



## Experts: Be Prepared for Anything during COVID Recovery

*Iowa companies may be well positioned to navigate the coronavirus, but experts say they should be prepared for surprises during what is likely to be a long and unpredictable economic recovery.*

Business leaders shouldn't expect to suddenly reemerge in rosy times, they warn. Instead, plan for all contingencies, and don't count on being able to relax anytime soon.

"I think basically what's going to happen is that the economy is going to plug along until there's some small interruption, and then we'll have a setback," said Mike O'Donnell, program director for the CIRAS Manufacturing Extension Partnership. "The looming threat is that if you're not prepared to go through a sawtooth-type recovery, then

that can be dangerous. Lack of cash flow is really dangerous as a manufacturer."

In Iowa and elsewhere, manufacturing has been an up-and-down experience for some time (page 3, Figure 1).

The national manufacturing PMI, an economic survey tool used to forecast business expectations over the next few months, measured below 50 for five of the last seven months before the pandemic hit. (A score of 50 is the neutral line between a growing or contracting manufacturing sector.)

Iowa-specific figures were below 50 for three of those seven months.

"I think one of the key things to kind of keep in the back of our minds is that manufacturing was a little soft even before COVID-19 hit," O'Donnell said. "Even if we come back to where we were, that's still not great."

PMI figures for the first three quarters of 2020 show Iowa cratering at a 34.4 in April. But the index crossed the 50 mark in July and measured 56.4 in August.

That and other data encourage a cautious optimism among Iowa business

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leaders. A June survey by the Iowa Association of Business and Industry (ABI) showed that more than 76 percent of the ABI's board members believed their sales would be steady or higher in the third quarter of 2020. Sixty percent intended to move ahead with planned Q3 capital expenditures. (By a September survey, the percentage planning Q4 capital expenditures had slipped slightly but remained at 57 percent.)

"I think it's realistic," said ABI president Mike Ralston. "We have what looks to me to be a pretty good shot at riding this thing out and not falling off the cliff."

"But at the same time, what happens if there's a pretty dramatic second wave (of COVID-19)?" Ralston added. "What happens if employees don't come back?"

Along with revenue loss, employee well-being and workforce stability have been dominant concerns for Iowa employers throughout the pandemic, according to a 23-week CIRAS survey of Iowa manufacturers (Figure 2). Worries about supply chain difficulties increased slightly after the May wave of business reopenings, then appeared to ease.

"Most of Iowa's largest companies have been very diligent to put in place processes and controls to minimize the risk of COVID-19 to their workforces," O'Donnell said. "But among smaller manufacturers, too many are following the 'it's not going to happen to me' mindset and either have not put enough controls in place or have already started to relax those controls beyond what is prudent."

The result, experts believe, is that some businesses may be fine going forward. But others won't be ready if another

"Most of Iowa's largest companies have been very diligent to put in place processes and controls to minimize the risk of COVID-19 to their workforces. But among smaller manufacturers, too many are following the 'it's not going to happen to me' mindset and either have not put enough controls in place or have already started to relax those controls beyond what is prudent."

— Mike O'Donnell

outbreak arrives. And you may not be able to tell which is which—even among the people you do business with—until it's too late.

"I believe we're going to see continuous economic improvements and interruptions over the next year," O'Donnell said. "You're going to have random companies being hit by people being out or the disruptions of having to shut down because of an outbreak."

Many Iowa companies are likely to face headwinds from a declining nationwide demand, according to Dave Swenson, a research scientist in the

Department of Economics at Iowa State University. Food-related businesses should remain stable, Swenson said, but Iowa producers of big-ticket items such as electronics and large machinery are likely to face troubled times throughout the next year.

"In a recession, no matter what, just by definition demand is down," Swenson said. "You can't sell it if nobody wants to buy it, and you can't build it if you can't get the parts. The overall economy can't thrive until the virus is under control."

So how should business prepare for a potentially bumpy road?

The first step, O'Donnell said, is to revisit your supply chain strategy. Make sure you have enough on hand to keep your company running, and try to do business with more people so you have options if a problem develops. Learn as much as possible about everyone involved with your business and what potential disruptions you could face.

