

Q2 - 2021

Helping New Jersey Manufacture Success

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NO COLLARS, JUST CAREERS STOP JOB SHAMING p28







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MEP • MANUFACTURING EXTENSION PARTNERSHIP

MANUFACTURING MONTHLY THEMES DRIVING INDUSTRY FORWARD IN 2021

As manufacturers move forward into 2021, businesses put the disruptions of 2020 behind them. New Jersey manufacturing businesses continue to explore new ways to improve their competitive edge, protect their workforce, and provide their customers with more value. Business leaders are working every day to achieve these goals. The second quarter of 2021 marked three critical trends within the manufacturing industry.

Keeping up with all the new disruptions and developments taking place in manufacturing can be difficult. Staying up to date while navigating the increasingly competitive business environment and still trying to maintain a continuous improvement mindset makes this endeavor even more taxing on business leaders. *Manufacturing Matters* will make this easier. The second quarter of 2021 highlighted Apprenticeships, Human Resources, and Lean Manufacturing. Explore each theme below and find out where to get more information on each.

APRIL - APPRENTICESHIPS

For new workers or career changers entering the job market, there is often a catch-22-- you need experience to get a job, but you need a job to get experience. Many companies don't have the luxury of having a standardized training program to give entry-level workers the advanced skills ultimately needed in their organizations.

Registered Apprenticeships can create a solution for employer and employee alike, offering a skill-building opportunity that doesn't require the business to create their own apprenticeship program from scratch. Manufacturers can partner with organizations like NJMEP that sponsor Registered Apprenticeship programs in a variety of concentrations to give new hires hands-on experience while building a strong foundation of critical manufacturing skills.

In the post-Covid economy, companies need every available edge in returning to profitability. For manufacturers who absolutely rely on the quality of their staff, apprenticeships can be an ideal way to cultivate a skilled and specialized workforce with minimal investment.





MAY - HUMAN RESOURCES

Even as automation, AI, and other emerging technologies are adopted by manufacturers, there will always be a need for skilled employees. Finding and retaining top talent can be one of the most difficult and challenging aspects of creating a successful manufacturing business.

Enter your Human Resources (HR) professional. HR pros are specifically trained to help your company acquire the best possible candidates for open positions, and to ensure that hires are satisfied and engaged at their jobs.

Manufacturers face unique HR challenges. Working with professionals that understand the specific needs of a manufacturing operation will ensure an HR team is equipped with all the tools they will need to support an industrial environment. Organizations like NJMEP pull information and experience from experts in the HR and manufacturing fields to provide businesses with the talent and training opportunities to meet manufacturers' specific needs. As workforce challenges continue to compound, ensuring businesses are actively thinking about upskilling their HR team will be vital to overcome the skills gap which was made even worse by the COVID-19 pandemic.

JUNE - LEAN MANUFACTURING

With its roots in automotive manufacturing, Lean is a methodology that is founded on the concept of continuous and incremental improvements on product and process while eliminating redundant activities. Lean thinking changes the focus of management from optimizing separate technologies, assets, and vertical departments to streamlining the flow of products and services through entire value streams.

For many companies that have successfully implemented it, Lean is more than just a set of principles. It is a mindset that pervades every aspect of their business and challenges every employee to seek out opportunities for greater efficiency and reduced waste. A lean organization emphasizes agility and focuses its key processes to continuously increase customer value

Check back every quarter to review the manufacturing themes driving industry forward. Explore a focused snapshot of how the industry is transforming here in New Jersey and throughout the United States. There are countless ways businesses can improve, so being able to cut through all the noise will be key. Set aside time to focus on Apprenticeships, Human Resources opportunities, and Lean Manufacturing. Discover how these themes can impact your business and uncover the latest ways to get involved.

Follow the latest from New Jersey manufacturing by following @NJMEP on Twitter, Facebook, and LinkedIn. Stay engaged all year long to help protect and support the industry.



