

AT A GLANCE

SUCCESSION PLANNING RESOURCES

NIACC PAPPAJOHN ENTREPRENEURIAL CENTER

provides workforce development training for executive leadership and helps companies with the business aspects of succession planning—particularly with marketing, customer relationships, finances, lender relations, and human resources.

IOWA SMALL BUSINESS DEVELOPMENT CENTERS' (SBDC)

succession planning services involve sales, operations, and finance. The center is state and federally funded. The SBDC hosts a variety of workshops to educate business owners on succession planning.

TRANSITION POINT BUSINESS ADVISORS

is one of many private consultants with whom CIRAS has worked over the years. Transition Point offers a range of business continuity and succession planning services. These include plans that seek to identify and unify the business vision, a business continuity plan for handling buy/sell agreements, a business succession plan to address management and ownership transition issues, a personal financial plan, a personal estate plan, and an annual business review.



Succession Planning: There's No Time Like the Present

When Ralph Wilson, longtime owner of the NFL's Buffalo Bills, died last March, speculation immediately sprouted over what would happen next. Who would own the team in Wilson's absence? Would his family have to sell it to cover estate taxes? Would the current president and CEO stay on the job? Would the team move to a new city if it was sold? What would happen to Buffalo?

Such questions are common in transitions. CIRAS can help Iowa companies answer them ahead of time and avoid needless concern.

Experts say succession planning is an important, yet often-overlooked, step to ensuring a business' lasting success. No matter what business you're in—from a family-owned farm to a private manufacturing company—the goal should be to lessen the burden on an owner's family, employees, and community and to ensure that the company thrives long after his or her departure.

"It's important to have a succession plan because eventually owners will leave the company," said Sean Galleger, CIRAS account manager. "Without a succession plan, the future of the business could be in the hands of attorneys or family members not familiar with the business, and the owner's wishes may not be transferred."

CIRAS can connect businesses to numerous resources throughout Iowa to help with different aspects of succession planning. CIRAS' connections include the Iowa Small Business Development Centers (SBDC), North Iowa Area Community College's (NIACC) John Pappajohn Entrepreneurial Center, and Transition Point Business Advisors, to name a few.

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On the Cover: A good succession plan will keep your business from toppling due to problems caused by your departure.

CIRAS Mission: *Every day we will enhance the performance of industry through applied research, education, and technical assistance.*

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"Planning is the key thing that distinguishes successful transitions from unsuccessful transitions," said Dan Winegarden, director of incubation and acceleration for NIACC's John Pappajohn Entrepreneurial Center. "It's a form of buying insurance. It protects the owner's family wealth, legacy, and succession, and it protects the employees."

Failure to plan could put more financial burden on a company or family members, create uncertainty for employees and customers, or spark disagreements over ownership and management. It eventually could put the company out of business, which would hurt employees and the community.

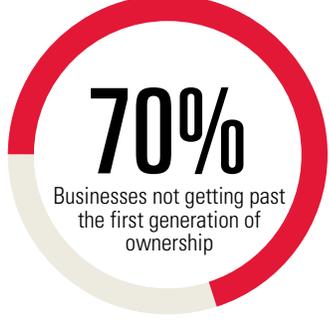
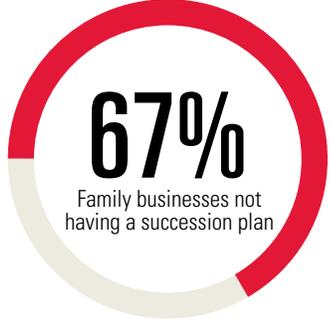
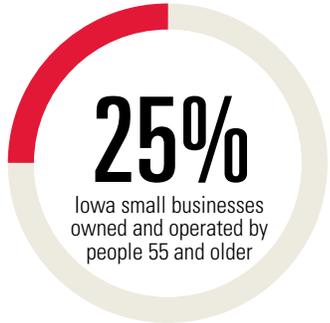
Creating a succession plan typically takes two to five years. It involves creating a business vision, including a plan for growing the business, getting the business finances in order, and determining the owner's personal financial and retirement needs. The owner, along with a team of professionals, identifies ways to minimize personal and business tax implications. The owner then creates a plan for change of ownership, identifies and mentors future company leaders, and communicates with key employees and family about the transition expectations and timeline.

"There's no one right way to do a business succession plan. Every owner, business, and industry is different, but nobody can do it alone," said Lisa Shimkat, statewide director of the SBDC and an Iowa State University employee. "To develop a succession plan, you'll need to bring together a team of professionals to help—business advisers, an accountant, an attorney, your company's leadership team, family members, and a certified financial planner."

Alan Richardson, chief operating officer at Transition Point Business Advisors, says the best time to start succession planning is when the owner is in his or her 50s, or at least 10 to 15 years before the ownership and/or management transfer will occur. If you wait too long to develop a plan, it could be too late to mentor the next generation to run the company. It also could be too late to develop and grow your business.

Shimkat recommends beginning to think about an exit plan as soon as you start a business. "So many things change. You never know if there's going to be a health concern or an accident, or if an employee or family member important to a transition takes an opportunity in another state and leaves the company," she said.

Planning ahead also ensures that the key employee or family member who will purchase the business will have time to begin saving the cash needed to buy it.



➤ **For more information on business succession planning, contact Sean Galleger at 515-290-0181 or galleger@iastate.edu.**

ExporTech Teaches Iowans How to Strategize for Selling Abroad

Four Iowa manufacturing companies are poised to boost their overseas sales by millions of dollars thanks to expert help they received this summer from ExporTech.

ExporTech is a structured strategy development process supported nationally by the U.S. Commercial Service, an arm of the federal Department of Commerce overseen locally by Director Patricia Cook. The process connects a small group of companies with experts who help them navigate the export sales process and develop plans to grow their businesses internationally.

About 35 states have implemented ExporTech so far, and this summer was Iowa's initial offering—thanks to the Department of Commerce, the Manufacturing Extension Partnership (represented in Iowa by CIRAS), and support from the Iowa Economic Development Authority, Iowa Small Business Development Centers, FedEx, and the Iowa Farm Bureau.

The first round of companies to participate included AG Belt Inc., Des Moines; M's Machine and Manufacturing Inc., Monona; Puck Custom Enterprises, Manning; and Warren Distribution, Council Bluffs and Omaha.

"Our goal is to work with a handful of companies on an individual basis to help them increase their exports," said Marc Schneider, CIRAS project manager and ExporTech facilitator. "The process is geared toward small- and medium-sized manufacturers who have done some exports and are looking to grow their export sales, or who are just beginning to export their products."