Smaller firms that sell to large manufacturers also should be prepared

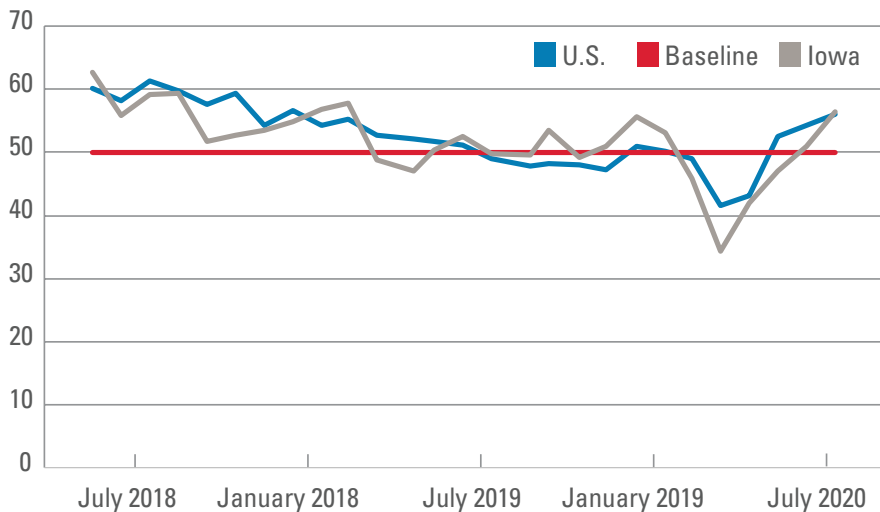
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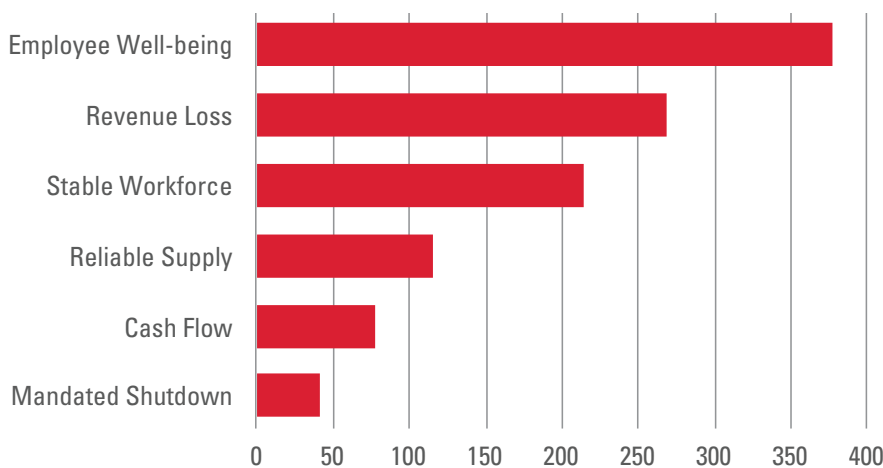
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**Figure 1:** Historical data show the U.S. PMI, an economic survey tool, has been lackluster for months. Experts view PMI levels below 50 as a sign of a contracting manufacturing economy.



**Figure 2:** A CIRAS survey shows Iowa companies primarily were concerned with COVID's impact on the well-being of their employees. (Total respondents = 999)

for the possibility that one day you might have to prove to an OEM that you're taking all reasonable steps to protect against COVID-19.

All companies should stay in close contact with customers and be continually reevaluating markets, O'Donnell said. Are you still targeting the correct people in this new world? Are you doing enough to reach customers over the Internet?

Experts agree that the future appears to tilt upward. But the climb to economic recovery is likely to be slow and bumpy.

"I think we're going to ride this out, and maybe we won't grow in 2020 or the first part of 2021," Ralston said. "But eventually, we're going to be fine."

➤ **For more information about planning your response to COVID-19, email [ciras.info@iastate.edu](mailto:ciras.info@iastate.edu).**

## Weekly COVID-19 Roundtable Discussions for Manufacturers

**Tuesdays**

7:30 a.m.

Online presentations on a weekly topic followed by questions and answers.