Helping New Jersey Manufacture Success

Serving and Servicing South Jersey

More Training, More Support, New Jersey Manufacturing

SOUTH JERSEY OFFICE: DETAILS AND IMPACT

The New Jersey Manufacturing Extension Program, Inc. (NJMEP) is opening a brand new office and training facility in Bellmawr, New Jersey to better serve manufacturers located in the southern part of the state.

211 Benigno Blvd, Suite D, Bellmawr, New Jersey will be home to the latest industrial training equipment, a large in-person training room, and offices for key South Jersey-focused NJMEP team members. No matter the need of a New Jersey manufacturer, they will have immediate local access to the information and services the NJMEP team can provide.

South Jersey manufacturers have largely been underserved in terms of legislation and business-focused programs. These areas struggle with a compounded workforce challenge as public transit is spread out and often not provided close to industrial spaces. Southern businesses stand to gain the most from the support and services NJMEP has to offer. Businesses in this geographic location were only able to engage with select industry events like 'MADE in New Jersey' Manufacturing Day, State-of-the-State of Manufacturing, and a few Legislative Manufacturing Caucus hearings.

GOAL OF SOUTH JERSEY EXPANSION

A South Jersey-based training facility to specifically serve the local manufacturers is the main mission of the Bellmawr office. It will be outfitted with highly advanced training technology and offer a plethora of manufacturing-focused professional development opportunities. Certification programs, MSSC credentialling courses, administrative workshops, and advocacy events will all be held in the South Jersey location. Cedar Knolls will still be the NJMEP headquarters, but all the services and support provided in the north can now be mirrored even more effectively in the southern part of the state.

WHY NEW JERSEY NEEDS SOUTH JERSEY SUPPORT

There are over 11,000 manufacturers in the state of New Jersey. Industrial facilities are located throughout the state, from Montague to Cape May and all of them are looking to improve their operational efficiency, productivity, upskill their workforce, and improve the bottom line.

Manufacturers are busy by nature. Every second wasted eats into their profits. NJMEP has a mission to provide critical services to manufacturers throughout New Jersey. If a manufacturer in Cape May County can't justify sending

employees to in-person training at the original Cedar Knolls facility, and their manufacturing plant doesn't have the room or capacity for customized on-site training, they cannot take advantage of these critical professional development opportunities. A South Jersey location reduces the amount of time required to upskill employees. Having the option



to sit down with an NJMEP subject matter expert in person to discuss a plan can go such a long way toward pushing that business forward. Providing manufacturers with a local option mitigates time wasted on travel and allows businesses to take advantage of more opportunities that directly contribute to the business's profitability.

WHAT THIS MEANS FOR THE INDUSTRY: BIGGER PICTURE

Manufacturing is often forgotten in New Jersey. Media all over the country are focused on services, software, and hospitality. Industrial sectors have a public image problem. However, that doesn't mean they don't deserve recognition or attention.

In fact, manufacturing accounts for over 12% of the total GDP output of New Jersey. People separate pharmaceuticals and life sciences from "Advanced Manufacturing" but these industries are truly one in the same. The latest medications and medical devices are all manufactured. Combined, these two sectors contribute over \$80.9 Billion to New Jersey's \$635 Billion GDP. "Advanced Manufacturing" accounted for \$47.4 Billion¹ in 2018 according to Investopedia and Pharmaceuticals/Life Sciences generated \$33.5 Billion² in output.

- https://www.investopedia.com/articles/investing/011316/ new-jerseys-economy-9-industries-driving-gdp-growth. asp#:~:text=The%20largest%20industries%20driving%20 New,which%20are%20Fortune%20100%20companies.
- 2 https://www.njmep.org/download/njmep-new-jerseymanufacturing-industry-report/

Beyond providing critical training and consulting services for New Jersey manufacturers, Advocacy is a massive focus of NJMEP. Historically, advocacy events could only be held in the Cedar Knolls location or at partnering South Jersey-based organizations. This limited the amount and frequency of engagement manufacturers could have

with legislators from South Jersey. With a permanent space to host legislative Manufacturing Caucus meetings, industry events, and countless advocacy initiatives, the importance and impact of the manufacturing industry can continue to be highlighted regularly for years to come.