A small group of executives from each company attended three one-day sessions in June, July, and August and worked individually with coaches throughout the summer. June's meeting featured general presentations and roundtable sessions led by various financial and export growth experts. In July, the group heard from a panel of experts on how to enter new markets, learned the ins and outs of export

controls, and participated in one-on-one coaching sessions. Finally, in August the executives shared their export plans with a panel of experts and fine-tuned their marketing strategies.

Full benefit from the sessions won't be realized for months, but early feedback from participants was positive.

"There are a lot of people available to help with the process of exporting, which we didn't realize. We thought we had to try and solve all our problems," said Jeremy Puck, general manager of Puck Custom Enterprises. "Through this experience, we're able to find resources like CIRAS and SBA [U.S. Small Business Administration] to help guide us and make sure we're doing it correctly."

Puck expects his company's sales to increase by 10 percent next year because of new exporting techniques and marketing.

"One of the surprises we've learned is that there are a lot of resources in Iowa that we can use for helping us learn how to be better exporters," said Ken Hammond, marketing manager for AG Belt. "We've already been tasked with expanding our market internationally, and we were going in with blinders, not sure how we were going to achieve it. ExporTech definitely helped us build a roadmap."

Troy Zeising, transportation manager for Warren Distribution, said he believes the sessions will "put us in that position to be proactive in our marketing attempts and target specific countries instead of reacting to various customers. ExporTech will help grow our international presence."

Additional ExporTech events throughout the state are in the works.



'Something's Happening' in U.S. Manufacturing

U.S. manufacturing is flourishing, according to Jason Miller, White House special assistant to the president for manufacturing policy. Miller, praising "steady progress" in the growth of manufacturing jobs, recently touted statistics showing that U.S. manufacturing since 2000 has grown at roughly twice the pace of the economy overall.

White's comments were offered at a July meeting at the Brookings Institution in Washington, D.C., and quoted extensively in a subsequent issue of *Manufacturing Technology News*.

Among Miller's remarks:

- **On growth:** "It's the longest period of manufacturing outpacing overall economic growth in the United States since the 1960s. So we're in a period where something's happening, something is different."
- **On the fact that wages for new hires are 38 percent higher in manufacturing than other sectors and that manufacturing employees are working more hours than the historical average:** "Now, one hour (per week) may not sound like a lot, but when you look across an entire sector that employs 12 million people, it's an enormous amount. . . . If we were to reduce that overall hour by hiring people to fill the need for labor in manufacturing, that's equivalent to roughly 300,000 more manufacturing jobs."
- **On relatively cheap natural gas and American factories' general access to technology:** "There are a lot of reasons that we should be optimistic about the growth potential over the near term for the U.S. manufacturing sector. The United States is more competitive for production—the economic winds are at our back, whereas they were not last decade."

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

UPCOMING EVENTS

- **CIRAS Automation Lunch and Learn**
October 14, 2014 • 11:00 a.m.–1:00 p.m.
Sheldon, Iowa
- **BizTalk Mastermind Group: LinkedIn Tutorial for B2B and B2G Businesses**
October 16, 2014 • 7:00 a.m.–8:00 a.m.
Webinar
- **HACCP Workshop for Meat, Poultry, and Egg Plants**
October 16–18, 2014 • 8:00 a.m.–6:00 p.m.
Ames, Iowa
- **Iowa Lean Consortium—Hagie Plant Tour**
November 3, 2014 • 10:00 a.m.–Noon
Clarion, Iowa
- **Internet Marketing Strategy Boot Camp**
November 3–5, 2014 • 9:30 a.m.–4:00 p.m.
Cedar Rapids, Iowa
- **Video Marketing Boot Camp**
November 10–11, 2014 • 9:00 a.m.–4:00 p.m.
Cedar Rapids, Iowa
- **Basic Sausage Short Course**
November 11–13, 2014 • 8:00 a.m.–5:30 p.m.
Ames, Iowa
- **ABI Market Wise**
November 12, 2014 • 10:00 a.m.–2:00 p.m.
Hospers, Iowa
- **BizTalk Mastermind Group: Grab Bag (Member Choice)**
November 20, 2014 • 7:00 a.m.–Noon
Webinar
- **Cured Meat Short Course**
January 13–15, 2015 • 8:00 a.m.–5:30 p.m.
Ames, Iowa
- **BizTalk Mastermind Group: New Year—Time to Dust Off That Marketing Plan**
January 15, 2014 • 7:00 a.m.–8:00 a.m.
Webinar

For details, see the events section of the CIRAS website, www.ciras.iastate.edu.

manufacturers
IOWA INNOVATION
expertise
pArtnership
busineSses

CIRAS Partners with Iowa Innovation Corporation to Help High-Growth Businesses Succeed

In a move to make Iowa even more fertile ground for high-growth and high-technology companies, CIRAS is bringing its expertise in manufacturing to a new partnership with the Iowa Innovation Corporation, a private economic development organization dedicated to helping innovative businesses grow faster.

The partnership, which began in July, formalizes collaboration between the two organizations and allows both to leverage each other's expertise for the good of Iowa companies.

"CIRAS' reach into the community means we'll be able to work together to fill a wide range of gaps that many entrepreneurs/growth companies may have such as funding, technical resources, partnerships, mentoring, training, etc.," said Mark Kittrell, president and CEO of Iowa Innovation Corporation. "Through this partnership, they'll have a single point of contact for CIRAS and other innovation resources across the state."

CIRAS will pay part of the salary and administrative costs for an Iowa Innovation Corporation staff member to identify high-technology companies that have the potential to source manufacturing from existing companies. CIRAS will provide its expertise, including helping companies identify local suppliers and resolve key technical issues. Both organizations will actively promote programs for each other to help increase the awareness of both among high-technology manufacturing companies.

"High-growth and high-potential companies identified by Iowa Innovation Corporation will allow CIRAS to effectively serve manufacturers that are outside our target market but a strong fit for our services," said Mike O'Donnell, a CIRAS program manager.

Both organizations believe that their ability to connect early-stage businesses and manufacturers with the appropriate resources—from expert advice to funding to CIRAS training workshops—will help companies establish a strong foundation for success. "The Iowa Innovation Corporation has ways to identify which companies have the highest potential for long-term growth, so their expertise will help us focus our efforts in helping those companies," O'Donnell said.

Both organizations are currently working on numerous other joint initiatives. "We believe a formalized partnership is a natural extension of our existing collaboration," Kittrell said.

innovation
IOWA

What Does It Mean to Be a Woman-Owned Small Business? *By Julie Fagle*

The answer varies among government sectors, although the certification carries benefits in every case.

Here are a few tips to sort it out.