## Creating Your Government Marketing Strategy

**November 17, 2020**

Webinar. How to define and locate potential government customers for your business.

## Virtual Lean Coffees

**Twice per month**

**2nd Thursdays**

11:00 a.m.

**3rd Fridays**

9:00 a.m.

## SBA's Surety Bond Guarantee Program

**December 1, 2020**

Webinar on an SBA program to help eligible small businesses with bonding requirements.

## Successful Food Product Development

**November 30–December 4, 2020**

Three-part webinar on bringing new product to marketplace.

## Basics of Demand-driven Inventory Planning

**January 27, 2021**

Webinar. Tools to manage inventory in today's environment.

**For details on these and other events, visit [www.ciras.iastate.edu/events-workshops](http://www.ciras.iastate.edu/events-workshops).**



# CIRAS Market Research Helps Goodwill Plan Future Growth

*Goodwill of the Heartland took its first steps into a new industry this summer—a journey that will lean partially on a map CIRAS helped the nonprofit create.*

The Iowa City-based organization, which provides job training for people with barriers to independence, long has been involved in contract manufacturing for Iowa companies. Goodwill performs various production and packaging tasks for Whirlpool, Collins Aerospace, Proctor & Gamble, and others as a way to teach their clients on the job.

Three years ago, the organization decided it was time to broaden its efforts.

“We thought we could take what we’re good at and diversify our business,” said Jessica Schamberger, vice president of operations for Goodwill of the Heartland. “We decided to get into food packaging—and while we’re at it, create training opportunities and talent pipelines for manufacturers that need workforce.”

The new business involves buying truckloads of soybean oil, enriching it with vitamins A and D, then repackaging it into 4-liter containers for the USDA. Finished cans will be used by the U.S. Agency for International Development (USAID) as aid distributed to 70 countries around the globe.

The USDA contract was obtained through a special federal program that gives purchasing priority to nonprofits providing jobs for people with disabilities. Goodwill now has the capacity to produce more than 1,500 metric tons of soybean oil per month and create up to 40 jobs.

Goodwill’s new facility, based in a renovated food service building in Coralville, has the ability to manufacture more. But what should be done with that extra capacity? Officials wanted that question answered before the business launched.

CIRAS project manager CJ Osborn helped the agency understand growth opportunities involving food services and food manufacturers. Selling to those markets, Osborn estimated, ultimately could generate an additional \$5 million of revenue.

“It was very helpful,” Schamberger said. “We don’t have the resources in house to do that kind of market research. . . . CJ’s work inspired confidence that we could grow that business beyond this first step.”

For now, however, Goodwill is content to step carefully. The soybean business started with nine employees in July and plans to ramp up production gradually. Anything could happen after that.

“First,” Schamberger said, “we want to get good at what we do.”

➤ **For more information about market research, contact CJ Osborn at [cjosborn@iastate.edu](mailto:cjosborn@iastate.edu) or 641-840-0505.**

Photos: Inside the Goodwill soybean facility.

“We don’t have the resources in house to do that kind of market research. . . . CJ’s work inspired confidence that we could grow that business beyond this first step.”  
— Jessica Schamberger

## AT A GLANCE

**Heartland Goodwill Enterprises**  
**FOUNDED:** 2013  
**EMPLOYEES:** 40  
**OVERVIEW:** Founded by Goodwill of the Heartland to operate businesses that provide job training for people with disabilities.  
**IMPACT:** Following market research could provide more than \$5 million of additional revenue.  
**LEARN MORE:**  
[www.goodwillheartland.org](http://www.goodwillheartland.org)



Testing VR at a Vermeer trade show booth early this year.

## Vermeer Using Virtual Reality to Train Technicians, Captivate Customers

An Iowa equipment manufacturer who turned a CIRAS educational event into major experiments with virtual and augmented reality soon expects to see huge dividends in lower training costs and more attentive customers.

Vermeer Manufacturing Company, a Pella-based manufacturer of industrial and agricultural equipment, formed its own three-person augmented reality team in 2017, shortly after the company attended a CIRAS educational event on the topic.

Three years later, Vermeer has created a successful virtual reality marketing tool and soon will launch a new VR program to train dealer technicians how to service and repair Vermeer equipment.

