Candymaker Finds Sweet Success

An enticing aroma greets you at the Fairy Tale Cotton Candy factory in Des Moines.

It’s sugar, but it could also be considered the sweet smell of success. Inside the factory, more than 50 varieties of cotton candy are produced and shipped far and wide to small stores and big box outlets, and under private labels to Universal Studios, Dollywood, and other tourist destinations.

The business is owned and operated by Steve and Meg Shearer and is a spin-off of their Chocolate Storybook candy company. Fairy Tale’s success can be attributed to Steve’s sales wizardry, Meg’s creativity, and manufacturing support from the CIRAS team.

“It’s challenging to grow a business. It is overwhelming to go after new ideas. We have a formula for how to do it, but it takes a lot of time,” said Steve. “Working with CIRAS makes it easy to manage everything. We’ve partnered with them for a long time, and they know our business.”

Willy Wonka has his Oompa Loompas; the Shearers have CIRAS.

In 2002, the Shearers bought Chocolate Storybook, a well-established Des Moines candy retailer. The pair collaborated with a vendor that supplied wrapped caramels, one of Chocolate Storybook’s most popular items. When the vendor went out of business, the Shearers bought all the assets with plans to open a facility to produce caramels. Business associates urged them to reach out to CIRAS for guidance.

They connected with Brenda Martin, then a food industry strategic advisor with CIRAS.

“The key is having a trusted relationship with a strategic advisor who understands what the company is trying to accomplish. Diagnosing where and when they need support leads to offering the best resources at the right time,” said Martin.

Martin explained what would be necessary for an FDA-inspected caramel factory. The Shearers quickly realized that they might be biting off more than they could chew.

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After finding another caramel vendor, they turned their attention to 10 cotton candy-making machines that came with the deal—a decision that would spin them into a whole new adventure.

Initially they produced cotton candy in their Chocolate Storybook location. The Shearers added on to the building to meet growing cotton candy demand. Realizing the potential of their new line, the Shearers revisited the factory idea and once again turned to CIRAS.

“They had to translate their experience operating a retail facility to becoming a manufacturer, and that’s where our strength is,” Martin said. “We helped them understand how to evaluate potential buildings, offered ideas for plant layout per federal food safety requirements, coached them on updating operational procedures, and helped them locate sustainable sources of ingredients.” The Shearers attended CIRAS Preventive Controls for Qualified Individuals (PCQI) certification to meet FDA requirements, and they invested in learning about packaging with Dr. Keith Vorst of the Polymer and Food Protection Consortium.

They opened the new factory in 2019. “Their transformation from retail to manufacturing was significant, and they were able to reach full-scale production with international sales in an unbelievably short time,” said Martin.

Marketing Support

Running two candy companies came with challenges on how to manage their digital presence. Meg and her daughter Sabrina teamed with Paul Gormley, CIRAS project manager, who did an assessment to understand the company’s marketing strategy. They also attended Gormley’s Strategic Marketing Boot Camp. He was ultimately able to connect the Shearers with a variety of resources to help them enhance their website so it served both businesses, improved their search engine optimization, and expanded their digital advertising. “I want to make sure our clients become knowledgeable consumers of digital marketing services who understand what they are hiring people do to, how to work with them, and how to evaluate if the results are what they wanted,” said Gormley.

Since these efforts, the company has seen “an increase in the number of visits to the website. We’ve just recently implemented these improvements, so we are looking forward to seeing the impact in 2023,” said Meg.
Chocolate Story Book and Fairy Tale Cotton Candy sell products through a variety of channels, including Amazon and Etsy. CIRAS helped them understand their customer data needs by conducting a Customer Relationship Management matrix development exercise. The Shearers were able to create a system to track their various sales mechanisms, helping them to better manage and meet customer demand.

“It revolutionized our fulfillment process,” said Steve.

