRODUCTS

FOUNDED: 1991
EMPLOYEES: 60
OVERVIEW: Fabrication
company specializing in
high-quality tubing parts
and welded assemblies.
IMPACT: Internship
program enhances
workforce, saves
\$120,000 annually through
efficiency improvements,
and builds a talent
pipeline.

Too often, internships lead to disappointing experiences for both students and companies. STP took a different approach, collaborating with CIRAS to design a comprehensive program that includes recruitment, onboarding, project assignments, and post-internship feedback. CIRAS project manager Mayra Ramirez worked with STP to develop an adaptable training plan.

"Our internship program, designed with CIRAS, allows us to influence the incoming workforce and gain valuable insights into modern techniques," said Dana Schultz, STP's human resources and safety manager.

The program emphasizes meaningful work, with STP managers assigning interns real challenges. "We empower our interns,"

Schultz said. "They tackle bottlenecks, offering unique perspectives and creative solutions."

STP's commitment is paying off. Iowa State interns Karson Egger and Alexander Kovar analyzed cycle times, optimizing processes to save approximately \$120,000 annually. The program's success led STP to expand its internships from two to six students.

"We're a growing company, and interns help us build bandwidth," said Schultz. "Their contributions have been invaluable."

For more information, contact Mayra Ramirez at ramirezm@iastate.edu or 515-520-3101.

Iowa State University President Wendy Wintersteen and student Karson Eggers.



CIRAS CONTACT INFORMATION



Locate your county to find your best introduction to CIRAS.

Your strategic advisor can help connect you with the expertise you need for your business.



All staff information can be found at www.ciras.iastate.edu/staff-directory.

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WORKFORCE SOLUTIONS

Planning for Automation: Essential Steps for Success

Automation addresses challenges such as workforce shortages, capacity limits, rising costs, and quality concerns. However, many companies face difficulties with implementation. Success requires careful planning, including defining your scope, building the right team, managing risks, and ensuring lasting success.

- 1
- **Define the Scope:** Focus on automating what makes the most sense. Avoid attempting to automate everything at once or treating automation as an all-or-nothing proposition. Use a framework of must-haves, should-haves, and nice-to-haves to prioritize your needs. A phased approach can help you establish realistic goals for both the present and future.
- Build the Right Team: Your team is crucial to success. Assess whether you have the necessary expertise to plan, implement, and maintain automation. If not, consider external partners, particularly when technical resources are limited.
 - Mitigate Risks: Unexpected challenges do not have to lead to failure. Tools such as Failure Mode and Effects Analysis (FMEA) can help identify potential issues early. Test performance characteristics, run proofs of concept, and conduct repeated testing to ensure the technology performs as expected.
- Plan for the Long Term: Automation does not end with implementation. Develop a long-term plan that includes spare parts, maintenance schedules, and troubleshooting resources. Remote monitoring can also help address skill gaps.

Do not overlook change management. Automation often alters roles and workflows. Support your team through clear communication, training, and feedback opportunities. Helping employees adapt is essential for success.

How CIRAS Can Help

Automation does not have to feel overwhelming. CIRAS is here to guide you through every step—defining needs, identifying resources, managing risks, and ensuring long-term success. We are committed to helping you achieve your automation objectives. Contact us to begin the process.

For more information, contact Andrew Friend at afriend@iastate.edu or 515-520-2803.