Alan Callender, Vermeer's augmented reality project manager, said the technologies have enormous potential if used intelligently.

"We use it to tell compelling stories, and we do an ROI on everything," Callender said. "We always try to figure out the biggest impact we can make and then determine what we want to do with it."

Vermeer tests each potential use for the new technology by having its programmer and user-experience designer (a graduate of Iowa State's Industrial Design Studio) work together

on a proof of concept. Once company leaders feel certain that a given use can be accomplished at a profitable cost, they develop the project to completion.

Early successes included a 360-degree video of the world's first self-propelled hay baler that now has been seen by more than 3,000 customers at trade shows around the country.

Callender said Vermeer's real-world, in-person technician training programs currently have waiting lists two or three times longer than the number of available seats. Virtual reality training will help Vermeer meet that demand quickly and efficiently around the world.

"We could do that with WebEx," Callender said, naming a popular software for online meetings. "But these technicians, their happy spot is hands-on. Sitting in front of a computer is not where they want to be."

Vermeer's experiments have included both virtual reality, in which participants don special headsets to immerse themselves in a digital environment,

and augmented reality, which uses equipment to add digital information to participants' views of the physical world. (CIRAS is hosting a webinar on augmented reality on November 19.)

"We always try to figure out the biggest impact we can make and then determine what we want to do with it."

— Alan Callender

For training and marketing, VR seems most effective, Callender said.

"When you stick somebody in those glasses, they're completely blocked off from everything else," he said. "It's easy for them to focus on you because it's just you, them, and the equipment."

### AT A GLANCE

**Vermeer Manufacturing Company**

**FOUNDED:** 1914

**OVERVIEW:** Manufacturer of industrial and agricultural equipment.

**EMPLOYEES:** 2,014

**IMPACT:** More than \$900,000 from CIRAS projects over the past five years.

**FOR MORE:** [www.vermeer.com](http://www.vermeer.com)

➤ For more information, contact John Roberts at [jarobert@iastate.edu](mailto:jarobert@iastate.edu) or 515-294-0932.



Outreach event in February 2020 for Des Moines federal courthouse project. Justin Niceswanger (far left) and Elizabeth Campbell (far right) were part of a group that included Ryan Companies, PTAC, and the U.S. SBA.

## CIRAS PTAC: A Smart Way for Construction Companies to Build Their Teams

*Building a new federal courthouse in downtown Des Moines is much more complicated than signing the paperwork and pouring concrete.*

“It comes with significant challenges,” said Elizabeth Campbell, director of Emerging Business Inclusion for Ryan Companies, the Minneapolis-based firm that landed the Des Moines courthouse’s three-year, \$105 million contract.

One of them is the subcontracting.

Ryan, like any large company awarded a federal government contract worth more than \$700,000 (\$1.5 million for construction), is legally required to spend part of that amount on small businesses. Exact details of any given subcontracting plan are confidential, but the U.S. Small Business Administration has a nationwide target of annually spending 23 percent of the government’s procurement money on small businesses.

What does that mean? For Ryan Companies, it meant the need to come

into town and hire 11 different types of construction contractors—companies that then would require vetting to make certain that Ryan’s potential subcontractors met the legal definition of a small business, that they were properly registered with the government, and that the companies were effective enough to deliver on the contract requirements.

“The alternative for us would be to blindly go into the (online) Dynamic Small Business Directory, do NAICS code searches by geography and business type, and have no idea when we call the names up what those companies’ capabilities are,” Campbell said.

Instead, Ryan turned to CIRAS for help.

Specialists with the CIRAS Procurement Technical Assistance Center (PTAC) worked closely with Ryan Companies

### AT A GLANCE

#### Ryan Companies

**FOUNDED:** 1964

**OVERVIEW:** Commercial real estate construction.

**EMPLOYEES:** 1,200

**IMPACT:** CIRAS involvement helped the company save time and money fulfilling its contract.

**FOR MORE:** [www.ryancompanies.com](http://www.ryancompanies.com)

to hold two “small business outreach” events in February 2019 and February 2020 so the company could recruit prospective subcontractors. Both before and after those events, CIRAS worked with Ryan to make certain that subcontractors understood all the relevant contract clauses and how to register their businesses in the government’s contract management computer system.