In the early days, the couple ran the factory and made all the decisions. Martin advised them that the complexities of a growing factory needed to be led by a dedicated manager. They were reluctant at first, but now agree it was one of the best decisions they’ve made. CIRAS helped develop the job description and the Shearers ultimately hired Addison Zellmer, a 2014 Iowa State graduate in supply chain management.

While Meg dreams up flavor ideas, colorful product names, and brightly designed labels, Steve puts his remarkable sales skills to work. The cotton candy business has grown bigger than they ever could have imagined. They just signed Hello Kitty as a customer. CIRAS is currently coaching the team’s preparation for Safe Quality Food certification, which will open new markets with major retailers.

After all this growth, and an incredibly busy holiday season, the Shearers are turning to CIRAS once again. This time to help them develop one-, three-, and five-year strategic plans that cover their succession plan. Eventually the couple will reduce their day-to-day roles in cotton candy production with a well-planned exit strategy that ensures Fairy Tale’s happily ever after.

For more information, contact Rachel Hahn at rhahn@iastate.edu or 515-620-8093.
How AI Will Influence the Future Workforce

As technology continues to advance, the role of artificial intelligence (AI) in the workforce is becoming increasingly important. AI is changing the way companies operate, from customer service to data analysis, and is expected to play a significant role in the future of work.

According to a report by McKinsey Global Institute, AI could contribute up to $15.7 trillion to the global economy by 2030. This growth is expected to create new jobs and increase productivity across industries. The report also notes that while some jobs may be displaced by automation, many new jobs will be created to support the development and implementation of AI.

In a recent interview, Dr. Kai-Fu Lee, CEO of Sinovation Ventures, spoke about the impact of AI on the workforce. “AI is going to change every job, and it’s going to make many jobs more efficient and effective,” said Dr. Lee. “But it’s also going to create new jobs that we haven’t even imagined yet.”

One industry that is expected to benefit greatly from AI is healthcare. According to a report by Accenture, AI could save the healthcare industry $150 billion annually by 2026. AI can be used to analyze patient data, identify trends, and predict potential health issues. This technology can also be used to improve patient care by automating routine tasks, allowing doctors and nurses to focus on more complex cases.

In the financial industry, AI is being used to streamline processes and improve customer service. Chatbots, powered by AI, are being used to answer customer inquiries and provide financial advice. According to a report by Juniper Research, the adoption of chatbots in the banking industry is expected to save $7.3 billion annually by 2023.

While AI is expected to create new job opportunities, it is also important for the workforce to adapt to this new technology. In a survey conducted by Gartner, 50% of companies said that they plan to retrain their employees to work alongside AI. “It’s important for workers to develop skills that are complementary to AI,” said Dr. Lee. “This will allow them to work alongside this technology and leverage its capabilities.”

In conclusion, the impact of AI on the workforce is significant and multifaceted. While it is expected to create new job opportunities and increase productivity, it is important for workers to adapt to this new technology. As Dr. Lee notes, “AI is going to change the way we work, but it’s also going to make us more productive and efficient.”

For more information, Mary McGraw at mcgraw@iastate.edu or 515-231-4734.
Addressing Production Issues in Advance Saves Time, Money

A Dyersville manufacturer is saving time and money by implementing a strategy that identifies potential breakdowns before they occur.

JEDA Polymers, maker of engineered resins for the injection molding industry, was using a “homegrown solution” to anticipate issues in their extrusion lines. Though their efforts were moderately successful, the company couldn’t resolve all their issues on their own.

“This is a forward-thinking company that knows the value of data in resolving production issues,” said Kirk Haaland, CIRAS project manager. “They’d been searching for answers on their own, and they’d had some success with their efforts. So when we suggested predictive maintenance, they were all in.”

CIRAS recommended a strategy that involved placing sensors on the motors that power the company’s four extrusion lines. The sensors monitor data that the motors produce to identify potential problems or failures, enabling the company to address issues before they happen. CIRAS also connected JEDA with two potential vendors, one of which was an especially good fit for the systems already in place at the company.