State Program

The state of Iowa has a Targeted Small Business Program for businesses that are at least 51 percent owned, operated, and actively managed by a woman, person from a minority group, or person with a disability. The business must be located in Iowa, operated for a profit, and have an average gross income of less than \$4 million over the preceding three fiscal years.

Available state incentives include financial assistance via the Iowa Economic Development Authority and government contracting assistance from the Iowa Department of Administrative Services.

State departments set annual targets for the amount of business they want to do specifically with targeted small businesses (TSB). Certified TSBs also receive 48-hour advance notice when the state solicits competitive bids. Additionally, companies receive enhanced visibility to state buyers and to other companies through a TSB directory.

Federal Government Programs

The Women-Owned Small Business Federal Contract Program allows a federal contracting officer to limit or set aside requirements for competition solely among women-owned small businesses (WOSB) and economically disadvantaged women-owned small businesses (EDWOSB).

To qualify as WOSBs, companies must be mostly owned, controlled, and managed by women. They must be “small,” as measured by the Small Business Administration’s standards for that industry, and must be in one of 41 industries where women are substantially underrepresented.

To be considered an EDWOSB, company owners must have a personal net worth of less than \$750,000, and the fair market value of all assets (including value of business and primary residence) must not exceed \$6 million.

Even if your business isn’t considered a WOSB or EDWOSB, it may still be considered a woman-owned business for the purpose of the federal government’s small business goals. Many prime contractors align their small business diversity goals with the federal government and use this self-certification program as verification.

For more information, about women-owned businesses, contact Julie Fagle at 319-310-8612 or jafagle@iastate.edu.

Great Plains Survey Stakes Out Success with CIRAS’ Help

Angie Hutton had no industry network or contacts, other than her husband, when she started Great Plains Survey. She had no experience running a survey company. But she did have 20 years of experience in the banking industry.

So she took a chance.

Angie and Jeff Hutton launched Great Plains Survey in La Porte City in 2011. Angie is president and majority owner of the company, while Jeff, a licensed surveyor, serves as vice president and focuses on sales and land surveying.

The Huttons didn’t have to start the business from scratch. Great Plains Survey is the result of a transfer of survey assets and employees from a nearly 100-year-old professional engineering and technical consulting firm. But the already-assembled team didn’t mean that all of the Huttons’ potential challenges had been resolved.

“I didn’t know what I didn’t know,” Angie Hutton said, “and that’s a very scary place to be.”

CIRAS helped with that.

In 2012, Angie met Julie Fagle from CIRAS’ Procurement Technical Assistance Program at a workshop on the government’s System for Award Management (SAM).

“Julie really opened my eyes to what is out there,” Hutton said. “She doesn’t tell me what I should do; she just tells me what our options are. The confidence that Julie and CIRAS have given me is huge.”

CIRAS has assisted Great Plains with bid preparations, small business size standards, bid match services, developing a capability statement, SAM registration, and small business preference programs in Iowa and Illinois—including those specifically available for women-owned businesses.

Hutton said she can’t look at her company’s bottom line and say, “this is exactly where CIRAS has helped us.” But she knows that CIRAS is committed to helping the company move forward.

“Julie keeps her eyes open for us,” Hutton said. “She’s always fighting for us, even when we don’t know it.”

Hutton said she is pleased with Great Plains Survey’s progress in only three years.

“We’ve done well, and we have great employees,” she said. “Our long-term goal is to create a good work environment, not only for our family but for our employees and their families.”

Hutton credits CIRAS with helping her make that dream a reality.

“CIRAS is great,” she said. “I just wish more people would hear about them sooner when they are developing a business.”



AT A GLANCE

Valent BioSciences Corporation

LOCATIONS: Manufacturing plant in Osage; plus locations in Libertyville and Long Grove, Illinois

EMPLOYEES: 89 full-time equivalent at Osage plant

OSAGE PLANT OPENED: June 2014

IMPACT: CIRAS connected VBC to state and Iowa State University resources and talent for help in designing its fermentation lab, creating laboratory waste handling procedures, and filling 89 new jobs at VBC's Osage plant. The plant also is contributing to the creation of at least 34 additional jobs at other businesses in the region.

OVERVIEW: Valent BioSciences produces a variety of low-environmental impact substances for the agriculture, plant growth regulator, public health, and forestry sectors.

Valent BioSciences Corporation Plant Brings New Jobs, Economic Growth to North Central Iowa

Drive through Osage, Iowa, and it's easy to spot the economic footprint of Valent BioSciences Corporation (VBC). It begins with a new hotel and VBC's new 130,000-square-foot biorationals plant, which opened in June.

Construction of the \$146 million plant, which Valent officials have described as a new "manufacturing and quality control center for VBC's broad portfolio of fermentation products," temporarily brought more than 400 skilled construction workers to Osage. The completed plant so far has created the equivalent of 89 full-time jobs, including high-tech and high-wage positions for skilled engineers, staff professionals, analysts, and production operators.

CIRAS helped Valent BioSciences find some of its top-notch talent by introducing the company to Iowa State University students. Iowa State career fairs and other hiring opportunities helped Valent Biosciences connect with agriculture and engineering students and graduates. The company eventually hired five Iowa State graduates and two student interns. CIRAS partner North Iowa Area Community College provided workforce training on topics such as fermentation and separation, as well as safety.

In addition, CIRAS connected the VBC plant to other Iowa resources it needed, including the Iowa Waste Reduction Center and fermentation labs at the Iowa State University Center for Crops

Utilization Research (CCUR). "The tours of the fermentation facility were helpful in development of our design," said Karen Richards, plant manager.

VBC currently produces microbial insecticides, nematicides, and plant growth regulators used in production agriculture to manage plant growth, quality, and stress in crops. "Biorationals" is a term that refers to both pesticides and other substances designed to have a low environmental impact. Richards said Osage is the first plant in the world built from the beginning for biorationals, with state-of-the-art design and control capabilities, plus the potential for expansion.

"Our plant was built to be very flexible and to accommodate different fermentation processes and recovery processes," Richards said. "So as demand grows or products shift, we have the capability to support all of VBC's products."