CIRAS also created a special reference guide to help would-be subcontractors determine their eligibility for a host of special socioeconomic programs. The programs provide special competitive

advantages for companies owned by women, service-disabled veterans, or socially and economically disadvantaged individuals, as well as businesses located in certain economically disadvantaged districts.

“Some contractors might not have much government contracting experience—or at least not at the federal level,” said CIRAS government contracting specialist Justin Niceswanger. “We certainly can help those smaller companies understand what they need to know.

“But we also can help the larger companies understand their marketplace and help them find the contacts they need.”

Campbell praised the value CIRAS brings to larger businesses simply by understanding Iowa’s communities and the small businesses within them.

“Prime contractors may not even be aware of all the valuable services that CIRAS provides to companies like us,” she said. “They’re great partners to work with.”

Renderings: Mack Scogin Merrill Elam Architects



➤ **For more information, contact Justin Niceswanger at [jnice@iastate.edu](mailto:jnice@iastate.edu) or 515-509-9565.**

## CIRAS Helps Copywriter+ Ink Contract

A Des Moines freelance writing business found financial stability in the opening months of the pandemic after CIRAS helped it pursue and obtain a government contract.

Kristi Kenyon, owner of Copywriter+, said her company was roughly three years old when she met Justin Niceswanger, a government contracting specialist with the CIRAS Procurement Technical Assistance Center (PTAC), at a networking event.

Before that, government contracting “wasn’t something that I even knew was a possibility” for writing jobs, Kenyon said.

“Justin was super helpful,” she said. “As soon as I learned of the opportunity (through a BidMatch email arranged by CIRAS), I reached out to him. . . . He really helped me through the whole process.”

Niceswanger said many businesses have difficulty with the complications of their first government bidding process. “A lot of it is based on whether you respond in the proper format, whether you submit everything that they ask for,” he said.

“We can help our clients with that process, help them understand the proposal.”

Kenyon ultimately received a renewable six-month contract to update website copy and create social media posts and other content for the City of Des Moines. She estimates that the contract initially will be worth \$12,000 to \$15,000 for her business—a welcome bit of security in the time of COVID-19.

Kenyon plans to pursue more government contracts, and she praised CIRAS for guiding her through the process.

“The biggest help was just in making sure that I was coming across in the most professional and successful manner possible,” she said. “It’s been great.”

**For more information on BidMatch or proposal review, contact Justin Niceswanger at [jnice@iastate.edu](mailto:jnice@iastate.edu) or 515-509-9565.**



### AT A GLANCE

#### Copywriter+

**FOUNDED:** 2017

**OVERVIEW:** Freelance content creation including newsletters, website copy, social media, and email.

**EMPLOYEES:** 1

**IMPACT:** At least \$12,000 for the first phase of a renewable six-month contract.

**FOR MORE:**  
[www.copywriterdsm.com/](http://www.copywriterdsm.com/)

# SSAB Finds Valuable Partner in Iowa State Students, Faculty Research

*A Muscatine steel factory is on the verge of innovation after increased student involvement developed into major research at Iowa State University.*

SSAB, an international steel producer, recently completed CIRAS-arranged research and filed for a patent on a new optical fiber technology for measuring the temperature of molten steel in electric arc furnaces in real time. The company also is experimenting with Ames Laboratory on ways to improve the rolled-steel alloys SSAB manufactures.

Combined, the two projects should have an economic impact of more than \$11 million.

Sunday Abraham, research and development director at SSAB Americas, said the company recently increased its involvement in Iowa State's senior "capstone" projects.

One such project, in which Industrial and Manufacturing Systems Engineering students were asked to design a new way to measure molten steel temperatures exceeding 1,600°C, led to successful faculty research. Abraham said an approach now is being developed for industrial use.

When ready, "it will make us much more efficient and much more consistent," Abraham said. "Saved time will result in increased productivity."

SSAB also has been working with Ames Laboratory to develop new procedures for making alloys. Matt Besser, director of the laboratory's Materials Preparation Center, said companies can get access to equipment and scientific staff members when they aren't busy with federal research.