NEXT STEPS FOR NEW JERSEY MANUFACTURING

The only way for manufacturing to make progress is for state policymakers to be constantly engaged and informed about the impact this industry has on New Jersey.

Manufacturing businesses were in a unique position to highlight their value during the COVID-19 pandemic. Demand soared for their products, services, and capabilities. Mirroring the need during World War II, manufacturers stepped up and retooled. They provided Personal Protection Equipment (PPE), and filled in gaps that arose from a damaged global supply chain. The opening of the South Jersey office will give local manufacturers easier access to the critical training and consulting they will need to bounce back from 2020. New Jersey manufacturers will have a southern hub for advocacy to ensure their voices are heard on the public stage. Efforts to ensure all manufacturing is supported in the state of New Jersey will only increase as the geographic footprint of NJMEP and the industry continue to expand.



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TRENTON



TESTA ON BENEFITS OF SUPPORTING MANUFACTURING IN NEW JERSEY

It is my honor to write to you as the new Republican co-chair of the bipartisan Legislative Manufacturing Caucus of New Jersey.

So many times, I have driven into Trenton and I catch a glimpse of the iconic bridge from Morrisville.

TRENTON MAKES / THE **WORLD TAKES**

The first iteration of the structure was a train bridge, opened in 1806 as the first bridge across the Delaware.

The famed slogan wasn't attached to the steel on the south side of the lowslung structure until 1935, decades after Trenton's manufacturing heyday.

The city had once been a major industrial player, known for its iron, steel and rubber industries, plus a pottery manufacturing sector that rivaled Ohio's stranglehold on the industry.

Every time I view the bridge, I am reminded of the tens of thousands of New Jersey residents who every day grasped their lunch pails under their arms and trudged to work in the foundries, mills, plants and factories.



SENATOR MICHAEL TESTA, DISTRICT 1

CO-CHAIR. NEW JERSEY BI-PARTISAN **LEGISLATIVE MANUFACTURING CAUCUS**

They weren't glorious jobs - they were often dirty, dingy, noisy, hot, and sometimes dangerous - but they paid well, and helped put plenty of food on the table. They provided steady work, often with lots of opportunity for overtime, and in many cases, workers spent their entire working career at the same company.

NJ'S MANUFACTURING **LEGACY**

As vital as Trenton was at the time, it was only the tip of the Garden State's manufacturing spear. The state was a major producer, providing goods that fueled the nation's economic engine. Things were good on this side of the Delaware.

Times changed and manufacturing changed. Gone are the monstrous stacks that spewed ash, smoke and toxins into the atmosphere. New Jersey changed, too, though not always for the better.

It is my goal as a Senator, and as cochair of the Manufacturing Caucus, to do everything I can to help New Jersey re-stake its claim as a dominant force in manufacturing.

The industry has been undergoing a strong rebound, and at the State House in Trenton, I will remain committed to the manufacturing firms and factory employees whose hard work, vision and determination are helping build the foundation for New Jersey's resurgence.

To help restore our great manufacturing legacy, I have introduced legislation that would establish the Trenton Makes Commission in the Economic Development Authority with the mission of researching and implementing the best ways to incentivize manufacturing businesses in New Jersey.

The commission will help make New Jersey a manufacturing hub and explode job opportunities and earnings in the state.

A HIGHLY TRAINED, QUALIFIED MANUFACTURING WORKFORCE

One issue that we hear about frequently from manufacturers is how difficult it is for them to find qualified workers.