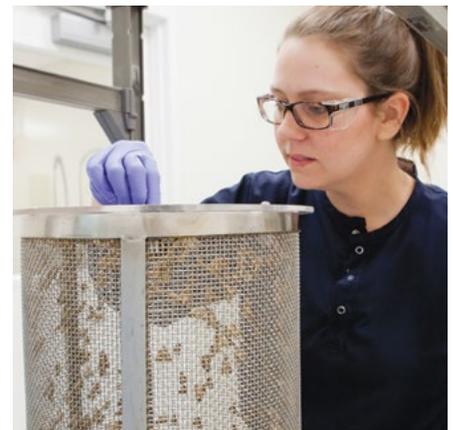
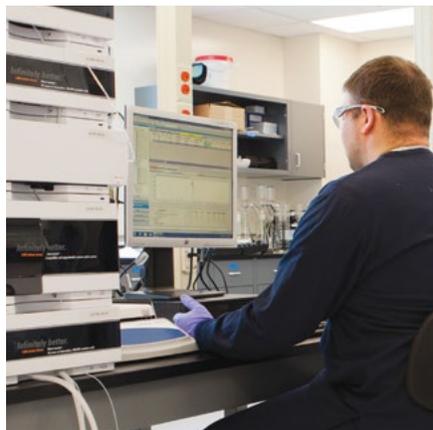
Valent BioSciences' presence in Osage has supported plenty of growth.

"As soon as the project was announced in 2011, a local group of investors came together to construct a \$4.2 million, 47-unit hotel employing 17 people to meet the short- and long-term need for

additional lodging as a result of the VBC project," said Brenda Dryer, executive director of the Mitchell County Economic Development Commission.

That came on top of VBC's preexisting relationship with Mitchell County. For decades, the company had shipped products to Osage's A to Z Drying for a final step in VBC's manufacturing.

Dryer said A to Z announced in June that it will need to expand in response to the projected growth at VBC. The \$5.4 million project is expected to create an additional 17 jobs.



SPECIAL REPORT: WORKING ON WORKFORCE



AT A GLANCE

IOWA'S WORKFORCE SHORTAGE

(Second in a Series of Articles)

THE IMMEDIATE PROBLEM: Iowa has a gap between its share of jobs that require more training than high school but less than four years of college (56 percent) and the number of people who have those skills (33 percent).

HOW WE GOT HERE: Decades of lower-than-normal unemployment means fewer people to fill jobs. Young people tend to leave rural Iowa for cities and for other states. Experienced factory workers now are approaching retirement.

PREVIOUS ARTICLES: Iowa businesses routinely reach out to children to promote careers in manufacturing; LEGOs are a tool to encourage science awareness.

THIS TIME: Recruitment—Neighbors, Nearby Industries, and Immigrants

Building a Workforce: If They Don't Come, Go Find Them *By Ron Cox and Jeff Eckhoff*

The key to getting good workers, according to Dave Maxheimer, is to be a good boss.

“Take a look in the mirror,” Maxheimer, human resources director at Hagie Manufacturing in Clarion, Iowa, responds when asked to give advice to other Iowa companies facing a worker shortage. “Are you the company that people want to work for?”

Manufacturers in Iowa and elsewhere say skilled workers have long been in short supply. Iowa Workforce Development has declared a statewide “middle skills gap” for jobs that require more training than high school but less than a four-year college degree. A Bayer Corporation survey of Fortune 1,000 corporate recruiters last fall found that half of those surveyed were having difficulty finding qualified applicants

in a timely manner for jobs focused on science, technology, engineering, and math (STEM). Sixty-eight percent said they expect a significant shortage of such job applicants during the next 10 years.

Iowa firms have responded by casting wider-than-ever recruiting nets and by seeking new ways to make their companies enticing to outsiders. When it comes to wooing experienced workers, experts say the choice for employers boils down to one of three options: If businesses don't have a ready pool of applicants, they can (1) recruit competitors' employees, (2) attempt to lure workers from other industries, or (3) recruit people who currently work outside the state (or country).

James Werbel, a management professor at Iowa State University, said many successful companies hire inexperienced or unskilled workers and train them to perform more difficult jobs.

“When people are just putting an ad out there, that's pretty much the worst way to recruit,” Werbel said. “That's fine when there's a shortage (of jobs). When there's 8, 9, or 10 percent unemployment, that works just fine. It doesn't work when there's a different labor market.”

Several Iowa firms believe they've fared better in the current market by standing out from other businesses.

Tim Bianco, president and chief executive officer of Iowa Spring in Adel,

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AT A GLANCE

Hagie Manufacturing

LOCATION: Clarion, Iowa

BUSINESS: Maker of agricultural spray equipment

FOUNDED: 1947

EMPLOYEES: 475

RECRUITMENT: Focuses on building company culture and finding workers who fit within it. Company encourages employees to make referrals.

Atlantic Bottling Co.

LOCATION: Atlantic and Waukee, Iowa

BUSINESS: Coca-Cola bottler for southwest, central, and south central Iowa

FOUNDED: As a soda and ice cream business in Villisca in 1905

EMPLOYEES: 160

RECRUITMENT: A little bit of everything, including redefining jobs to develop a work-around to account for worker shortages. Stronger focus on outreach to high schools and community.

Rosenboom

LOCATION: Corporate headquarters in Sheldon, Iowa, and a facility in Spirit Lake, Iowa; two facilities in China and one in Bowling Green, Ohio

BUSINESS: Maker of custom hydraulic cylinders

FOUNDED: 1974 as a tool-and-die shop

EMPLOYEES: 640

RECRUITMENT: Community outreach important. Business working with its communities to do a better job of selling itself to potential outside workers.

Iowa Spring

LOCATION: Adel, Iowa

BUSINESS: Making springs for garage doors and agricultural equipment

FOUNDED: 1977

EMPLOYEES: 123

RECRUITMENT: Workers are attracted, in part, by a four-day or three-day workweek, depending on the shift.

said his business long ago adopted an unusual scheduling system to make it easier to quickly fill customer orders without overtime. Most Iowa Spring employees now work four 10-hour shifts per week. A third shift works 12-hour days from Friday through Sunday—but gets paid for 40 hours of work if they complete the entire scheduled 36.

Bianco, who noted that Iowa Spring traditionally has not had problems finding workers, said the company's weekend shift is by far its most popular, partly because it allows working parents to avoid childcare expenses.

"We think it's an advantage" in hiring, he said. "Our guys talk about it. They love it."

Jeff Blum, operations manager at Puck Enterprises, a maker of manure application equipment in Manning, said his company has seen similar enthusiasm over its practice of paying quarterly bonuses based on the volume of defect-free equipment that leaves the factory. For full-time employees, the bonuses generally equate to an extra \$2 to \$4 per hour in quarterly income.

"I would say that with this round of hiring we're going through right now, it's been very helpful as far as making us more competitive and explaining to future employees what the future looks like here," Blum said. "I would say it wasn't as important to us in the past as it's starting to be."

Hagie Manufacturing's recruitment efforts for years have mixed evangelizing about the company's employee-first work culture with several out-of-the-box marketing efforts that Maxheimer readily acknowledges to have been "silly" ideas.