"It will make us much more efficient and much more consistent."  
— Sunday Abraham

CIRAS project manager Adam Boesenberg, who first connected SSAB with Ames Laboratory, said such arrangements help companies test new approaches without shutting down enormous production lines.

To deliver the best products, companies "always need to be innovating," Boesenberg said. "That's not always easy to do with the equipment you have in house."

➤ **For more, contact Adam Boesenberg at [aboesemb@iastate.edu](mailto:aboesemb@iastate.edu) or 515-294-5903.**

## AT A GLANCE

### SSAB

FOUNDED: 1993

OVERVIEW: Global steel manufacturer.

EMPLOYEES: 460 (Iowa)

IMPACT: Roughly \$11 million.

FOR MORE: [www.ssab.com](http://www.ssab.com)



Sunday Abraham, left, and Randy Petty, superintendent of primary steelmaking for SSAB Iowa.

## AT A GLANCE

### 43 North Iowa

FOUNDED: 2019 under current name (NIVC in 1970).

OVERVIEW: Transitional living and employment support for people with disabilities.

EMPLOYEES: 98

IMPACT: Increased stability for merged organization.

FOR MORE: [www.43northiowa.org](http://www.43northiowa.org)

## CIRAS Helps 43 North Iowa Chart New Course

*Despite a global pandemic, two north Iowa service organizations will be ending 2020 on firmer footing thanks to a merger facilitated by CIRAS-arranged coaching and strategic planning.*

North Iowa Vocational Center Inc., or NIVC Services, formally joined with North Iowa Transition Center, or NITC, at the beginning of this year to become 43

North Iowa—a single, combined social services agency in Mason City.

Named after Mason City's latitude, the new agency combines 50 years of NIVC experience training people with mental and developmental disabilities for employment with NITC's 40 years of providing residential mental health services.

Sherry Becker, executive director of 43 North Iowa, said both agencies—



# Mary Greeley Medical Center Uses Lean as Bridge to Baldrige

Mary Greeley Medical Center capped a 10-year journey in 2019 when the hospital became Iowa's first-ever organization to receive the Malcom Baldrige National Quality Award.

It happened, in part, because Mary Greeley used Lean techniques to trim waste from hospital activities and create a more efficient, more patient-centered environment.

Karen Kiel Rosser, vice president and quality improvement officer at the Ames-based medical center, said Mary Greeley initially adopted the Baldrige criteria because "we knew we had a way to demonstrate our financial strength (through industry standards such as generally accepted accounting principles), but we didn't have the same standards to demonstrate our quality."

In adopting Baldrige, Mary Greeley was chasing the highest possible standard for performance excellence that a U.S. company could pursue. To achieve it, the hospital turned to Lean and Six Sigma. Mary Greeley joined and received training from the Iowa Lean Consortium, beginning a long and deep relationship.

Kiel Rosser, ILC Lean Champion of the year in 2015, said Lean now is an integral part of Mary Greeley's culture. Over five years, more than \$5 million of "hard savings" resulted from "100-Day Workouts"—events the hospital used to find revenue-saving or cost-reducing ideas that could be designed and implemented in 100 days.

Patients benefited as well. Mary Greeley therapists became 25 percent more efficient when they switched to a patient-centered scheduling approach instead of simply sending therapists (without appointments) to meet patients in their rooms. Baldrige recognized this change as a best practice.

Kiel Rosser said the hospital is "constantly looking for new ways to do things and new techniques outside our industry."

"That's the value we get from the ILC," she said. "There's always something new that we can learn."

➤ **For more information, contact Tracy Schuster at [tschust@iastate.edu](mailto:tschust@iastate.edu) or 515-715-0164.**

"We are constantly looking for new ways to do things and new techniques outside of our industry."  
— Karen Kiel Rosser



and their nearly \$7.5 million combined budgets—were threatened by a changing U.S. health care system and needed to combine forces.

"CIRAS definitely can take credit for helping us navigate through this process," Becker said. "It hasn't been easy, but we really are where we need to be."