“With the contacts CIRAS provided, we’ve been able to move in the direction of Industry 4.0, which is an important goal,” said John Deeken, engineering and quality management system administrator at JEDA.

Problems with the motors that power JEDA’s extrusion lines can shut down production in that area for a week or more, idling workers and delaying shipments.

“So there’s lost production time, higher fees to expedite parts delivery, and unhappy customers who can’t understand why you’re running behind. These are the types of problems that predictive maintenance is helping them avoid,” said Haaland.

JEDA Polymers was started by Jeff Goodwin and Ronda Haskell in 2007 in central Illinois. The company moved into a 43,000-square-foot facility in Dyersville in 2015. They currently have 16 employees with plans to grow to 20. They offer more than 300 products to an ever-expanding client list.

JEDA has a growing relationship with CIRAS. They first worked together when JEDA sought assistance with the application process for an Industry 4.0 grant from the state of Iowa.

“We didn’t get the grant, but we’ve continued working with CIRAS for the valuable services they provide,” said Deeken. “They were recently here facilitating an event focused on communications with the operations and shipping and receiving departments. We’re also utilizing their expertise as we implement lean principles.”

For more information, contact Kirk Haaland at khaaland@iastate.edu or 515-520-7623.

JEDA POLYMERS
FOUNDED: 2007
EMPLOYEES: 16
OVERVIEW: Manufactures engineered resins.
IMPACT: Minimizing lost production time and expedited delivery costs.
Partnership with APEX Pays Off

Bryan Christopherson, Midwest regional manager at Floodproofing.com, attended the 2022 Small Business Industry Day at Rock Island Arsenal hoping to learn more about doing business with the federal government. It didn’t take him long to connect with Julie Fagle, a government contracting specialist with CIRAS. With her guidance, Floodproofing.com was eventually awarded a $236,000 federal subcontract for their first-ever government job.

“We’d been talking about the possibility of working with the federal government and all that involves for some time, but we thought preparing for it would be a daunting process,” said Christopherson. “And no doubt, it would’ve been too time-consuming to do on our own. But with the right help, we not only got through the process but received a great federal subcontract as well.”

Floodproofing.com is a one-stop shop for solutions to multiple flood-related issues. The company services commercial and residential customers with an array of flood-protection products, flood insurance, and floodproofing systems like vents and barriers.

Fagle helped the company understand government contracting requirements, assisted them in developing a capability statement, and helped with their mandatory System Award Management (SAM) registration. Fagle also introduced the company to Bid Match, an automated service that provides businesses with daily emails on federal, state, and local contracting opportunities in their areas of expertise.

“This is exactly how Floodproofing.com found the bid that led to their first contract,” Fagle said.

The contract involves providing a product called a “muscle wall” at two lock-and-dam locations in Missouri.

Moving forward, Fagle will continue to support Floodproofing.com with market research that will save them time and resources by identifying new potential government customers. APEX research looks at numerous variables, including past procurement data for government agencies, existing contracts, and information on prices competitors charge for goods and services.

“This will be an ongoing relationship for us,” said Bob Fisher, director of marketing at Floodproofing.com. “The nice thing about working with a local APEX office is they always call you back, and when they do, they have answers.”

For more information, contact Julie Fagle at jafagle@iastate.edu or 319-310-8612.
As a result of a federal program transition, all 90+ Procurement Technical Assistance Centers (PTACs) have been rebranded as APEX Accelerators. Formerly managed by the Defense Logistics Agency, the program changed hands on October 1, 2022, and is now under the direction of the Department of Defense (DoD) Office of Small Business Programs (OSBP). The PTAP program was authorized by Congress in 1985 to expand the number of businesses capable of participating in the government marketplace.

The mission of APEX Accelerators is to “serve as the axis for existing and new business to strengthen the defense industrial base by accelerating innovation, fostering ingenuity, and establishing resilient and diverse supply chains.”

The services provided by the CIRAS APEX Accelerator will largely remain the same: help Iowa businesses succeed in the government marketplace. Our team of government contracting specialists will continue to provide no-cost counseling, training, and events to Iowa businesses.