Like the time last summer when Maxheimer parked a company RV in the middle of Humboldt to give away food, donate to local employee-chosen charities, and generally spread the word about Hagie's existence.

Or the time Hagie ran a newspaper ad touting its culture and asking readers if

they were "tired of the same old crap" at their current jobs.

Or Hagie's now traditional wardrobe coordination at Iowa State University job fairs, which company employees regularly attend dressed as superheroes, as football players, as disco dancers, or in matching Hawaiian shirts.

"John Deere and Boeing, they're the big boys there," Maxheimer said of the Iowa State career fairs. "Then you come to Hagie. Who's Hagie? Half of those students don't even know who we are."

Maxheimer said college recruiting trips now rank somewhere around Hagie's third-highest source of new employees—right behind an Internet job board. Both pale, however, in comparison to the 60 percent of Hagie's new workers who come into the company based on referrals from current employees. (Maxheimer credits the employee-first culture as the main reason employee referrals have jumped from 25 percent just three years ago. "If your employees like working for you, they will bring other high performers just like them," he said.)

Other Iowa companies are redefining jobs to make it easier to recruit.

Mike Pappas, human resources manager at Atlantic Bottling Company in Atlantic, said his firm recently hired young "ride-along helpers" to staff delivery routes in the face of a shortage of qualified drivers. The helpers, many of whom are young high school athletes, lack the necessary commercial driver's license to handle routes alone. But they assist older Atlantic Bottling supervisors by hauling products onto trucks and into stores.

Pappas said he believes Atlantic to be in better shape than its competitors, but that everyone is feeling pinched by a shortage of qualified job candidates.

"This is as tight as it's been in quite a while," he said. "I've been here almost 18 years. You'd have to go back probably to the late '90s, early turn of the millennium to find a period where we were having this much trouble."

AT A GLANCE

Puck Custom Enterprises Inc.

LOCATION: Manning, Iowa

BUSINESS: Maker of manure application equipment

FOUNDED: As Puck Brothers Pumping in 1979

EMPLOYEES: 35

RECRUITMENT: Includes a quarterly bonus paid to employees based on the volume of defect-free equipment that leaves the factory.

Jack Schreurs, human resources manager at Rosenboom, a manufacturer of hydraulic cylinders in Sheldon and Spirit Lake, said his company likewise has been reaching out more to its communities—through everything from attending high school job fairs to holding open houses for the public. The goal, Schreurs said, is to put manufacturing in a more attractive light and get more people thinking about Rosenboom as a possible place to work.

“It includes just getting people from the community in to see what we do,” he said. “When we do that, they’re blown away by all the technology here.”

Pappas and Schreurs both acknowledged a willingness to hire a competitor’s employees. (“Are we paying a lot of attention to the market? You’d better believe it,” Schreurs said.)

But both balked at the notion of simply boosting wages to capture needed talent. The problem is that an employee who jumps ship for one salary hike might just jump again if another offer arrives later.

“If you’re going to get the same kind of person, paying them more may not solve the problem,” Pappas said. To pay a higher salary, “you’ve got to be convinced that you’re going to attract a higher caliber of person.”

Schreurs, framing the issue as a question of long-term goals, echoed that “taking each other’s employees isn’t the answer.”

“This is as tight as it’s been in quite a while. I’ve been here almost 18 years. You’d have to go back probably to the late ‘90s, early turn of the millennium to find a period where we were having this much trouble.”

—Mike Pappas

“I don’t want to be in a position where I have to say, ‘You don’t want to work for Polaris, you have to work for us,’” he said. “The real answer is not in recruiting employees from somebody else, if that’s all you’re doing. It’s growing your community at the same time your business is growing.”

Rosenboom recently opened talks with local community leaders about how the company might better contribute to the area and public perception of it. It’s too early to tell where such talks might go. But those conversations are necessary, according to Schreurs, to counter the pull of large cities with their easily accessible shopping and other amenities.

“I enjoy northwest Iowa, but not everybody does,” Schreurs said. “When you’re talking to somebody from a more densely populated area where there’s a mall within 10 minutes, then that becomes a hard sell.”

“I think part of it is that we’re going to have to work with our communities more,” Schreurs said. “Our communities also have to say there’s good housing here, etc.”

Pappas, for his part, anticipates that Atlantic Bottling and other companies will need continued creativity to find workers.

“I don’t think it’s going to be a one-size-fits-all kind of solution,” he said. “We’re going to have to try a lot of things.”

Thoughts on Job Jumping

- “Competition for employees is good for the labor market and, in turn, good for consumers. A company that has been the victim of a poaching is more likely to improve wages and working conditions for the remaining employees to reduce future poaching.”
—Utah State University management professor Tim Gardner in 2010 discussing his paper “The Ethics of Lateral Hiring.”
- A June survey by compensation consultant Towers Watson noted that the average employee wage increase was expected to be 3 percent in 2014. According to a recent Forbes magazine article by Cameron Keng, “the average raise an employee receives for leaving is between a 10% to 20% increase in salary.”



➤ To share your company’s best practices, contact Ron Cox at 515-294-0099 or rcox@iastate.edu.

Iowa Has Low Unemployment but Plenty of Workers Who Could Shift Industries

by Liesl Eathington

Hiring happens all the time. A mix of expansion and turnover means Iowa's employers must recruit or recall workers to fill about one in ten jobs during any given quarter. Their recruitment options include drawing from the pool of unemployed workers, enticing new workers into the labor force, attracting workers from other states or countries, or luring workers away from other Iowa firms or industries. This article explores possible yields from these strategies by scaling them up to the statewide level.

Figure 1 quantifies untapped potential within multiple sources for Iowa workers. The red bars approximate the actual number of nonworkers among various population groups. The tan bars show the expected number in each group for a state of Iowa's size, assuming national average rates of unemployment, labor force participation, and migration.

Unemployed Workers

Iowa averaged nearly 78,000 unemployed workers during 2013. Estimates suggest another 63,000 were working only part time while they would have preferred full-time work.

With its lower-than-average unemployment rates, Iowa's pool of

unemployed workers is already small by national standards. Should rates continue to decline, the likelihood of successfully matching workers to jobs will decrease as the pool of underutilized workers shrinks. Recruiting strategies that target this group may require intensive worker training.