After decades of teaching our children that if they want a good job, they have to go to college, this is the result. Colleges teach for desk jobs, lab coats, and graduate degrees.

Too often, students spend a few years at a university, racking up debt from student loans, only to leave school with no degree and no job prospects. As a result, they have wasted valuable years and tens of thousands of dollars.

We can kill two birds with one stone by passing and implementing legislation sponsored by Manufacturing Caucus leaders Senator Greenstein, Senator Oroho, and myself.

The legislation, S-3216, calls on various state entities to promote manufacturing career pathways for college, county college and vocational high school students.

The program would prepare students for careers in manufacturing, easing the dearth of qualified job candidates that hinders the growth of businesses in the state.

The bill is working its way through the Legislature, and I will keep you up to date on its progress.

RED TAPE REFORM

When it comes to counter-productive actions, New Jersey reigns supreme.

Our state is well known for its businesschoking rules and regulations. For more than a decade, Trenton has bitten off its nose in spite of its face.

Rather than building a business environment that encourages investment and helps attract employers here from other states, New Jersey takes the opposite approach, often driving companies out of business with an impossible-to-navigate maze of bureaucratic red tape.

I am sponsor of legislation that would go a long way toward addressing this serious issue, but A-4810, which would establish the Government Efficiency and Regulatory Review Commission was vetoed by the Governor after sailing through both houses of the legislature.

Under the bill, the commission would review all proposed and adopted regulations, rules, and executive orders to assess their impact on the economy and determine if the burdens on businesses and government outweigh their benefit.

For the sake of the state economy, Trenton must take steps to make the state more business friendly. Vetoing bipartisan bills like this only makes things more difficult for New Jersey employers and manufacturers.

LEGISLATIVE UPDATE

Update on A-4803/4811 (Concerns approval process for personal protective equipment and State stockpiles of personal protective equipment.) – Passed the Assembly in October, passed the Senate in December, and conditionally vetoed by Governor Murphy in May.

The bill would create a state-level certification program to allow manufacturers to produce PPE. The measure would help to strengthen our stockpiles, which faced severe shortages of masks, gloves, gowns, and other Personal Protective Equipment at the height of the pandemic.

The Assembly accepted the Governor's changes, but the Senate has not yet taken action.

Update on S-1957 (Supports activities of New Jersey Manufacturing Extension Program, Inc.) – Passed by both houses on October 29, 2020, the bill was vetoed by Governor Murphy in December.

The bill would establish a permanent source of funding for the New Jersey Manufacturing Extension Program with a \$1.5 million allocation from the Workforce Development Partnership Fund.

SUPPORT FROM THE LEGISLATURE

Those of us in the Manufacturing Caucus are obviously friends of industry. I, for one, welcome your feedback and suggestions, and I encourage you to cultivate working relationships with each of us. We will be fighting for you in Trenton.

That is my promise.

I know that, working together, we can strengthen the manufacturing sector in the state and send this message:

When it comes to manufacturing, New Jersey means business.

Three Parts, One State

State-of-the-State Drives New Jersey Manufacturing Forward

State-of-the-State of Manufacturing brings together industry leaders with state legislators and decision-makers. 2020 presented New Jersey manufacturing with a unique challenge. The unprecedented situation the world was forced to face required a shift in how industry collaborates with local government. Addressing the needs of manufacturing was a top priority for the newly designed State-of-the-State of Manufacturing. This event ensured the industry was heard, valued, and supported.

THE GOAL

The goal of State-of-the-State of Manufacturing has historically been to update the industry on the latest legislative developments. COVID-19 caused the goal to shift. In 2021, three virtual events were held and gave manufacturers a forum to directly engage with their legislators. Manufacturers were able to ask local policymakers the questions that mattered to their business. It allows both parties to understand what New Jersey is doing to help while also educating legislators about the true needs of the industry.

Without a vehicle for manufacturers to speak up about the needs they have, the challenges they face, and their current situations, the government will not have a complete picture of what needs to be done to support this multibillion dollar industry.