In addition to existing services, CIRAS will serve Iowa businesses by growing relationships with large prime contractors and hosting more matchmaking events. Iowa businesses can anticipate hearing about new opportunities to work with the government outside the traditional Federal Acquisition Regulation-based procurement methods.

The DoD will place more emphasis on partnering with CIRAS to expand their supplier base and better understand the capabilities available in Iowa. This partnership will increase the visibility of Iowa businesses to the federal government and bring more opportunities to the state.

Even though the high-level objectives of the program have a DoD focus, the program still exists to assist businesses with local and state contracting, as this is generally the starting point for businesses that progress into the defense industrial base.

For more information, contact Jodi Essex at jodir@iastate.edu or 515-509-0769.
Turner Construction, CIRAS Cohort Is Big Success

Participants who recently completed the first-ever Construction Diversity Accelerator class led by Turner Construction and CIRAS agree: the event was a rousing success.

“It was engaging and well organized,” said Perlla Esturilho from Southeast Constructors, one of 30 people who participated in the five-week course. “It’s hard to do a one-size-fits-all program, but they did it.”

The class, which drew participants from 20 companies, was designed to enhance the ability of Underrepresented Business Enterprises (UBEs) and Disadvantaged Business Enterprises (DBEs) to compete for contracting opportunities. Turner Construction, the largest domestic contractor in the United States, has offered the hands-on course in other parts of the country, but this was the first time it was offered in Iowa.

“For Turner, the goal was to increase the participation of underrepresented contractors on their projects,” said Mary Zimmerman, CIRAS DBE support services program manager. “For us, it was a chance to introduce companies to some of our services but most of all to bolster their confidence to pursue projects they may never have otherwise considered.”

The class, taught by Turner staff and select industry partners, covered topics including estimating, bidding, procurement, scheduling, safety, and sustainability. Participants also had opportunities to interact with Turner representatives.

“It was interesting to hear from a sizeable general contractor, to know more about how they do business, and what they expect,” said Vaughn Miller, Advanced Traffic Control, Inc. “I believe what I learned will be a great asset to our company, and I look forward to using what I learned to enter a new market.”

Another highlight for participants was the opportunity to share experiences with other UBE/DBEs.

“Hearing stories of where they started, their challenges, and where they are now was helpful,” said Rene Martinez, 3M Contracting.

Instructors were equally enthusiastic about the program.

“I thoroughly enjoyed teaching this course,” said Travis Dolphin of Turner Construction, who led a session on lean principles. “A highlight of my experience was the look of genuine understanding and realization when participants grasped the ideas of lean. I hope we get a chance to do it again to reach even more individuals.”

At the end of the final class, participants invited company or family members to watch them receive their UBE award and join them in a celebration of their achievements.

For more information, contact Mary Zimmerman at maryz@iastate.edu or 515-450-1278.
Small Changes Lead to Big Wins

Making relatively small changes to one aspect of your business operation can make a big impact on productivity, your bottom line, and your culture.

That’s the lesson learned by Tri-City Electric, which saved an estimated $20,000 after spending just five hours with CIRAS project manager Emily Betz. She was called in to help the company organize their construction planning documents. As many as 400 hours a year were being wasted searching the company’s database for pertinent documents.

“They were keeping everything from lost bids to notes on current projects in the same file with no way of knowing which documents were relevant or the most recent,” said Betz. “So, we talked about where to keep documents, what to name them, and how long to keep them with a goal of finding better ways of organizing their information so everyone could get what they needed when they needed it.”

Tri-City Electric, based in Davenport, is one of the nation’s oldest and largest family-owned electrical contractors. The company serves the new construction, renewable energy, communications, audio visual, electrical distribution, engineering, and integration and security needs of residential and commercial clients. With a workforce of nearly 1,500, keeping everyone informed and updated was challenging under their old system.