Labor Force Nonparticipants

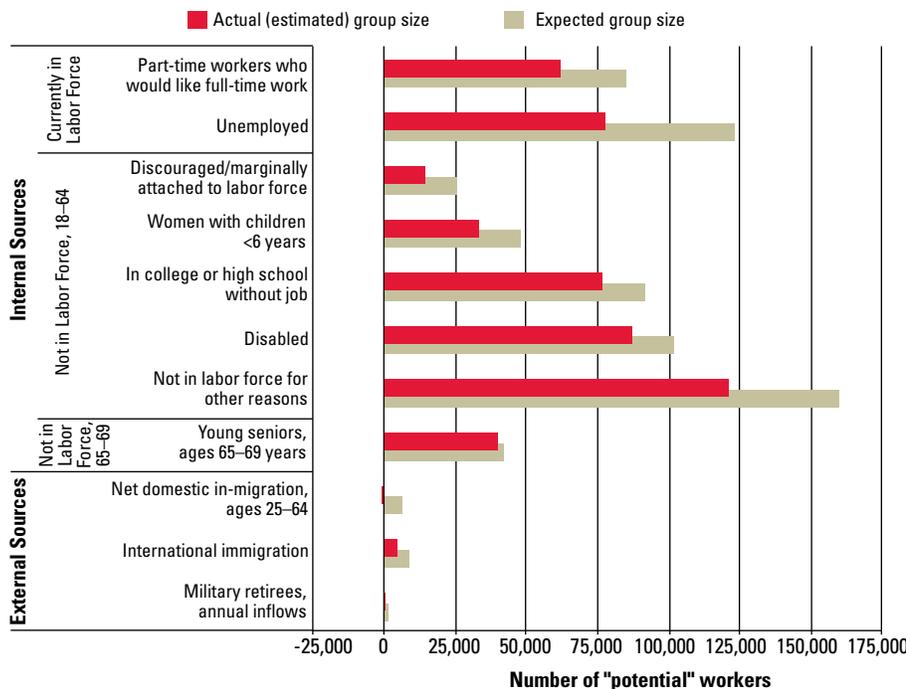
Iowa has roughly 333,000 working-age residents who are not part of the labor force. While they have various reasons for not working, some members of the following groups might be enticed into the workforce given the right inducement.

- Discouraged and marginally attached workers—Iowa has an estimated

14,000 people who want and are available for work but have recently stopped looking for a job, much lower than the expected value of 26,000 for a state of Iowa's size.

- Mothers with young children at home—About 33,000 of Iowa's nonworkers are women with children under six years of age. Iowa's labor participation rate among women with young children (77 percent) already far exceeds the U.S. average of 68 percent.
- College and high school students—Approximately 77,000 college and high school students in Iowa do not work. Iowa's labor force participation rates among college and high school students are 71 and 61 percent, respectively, compared to the U.S. average rates of 67 and 43 percent.
- People with disabilities—About 51 percent of Iowa's disabled residents participate in the labor force, leaving about 87,000 disabled residents who do not work. The national participation rate among people with disabilities is 41 percent.
- "Young" seniors, ages 65–69—Thirty-nine percent of Iowans who are just past the traditional retirement age remain in the workforce, leaving only about 40,000 nonworkers. Iowa's participation exceeds the national participation rate of 36 percent.
- Other nonparticipants—After accounting for all of the groups listed above, Iowa still has approximately 120,000 civilian residents of working age who are not part of the labor force for reasons unknown.

Figure 1. Potential Sources for New Iowa Workers



Iowa's labor force participation rates already exceed national averages. Whether or not employers can induce even more to join the workforce is uncertain. Understanding the various reasons for nonparticipation and developing different strategies to target different groups may be necessary.

Domestic and Foreign In-migrants

Iowa falls short in attracting new working-age residents from other states and countries in numbers proportional to the size of its economy. Compounding this, the percentage of working-age residents who leave each year exceeds the national average mobility rate for people 18–64 years of age. Iowa's recent net migration gains have averaged fewer than 5,000 new working-age residents each year, with nearly all coming from international sources.

Even if Iowa improved its yield from net migration flows to approximate national averages, the state's workforce would likely grow by just 15,000 workers per year, which is about 1 percent of the current Iowa workforce. The small number of workers at play limits the potential success of state-level incentives to lure in-migrants, although the tactic may remain appropriate for a specific company or regional initiative.

Other Iowa Firms and Industries

With in-state sources already tight and migration flows contributing only slightly and slowly to the workforce, Iowa's employers increasingly compete with each other for new workers. Employers need not restrict their search to their own industry. Workers with core competencies

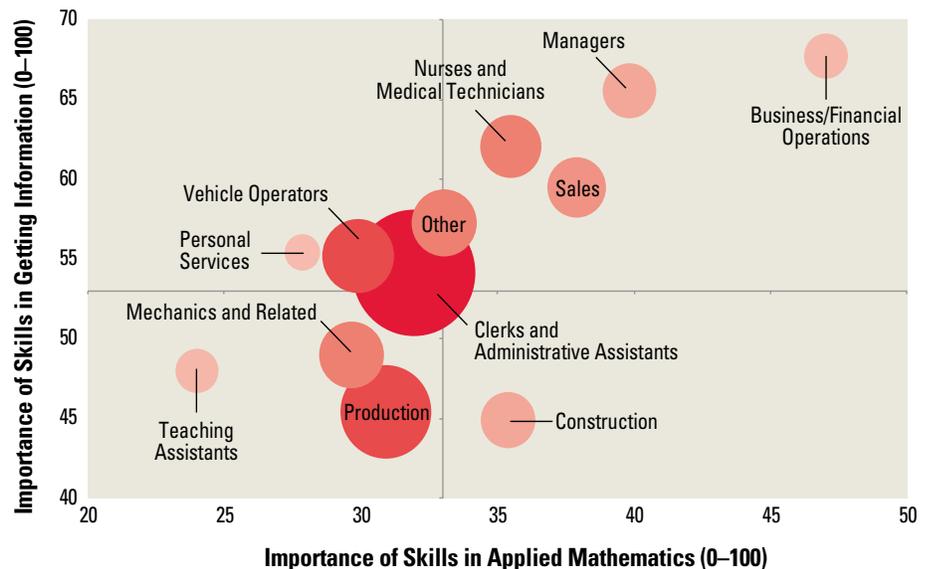
in high-demand skill areas may be good candidates for recruitment regardless of their current industry of employment.

Figure 2 illustrates the comparative demand for two important skill sets across several types of middle-skill jobs requiring up to two years of education or training beyond high school. Each circle represents a group of similar occupations, with circle sizes reflecting the number of Iowa jobs in each group. A circle's position indicates the importance of information-gathering skills (y-axis) and applied math skills (x-axis) in performing that type of job. Importance is measured on a 0–100 scale using ratings obtained from the U.S. Department of Labor. The average middle-skill job in Iowa scores 33 on applied mathematics skills and 53 on information-gathering skills, as indicated by the intersection of two lines.