New Jersey fell out of touch with the manufacturing industry a decade ago. A lack of advocacy and communication allowed Garden State manufacturers to disappear from the public eye. The industry was already wrestling with an outdated stigma and this lack of a voice on the public stage allowed this negative reputation to fester.

The New Jersey Manufacturing Extension, Inc. (NJMEP) set out to address this unfortunate situation through advocacy and the creation of forums for the industry to speak up for themselves.

NJMEP is not a lobbying group or industry association. The organization provides training and consulting services to the over 11,000 manufacturers that call New Jersey their home. However, NJMEP does advocate for manufacturing. State-of-the-State of Manufacturing is one way the industry can progress forward.

THF FVFNT

State-of-the-State of Manufacturing went virtual in 2021. Each virtual event focused on connecting with legislators from three geographic regions: North, Central, and South.

State-of-the-State was a three-part event that spanned 3 quarters. All three covered unique topics that resonated with every manufacturer from New Jersey. The geographic separation allowed NJMEP to partner with organizations that had a focus on those areas, and to connect with legislators in those districts.

All three events were structured to allow the Legislative Manufacturing Caucus to update the industry on their latest initiatives, give newer legislators the chance to introduce themselves to manufacturers, and give New Jersey manufacturers the chance to ask these individuals the questions that matter to their business.

THE PROGRESS

Without State-of-the-State of Manufacturing, the bipartisan bicameral Manufacturing Legislative Caucus would have never formed. This group is made up of legislators from both sides of the political aisle. Its overarching goal is to be the bridge between industry and government. They accomplish this goal by holding Caucus hearings where manufacturers are invited to speak and engage directly with these legislators, reviewing their biggest challenges and asking them to describe the support they'd like to see from the state. The Caucus then fights for the industry, making sure this critical sector is being represented and supported.

Manufacturers that get involved in State-of-the-State of Manufacturing

benefit directly. The NJMEP advocacy team connects with business leaders after each event to ensure their question has been answered and to see if they have any follow up challenges or issues they'd like addressed. The advocacy team acts as a conduit between the business and the legislators, or it can provide any ancillary information needed to address the manufacturer's concerns.

Throughout 2021, dozens of manufacturers have turned to State-of-the-State to address state policymakers and work with the advocacy team to set their business up for success in New Jersey. Without events that provide these opportunities, gaining government support would be tremendously challenging and incredibly expensive.

THE FOLLOW UP

Advocating for the New Jersey manufacturing industry doesn't stop after State-of-the-State PART 3. Manufacturers need to continue the conversation all year long. Actively engaging with advocacy efforts and industry events is the only way to ensure New Jersey businesses are considered when new bills are being conceived. If legislators aren't aware the manufacturing industry is alive and working to grow in their state, it will not receive support.

There are over 11,000 manufacturing businesses and STEM firms that call New Jersey home. State-of-the-State of Manufacturing is just one way they can speak up and ensure manufacturing is seen. 'MADE in New Jersey' Manufacturing Day 2021 is the next chance these businesses have to make their voice heard. Be sure to

follow NJMEP on Twitter, Facebook, and LinkedIn or sign up to receive Manufacturing Matters to keep up to date with the latest support available from both the state and independent organizations.

MFG DAY

'MADE IN NEW JERSEY'
MANUFACTURING DAY 2021 IS ON
FRIDAY, OCTOBER 1 REGISTRATION OPENS SOON

MANUFACTURER OF THE YEAR' AWARDS -NOMINATIONS OPEN NOW

The 'Manufacturer of the Year' awards are back! In 2020, every manufacturer deserved to be recognized as an 'Unsung Hero' 2021 marks the reintroduction of New Jersey's Manufacturing Awards.

Nominate stand-out manufacturing businesses in a variety of 'Manufacturer of the Year' categories.