“Our server and document control were not as efficient as we wanted,” said Dave Aguirre, director of construction services. “Emily got us headed in the right direction by asking the right questions and getting us to focus on improving our processes and standards.”

The company had to let go of some of their old habits and embrace new ways of organizing documents. Betz said there was little resistance, which made the process move smoothly and quickly. Tri-City is a member of the Iowa Lean Consortium, so improving efficiency and eliminating waste were not unfamiliar concepts.

“They immediately made decisions and implemented changes right there in the room instead of saying ‘Maybe we need more discussion on this,’” said Betz.

The company didn’t stop there. They continued to bring more people “into the room” to look at how processes could be improved.

“This started a cascading effect in other areas,” Aguirre said. “It’s unbelievable how people are now working together from different departments on ways to improve. We have started our own internal lean coffee that has really taken off, and we are tackling other areas where we can improve as well.”

“The engagement has been a breath of fresh air, to be honest. I am very happy we took the first step in contacting CIRAS to help wrangle us in and get us heading in the right direction.”

For more information, contact Emily Betz at betze@iastate.edu or 515-567-0216.

Upcoming Events

■ Creating Customized Analytics Dashboards to Increase Marketing Effectiveness
June 21, 2023
This one-hour webinar will teach attendees how to easily pull together reports for marketing efforts by building a dashboard. Learn how to choose the right metrics, gather data on those metrics, and display them in real time.

■ ILC Managing Change from the Middle
June 22, 2023
This virtual event will help those implementing lean thinking and methodologies in a non-manufacturing setting.

■ Human Resource Strategies
July 19, 2023
Learn new tactics from colleagues with experience in process improvement, technology to support the workforce, job quality tools, workforce strategy, and HR practices.

■ Iowa State University Capstone; Driving Business Innovation with Students
July 25, 2023
Discover how the Iowa State Capstone program can be your next pipeline to hiring Iowa State students, how to gain access to valuable university resources, and what it takes to host a project of your own.

Visit www.ciras.iastate.edu/events-workshops for details on these and other events.
Networking Helps Cedar Ridge Solve Equipment Needs

Cedar Ridge Winery and Distillery had a problem: its packaging equipment was inefficient, took up too much space, and required too many people to operate. Replacing the outdated machinery would cost more than $150,000.

Murphy Quint, head distiller and chief of operations at Cedar Ridge, knew the Iowa Economic Development Authority had a program to help manufacturers with technology equipment purchases. He contacted Rachel Hahn, CIRAS strategic advisor, for more information. She not only helped him with the grant application process, she also found an Iowa business that was using equipment she thought might work for Cedar Ridge.

“I was talking with Quint about what a truly automated system would look like, and it occurred to me that the equipment at Goodwill of the Heartland might work for them,” Hahn said. “I was able to connect the two, which led to Quint touring the Goodwill facility to see how their equipment was working for them.”

Goodwill has operated an oil packaging plant in Coralville since June 2020. The oil is distributed worldwide to more than 80 million food insecure people. Jessica Schamberger, vice president of operations, said several local businesses have toured the facility since it opened. She was pleased to accommodate the request from Cedar Ridge.

“These visits give us an opportunity to highlight our automation and to share best practices,” she said. “It’s also how we share Goodwill’s mission to help people realize their potential through education, training, and the power of work.”

With help from CIRAS, Cedar Ridge received a $50,000 Manufacturing 4.0 Grant. The money was put toward the purchase of the equipment. It arrived in two pieces in February and March and has recently been installed and put into operation.

“We actually ended up buying some of the same equipment Goodwill utilizes, in part because they spoke so highly of the vendor,” Quint said. “I was also impressed by the way the equipment utilizes space. And because it’s automated, it reduces the number of people we need on our bottling line, allowing us to redirect those employees to other necessary tasks.”

“Working with CIRAS has been incredible,” Quint said. “Rachel is extremely knowledgeable and has helped guide us to a more efficient packaging setup, which was our goal.”

For more information, contact Rachel Hahn at rhahn@iastate.edu or 515-620-8093.