The merger was only an idea in 2018 when Becker approached CIRAS account manager Derek Thompson for advice. CIRAS strategic advisor

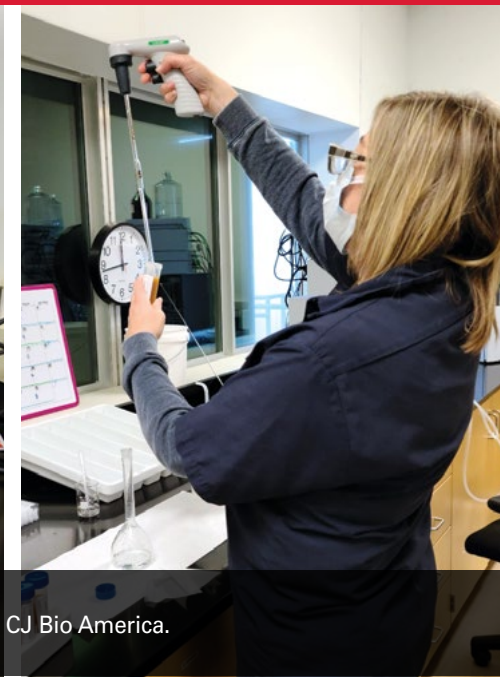
Joy Donald helped Becker prepare the merger idea for NIVC's board of directors, then matched her with a consultant to help with team building and meshing the two organizations' cultures. Roughly 50 employees from both organizations met in two sessions to talk through their needs and develop a combined vision for the future.

Becker, who retires at the end of 2020, believes she'll be departing an agency that's more attractive to the entities

who pay for its services because it now provides both in-home and on-the-job assistance.

"Financially, we're solid," she said. "And the complementary sides of the organizations are only going to get better working together."

➤ **For more information about strategic coaching, contact CIRAS account manager Derek Thompson at [thompson@iastate.edu](mailto:thompson@iastate.edu) or 515-419-2163.**



Scientists perform testing and sampling at CJ Bio America.

## Industry 4.0 Assessment Helps CJ Bio Start Smart with Tech Upgrades

*A Fort Dodge feed ingredients company expects to save millions of dollars by implementing technology upgrades identified through a CIRAS Industry 4.0 assessment.*

CJ Bio, which produces amino acids for livestock and poultry feed, expects to have the top two or three items of improvements on its list completed by the end of 2020. The list, which details places where technology enhancements could have the largest impact on the company's bottom line, was created through a CIRAS-guided process of reassessing CJ Bio's current use of technology in its business.

"What the Industry 4.0 process did was allow us to take experts from our various departments and get them all together to make a decision," said CJ Bio operations manager Luke Palmer. "It's sometimes too big of a beast to manage unless you make an effort to pull everyone together and have an outside party help you assess everything."

Industry 4.0 is a term used to describe society's fourth industrial revolution—

the point where all equipment and processes in a manufacturing setup are interconnected, where data are continuously gathered via sensors, analyzed by computer models, and used to optimize processes on the fly.

CIRAS project manager Andrew Friend said CJ Bio, like many companies, knew it had room for improvement.

"You get so busy putting out fires that you never ever get a chance to look at the bigger picture and say, 'OK, how do you stop fires from getting started in the first place?'" Friend said. "This pushed them over the threshold to say, 'OK, let's do something about it.'"

Last fall's assessment involved several hours of CIRAS observing CJ Bio processes. That was followed by a CIRAS presentation on various technologies making up Industry 4.0. Then, people from throughout the

### AT A GLANCE

#### CJ Bio America

FOUNDED: 2011

OVERVIEW: Manufacturer of amino acids for livestock and poultry feed.

EMPLOYEES: 170

IMPACT: More than \$6 million from CIRAS projects over the past four years.

FOR MORE: [www.cjbio.net/en/index.do](http://www.cjbio.net/en/index.do)

company met in groups to develop improvement ideas. Finally, the entire group created a ranked list of places to start and developed a business case for each project.

Palmer said the company's initial priorities include automating some of the sampling and testing required during its production process and overhauling the way it handles bulk material waiting to be shipped. Together, those two changes alone will reduce costs by more than \$1 million.

CIRAS "allowed us the melting pot we needed" to make smart choices, Palmer said. "They just had some really interesting tools to facilitate the discussion."