As Figure 2 suggests, many occupations demand similar skill sets that might translate from one industry to the next. Using information tools available from federal and state workforce development agencies, employers might explore a wider variety of skill profiles to help target their recruiting efforts to specific occupations or industries.

The prospect of higher wages, benefits, or better working conditions may encourage some Iowa workers to transition into new fields. Although recruiting workers away from other in-state employers may seem like a zero-sum game from a labor supply standpoint, any general movement to higher-wage industries could make Iowa more attractive to potential workers both inside and outside of the state.

Figure 2. Middle-skill Occupations: Requirements for Applied Mathematics and Information-gathering Skills



Recruitment Programs Promote Iowa to Military Veterans, Smooth Path for Immigrants

The first two months of Iowa's landmark plan to recruit returning military veterans to the state drew 23 new workers—and hints of a coming, slightly larger wave of former soldiers in search of jobs here.

State officials announced in late July that a total of 86 veterans had contacted the state to seek assistance under the fledgling Home Base Iowa program (23 of whom by then had been hired). The program, created this spring as the centerpiece of legislation proposed by Gov. Terry Branstad, exempts federal military retirement pay and survivor benefits from Iowa income tax. The law also gave businesses the ability to provide preferential treatment for veterans in hiring and promotion and made it easier for veterans to use military training in applying for licenses required by civilian jobs.

“Good jobs are the most important thing,” Branstad told *The Des Moines Register* in July. “What we want to offer is great career opportunities and a relatively low-cost, safe place to work and raise a family.”

Statistics attributed to the National Conference of State Legislatures say more than 20 states recently passed tax or licensing changes favoring veterans. But Bloomberg BNA, a subsidiary of the well-known business news agency that focuses on business, law, and government, noted in mid-August that “few states are courting the veteran population as passionately as Iowa.”

New Mexico and Alabama currently offer credits to businesses who hire veterans, according to Bloomberg BNA, while West Virginia offers credits to veterans of the Vietnam and Korean wars.



New York plans to offer a veteran hiring credit in 2015, and Illinois extended a planned sunset on its credits to make them available until December 31, 2016. Iowa's recent changes “don't reward businesses for hiring veterans,” Bloomberg BNA noted, but “they are the type of tax incentives that will make the state an attractive destination for a skilled veteran population eager to work.”

The Home Base Iowa law is expected to cost the state roughly \$9 million annually based on tax exemptions for 7,765 current Iowans receiving military retirement income. A foundation set up by the legislation hopes to swell those ranks by raising money for a recruiting campaign.

Fourteen years ago, a commission appointed by former Governor Tom Vilsack sought to create an Immigration Enterprise Zone that would lure “New Iowans” to fill vacant jobs. The idea was met with stiff criticism, however, and plans faded.

According to the Washington, D.C.-based Immigration Policy Center, Iowa nevertheless has seen its foreign-born population rise from 1.6 percent in 1990 to 4.4 percent in 2011.

The immigrants themselves likewise have changed, with refugees from Africa and Southeast Asia joining earlier waves of Latino immigrants. Tyson Foods confirmed for reporters two years ago that 17 percent of the workers at its pork processing plant in Columbus Junction, Iowa, were Burmese—up from zero in 2007.

Iowa State University Extension and Outreach has sought to provide advice for various Iowa communities on how to prepare for an immigration influx. Himar Hernandez, associate director for community and economic development, currently is working with Cresco officials to prepare for more than 60 new workers who will arrive with the opening of a new processing plant there for Lime Springs Beef. Hernandez said Iowa State currently has two staffers providing this type of assistance and is in the process of hiring three more.

“We see a lot of community requests where they say, ‘Hey, we know these companies are going to be expanded,’” and we want to be ready, Hernandez said.

Experts say refugees generally find their way to Iowa after settling first in enclaves near larger American cities. Iowa companies can hire consultants to reach out to those enclaves and recruit an initial wave of workers.

“You get one family here, and if they like it, if they feel welcome and they feel safe, then they'll bring 15 relatives,” Hernandez said. “It's really pointless to advertise for those types of jobs.”

“The secret is to make sure that your community is welcoming,” he said. “Most of it is that it's safe and that it has some housing stock available. Then the word will spread.”

On July 1, Iowa State University restructured the Institute for Physical Research and Technology (IPRT) and its centers and programs with the intent to improve administrative efficiency and streamline research and economic development units. As a result, program management of IPRT Company Assistance now falls under CIRAS.

CIRAS welcomes the following employees to its staff:

Paul Berge

Paul Berge joined IPRT two decades ago and served for the last six years as program director of IPRT Company Assistance. Berge, an industrial specialist, will continue doing similar work

for CIRAS. His technical interests include process metallurgy as applied to manufacturing, including failure analysis, characterization of microstructures, and materials selection. Berge has authored six scientific publications and holds one patent.

Berge has a bachelor's degree in metallurgical engineering and a master's degree in materials science and engineering from Iowa State.



Adam Boesenberg

Adam Boesenberg joined IPRT in 2013 as a metallurgical engineer and worked as an assistant scientist with IPRT Company Assistance. His

interests include electron microscopy, failure analysis, materials selection, process metallurgy, and characterization techniques for ferrous and nonferrous materials. Boesenberg has authored four scientific publications and is listed as coinventor on three patents.

Boesenberg has a bachelor's degree in materials engineering and a master's degree in materials science and engineering from Iowa State.



New Engineering Learning Online Courses a Response to Industry Demand

Starting later this year, Iowa manufacturing employees will be able to learn the ins and outs of plastic welding without having to leave their desks.

Iowa State University's Engineering-LAS Online Learning (ELO), with help from CIRAS, plans to begin offering a new plastic welding continuing education course this fall in response to long-standing industry needs.

The course, which involves a series of eight modules, covers the fundamentals of plastic welding, including methods for joining plastics, types of materials to use, and more. At the end of the course, students receive a certificate of completion and continuing education credits.

David Grewell, an Iowa State University expert who created the modules at CIRAS' request, said he hopes manufacturers will increase productivity, create higher quality products, and increase revenues as a result of their employees taking the course.

"If they're doing any type of joining or welding, it needs to have proper joint design, process selection, and correct parameters set on machines to do it correctly," said Grewell, a professor of agricultural and biosystems engineering. "The course is very much practical. We talk about problem solving, joint and part design—things industry needs to be worried about."



Introduction to Plastics Welding is one of several new courses ELO has in the works. Since 2000, the demand for new online courses has continued to grow, as demonstrated by an annual ELO enrollment growth of more than 10 percent. Today, ELO offers more than 70 undergraduate, graduate, and certificate courses each semester—up from around 30 (almost exclusively graduate-level) courses that were offered online 10 years ago.