Top: Head Distiller Murphy Quint, left, and Cedar Ridge Founder Jeff Quint, right. Bottom: The Cedar Ridge production team.
Start Thinking about Compliance

If you haven’t heard about ESG, you will.

ESG stands for Environmental, Social, and Governance and is focused on evaluating the sustainability of an organization. It’s becoming increasingly valued by employees, investors, and customers. Many of those stakeholders are starting to ask questions about the ESG performance of the companies they do business with, including smaller suppliers across Iowa.

A strong ESG program focuses on ensuring you are a responsible business that follows laws and best practices in your environmental practices, how you treat your people, and how you run your business. While more complex topics such as greenhouse gas emissions will come up, the most important element is demonstrating the fundamentals.

“When you get a request from a customer—and you will—there’s no need to panic,” said Mike O’Donnell, CIRAS program director. “You are likely already doing things to make your business better that also yield ESG benefits. For example, Iowa gets about 55% of our electricity from wind, giving us an advantage in use of renewable energy and potentially in the carbon footprint of your operations.”

Many large companies use internationally accepted standards and systems, such as Ecovadis, as their method to collect, analyze, and communicate ESG across their supply chain. CIRAS and its partners, such as Iowa State faculty and the Iowa Sustainable Business Forum, can help you make sense of the requests. Most importantly, this means identifying actionable changes you can make that benefit your business and ESG expectations.

The most important thing for any business that is asked to disclose ESG performance to a customer is to be honest and provide traceable facts about your business.

In Iowa, three main sources are driving ESG action in smaller businesses: consumer preferences, regulatory pressures, and larger customers who have started disclosing their own ESG reports. The focus of inquiries is generally specific to the work of the industry and its customers.

“For the heavy equipment industry, the focus is typically on using energy from renewable sources and reducing conflict minerals,” said O’Donnell. “If you’re in the clothing industry, it’s likely about ensuring that labor laws and practices are being followed by your global suppliers.”

Careful management of ESG compliance can create value through tapping new markets and expanding in existing ones, reducing costs, minimizing the risk of regulatory and legal interventions, increasing productivity, and attracting and retaining quality workers.

“Research shows younger people include ESG in their employment decisions, so this may help recruit next-generation talent if you can show real progress,” said O’Donnell.

The key to successful ESG compliance is balance, according to O’Donnell. Don’t overreact or immediately make it your number-one business priority. Do look at what you can do to gradually improve.

For more information, contact Mike O’Donnell at modonnell@iastate.edu or 515-509-4379.
INNOVATIVE INTERNSHIPS: 
Connect with Your Future Talent

A well-designed and implemented internship program can provide a pipeline of future employees. Here are a few things to consider as you create or review internship opportunities in your company.

- **Develop a realistic budget.** Compensation typically includes salary and may also include housing assistance, work clothing, transportation, and tools to perform their work. Your internship program is an investment and commitment from your company leadership and every individual across the organization.

- **Provide training for your team on how to engage with your student employees so you both benefit from the experience.**

- **Make it easy to apply.** Provide a clear application, interviewing, and hiring process for your student applicants.

- **For students, an internship isn’t just about the work.** It’s also about seeing if the company is a good fit for what they’ve learned in the classroom as well as their career goals. Give students opportunities that align with their skills. Help them feel like they’re part of your team by involving them in projects that bring value to your organization. Create a meaningful experience by treating them like a coworker, including them on project teams, and giving assignments that are important to your organization. Hold them accountable for results and give them access to your senior leaders.

- **Help your student interns experience what it’s like to live in your community.** Make them aware of local activities and recreational opportunities outside the office. Remember you’re selling your company and your community for their consideration to stay or return.

Regardless of your size or your industry, you can have a successful internship program that creates a pipeline for your future workforce. In partnership with Iowa State University’s Career Services, CIRAS provides tailored coaching to help you enhance current internship programs, recruitment strategies, and student engagement to create better relationships with the future workforce.

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