➤ For more information about the CIRAS Industry 4.0 assessment, contact Andrew Friend at [afriend@iastate.edu](mailto:afriend@iastate.edu) or 515-520-2803.



## TG Industries Flips a Switch to Cut Costs, Stabilize Supply

An Armstrong maker of hydraulic lift vehicles expects to save money and eliminate production delays after CIRAS helped the company find an alternative for a problem part.

TG Industries, which also does business as Arm Lift, started using a particular type of rocker switch in its vehicles in 2000, said engineer Loren Kinnander. By 2019, the once-standard switches were no longer common. Prices rose as they became harder and harder to obtain from the company's single overseas supplier.

Kinnander said the company regularly would purchase four to six months of switches at a time and "hope we'd get the next batch before we ran out."

Chris Hill, director of the CIRAS Technology Assistance Program (TAP), ultimately helped TG Industries rethink its product design. CIRAS used a 3D printer to create new adapter flanges for the switch—prototypes that the company then could test in existing products.

Arm Lift now uses a new Iowa-produced plastic adapter alongside easier-to-get rocker switches. Kinnander estimates the changeover's total benefit ultimately will top \$150,000—including lowered costs, reduced downtime, and an expected increase in sales.

"It really worked out quite well," he said. "I'm kind of excited."

**For more information, contact Chris Hill at [chhill@iastate.edu](mailto:chhill@iastate.edu) or 515-313-8251.**

### AT A GLANCE

#### TG Industries Inc.

**FOUNDED:** 1973

**OVERVIEW:** Maker of a wide variety of hydraulic lift vehicles.

**EMPLOYEES:** 12

**IMPACT:** More than \$150,000 will ultimately be saved by using newer, more common switches.

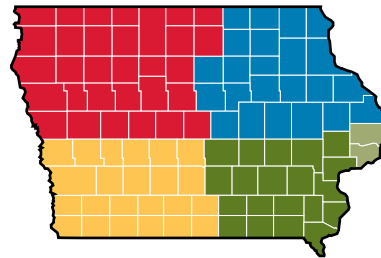
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In addition to four regional account managers, CIRAS has seven regional government contracting specialists,\* a statewide account manager for the food industry, and one for economic development. More staff information can be found at [www.ciras.iastate.edu/staff.asp](http://www.ciras.iastate.edu/staff.asp).



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## GROWING YOUR BUSINESS

# Gain a Competitive Advantage with Cybersecurity Certification *By Jodi Essex*

*Technology continues to be a rapidly changing part of our world, but there are strong benefits to keeping up—and keeping ahead of your competitors.*

One of those advantages comes in the area of cybersecurity. Businesses that are able to achieve cybersecurity certification—independent proof that they are able to protect and maintain important business data—soon will have a competitive advantage due to the federal government's implementation of its new Cybersecurity Maturity Model Certification (CMMC).

Once fully implemented, the CMMC will require companies to obtain certification and demonstrate their compliance with cybersecurity regulations in order to be awarded a federal contract or subcontract with the U.S. Department of Defense.

The CMMC is structured into five levels, with Level One being consistent with the basic cyber hygiene requirements outlined in FAR 52.204-21 and Level Three closely mirroring the requirements of NIST SP 800-171, with a few additions. This structure allows companies to show progression in their cybersecurity practices over time while providing the government confidence that sensitive information is handled properly.

Many companies have avoided this topic to this point. Others have decided it's not worth the time and money it would take to achieve cyber compliance, and they therefore are opting out of government contracting altogether. As a result, companies that take the strategic approach and achieve compliance will find a playing field with fewer competitors—one where they may be able to easily position themselves for long-term growth.

While cybersecurity is a critical need, the government also understands that this is an additional burden on companies. To help mitigate that, federal officials have stated that costs associated with compliance will be allowable and reimbursable on government contracts. They've also developed free resources, such as Project Spectrum, to assist companies with self-implementation, and they've provided support through the CIRAS Procurement Technical Assistance Center (PTAC) and Manufacturing Extension Partnership (MEP) programs.

CIRAS can help you understand the impact this may have on your business and provide implementation assistance.

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