Despite the growth in undergraduate offerings, ELO still maintains 10 master's degree programs in engineering-related fields, 13 engineering graduate certificates, and several continuing education courses.

Tom Brumm, professor-in-charge of ELO, said providing this type of professional development can help companies retain employees and better integrate new technologies into the workplace. It also helps licensed professional engineers maintain their certification. The online format allows employees anywhere to take courses relevant to their work.

CIRAS staff works regularly with ELO to identify education needs for Iowa manufacturers. Two new graduate programs—energy systems and engineering management—are available, as well as continuing education courses in methods-time management for manufacturing and building energy performances. New courses in sales engineering and electrical power systems are in the works.

To learn more about online course offerings, visit www.elo.iastate.edu or contact your CIRAS account manager.

CIRAS launches its new MadelInIowa web site and app this fall, thanks in large part to the efforts of Simanta Mitra, senior lecturer in the College of Liberal Arts and Sciences at Iowa State University.



The intent of MadelInIowa.org and the MadelInIowa app (available soon for Android and iOS devices) is to show high school and college students, as well as state-level decision makers, the numerous career opportunities that Iowa's manufacturers offer. Both the site and the

app allow students, potential employees, and businesses to search for information by product name, career type, industry, or county. Each product listed includes a company, product description, product photo, and company logo.

CIRAS first approached Mitra to brainstorm about the project in the fall of 2013. Mitra enlisted the help of two Iowa State graduate students, Satish Maddala and Venkatanaga Sribalusus, who helped him develop and refine MadelInIowa—a process that took several months to complete, although development continues to this day.

"We've met several times, and still do, with CIRAS to identify what needed to be done and to make sure we were building the right thing," Mitra said. "Much of the time was actually needed to make sure that the site and app are usable and acceptable to end users and the primary stakeholders."

When he's not working on CIRAS projects (there may be more in the future), Mitra teaches software engineering courses at Iowa State, where he has been an instructor since 1999. Mitra has a bachelor's degree from Calcutta University and master's and PhD degrees from Iowa State.

"I enjoy helping students 'get it,' where 'it' is a difficult concept or skill," Mitra said. "I like exchanging ideas with students; working with my colleagues, who are experts in their fields; and being free to pursue my academic interests."

Any Iowa manufacturers who want their product(s) included in MadelInIowa.org should submit information at <http://bit.ly/1n3Ekwo>.

Look closer at Iowa's rolling landscape and you may be surprised to discover what is made here—everything from refuse trucks and powered machinery to buckets and pastries. When you buy products manufactured in Iowa, more money stays in our local communities.

Affordable Buckets

Overview: Affordable Buckets is a web-based business that offers plastic buckets and lids in 1-, 2-, 3.5-, 4-, 4.25-, 5-, and 6-gallon sizes in many colors for small to large quantities.

Location: Victor, Iowa

Founded: 2007

Employees: 2 to 3

Website: www.affordablebuckets.com/info.html



Country Maid, Inc.

Overview: Country Maid, Inc., is a 100% employee-owned company that manufactures frozen food products, namely the "famous" Butter Braid® brand pastry. Country Maid, together with its national network of 70 independent dealerships, has helped thousands of fundraising groups across the nation raise more than \$150 million dollars for hundreds of thousands of worthy causes.

Location: West Bend, Iowa

Founded: 1991

Employees: 56 full-time employees

Website: www.countrymaid.net



Scranton Manufacturing Corporation, Inc.—New Way

Overview: New Way is the fastest growing maker of refuse trucks in North America, with a Scranton plant that's now undergoing a 56,000-square-foot expansion. The company's automated Sidewinder model has quickly become the industry standard, while the innovative "ROTO PAC" easily switches between collecting food waste and grass clippings.

Location: Scranton and Carroll, Iowa

Founded: 1974

Employees: 225

Website: www.newwaytrucks.com



For the Record | Two cornerstones of CIRAS' support structure were renewed by separate government agencies this summer in moves that mean CIRAS will continue to maintain access to its vast network of expertise.

The U.S. Defense Logistics Agency in July renewed CIRAS as Iowa's local Procurement Technical Assistance Center. CIRAS will receive \$600,000 during fiscal 2015. The money will be matched with other sources to provide \$1.2 million of assistance to Iowa businesses in navigating the world of government contracting.

At the same time, the National Institute of Standards and Technology (NIST) reaffirmed CIRAS as the Iowa affiliate of NIST's Manufacturing Extension Partnership. The \$1.9 million award will be combined with other revenue to create a program budget of \$5.6 million.



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. Coupled with a satisfaction guarantee, our typical client has achieved a 200% ROI. A vast network of university and industry experts brings years of professional experience to CIRAS. Clients have reported an economic impact of more than \$1.8 billion over the past five years.

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THE INNOVATION CYCLE

Innovation Cycle: RWW Framework Improves Decision Making and Team Communication by Chris Hill

For an idea to become an innovation, it must pass through four phases of the innovation cycle: Definition, Discovery, Development, and Delivery. In this article, we discuss how to apply a Real, Win, Worth (RWW) framework to use in Discovery that can help leaders decide how to move forward.

Recall that, in the Discovery phase, a tightly refined concept for a new product, process, or business model is tested to determine whether or not it provides value. It must have enough value to the customer to justify payment and to the company to justify commercialization.

A concept that facilitates this testing is the RWW framework. CIRAS adds a quantitative framework to let a company use RWW repeatedly as a decision-making tool.

'Is it Real?' This section focuses on understanding and quantifying an opportunity, problem, and solution. Is the problem legitimate? Does our concept clearly solve it? Data on market potential and customer feedback through trials and pilots are necessary to accurately answer these questions.

'Can we Win?' This section is where we evaluate the competitive landscape. If the problem and opportunity is real, competitors will try to win the business. What

advantage does our concept have over others? Will customers care?

'Is it Worth doing?' Lastly, we must focus on the potential value versus investment. Estimate sales price, growth rate, and volume over time. When does the innovation generate cash flow?

A cross-functional team should use the RWW framework to question any potential new concept. There is no right answer, but the value to the business comes from finding a consensus on how to move forward—do you kill, invest, or shelve the project? Applying the RWW framework not only helps make a decision, but it also builds team awareness, support, and buy-in.

Answering these questions PRIOR to significant investment will reduce overall development costs and improve the likelihood of success for new innovations. For more information on how CIRAS can help you become more innovative, please contact your CIRAS account manager.



To participate in the innovation discussion, join our LinkedIn group at [linkd.in/12tVly1](https://www.linkedin.com/groups?gid=12tVly1).