Categories include..

Manufacturer of the Year – Small (50 or less employees)

Manufacturer of the Year – Medium (between 51 and 250 employees)

Manufacturer of the Year – Large (251 employees or more)

Manufacturer of the Year – Young/ Start Up (in business 5 years or less)

Manufacturing Cares - Recognizing charitable contributions

Innovator of the Year - Honoring stand-out innovators

Made in NJ Honor Roll - Industry

Visit NJMEP.org/nominate to learn more and nominate a manufacturing business, today!

NJMEP is proud to host the sixth annual Jersey Guys Golf Outing

One of the highlights of the 'Manufacturing Cares' event calendar is the 2021 'Jersey Guys' 6 Golf Outing. It was an unforgettable experience for golfers and givers alike. The outing took place on Friday, July 23 at Minebrook Golf Club, and was a welcomed gathering after a year of isolation for many. NJMEP and the Team Eagle Foundation have once again partnered for this special charity event, which benefits young adults of New Jersey through academic scholarships. NJMEP recognizes the pressing need for education and training of the next generation of New Jersey's workforce and embodies the commitment and dedication of New Jersey manufacturers to the betterment of the young minds who will become tomorrow's leaders.

OVERCOMING COVID

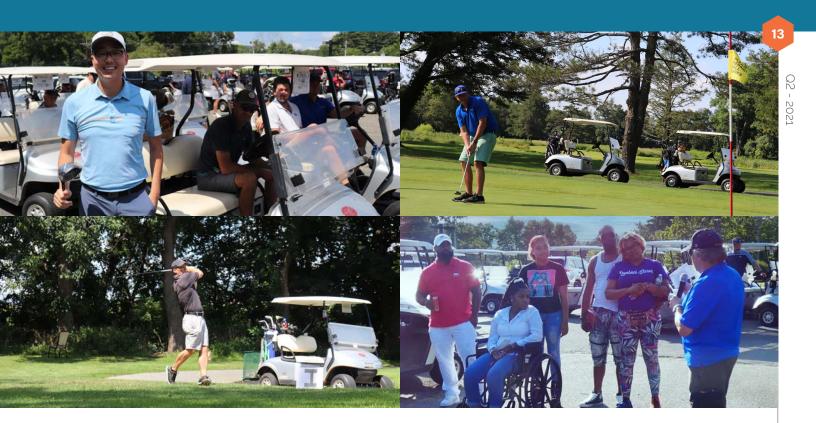
In 2020, the golf event was not possible due to the Covid-19 crisis. But the event was too important to put on hold. The Golf Outing was reimagined, and the team shifted gears to organize an online event, with donors sponsoring 18 virtual trivia "holes" and players rising to the new challenge. The competition was different, but fun and the fundraising just as effective. Over \$19,000 was raised and donated directly to food banks around New Jersey. As always, our team of donors and volunteers was the key to success.

BACK IN FULL SWING!

With the pandemic mostly behind us, it was time to get back on the links at Minebrook Golf Club and raise even more money for this worthy cause. This year, participants competed for some amazing prizes, including a \$25,000 hole-in-one jackpot, 'Million Dollar Shoot-out', and a chance to win the Pot o' Gold raffle.







STRONGER TOGETHER

The outing is part of NJMEP's 'Manufacturing Cares' initiative, which provides a forum for manufacturing companies to join together, and conduct coordinated charitable giving efforts. With these combined resources, the manufacturing industry can achieve a broader reach and greater impact in giving back to their communities and to the state of New Jersey.

'Jersey Guys' got its name because the scholarships this Golf Outing helps fund were created to honor two Jersey guys who should always be remembered: Anthony DeSantis and Bob Beaman. This year, one more 'Jersey Guy' is added to the list. Chris DePace, long-time NJMEP Account Manager, passed away from a bout with COVID-19 but he will never be forgotten. Chris was kind and always thought of others. Even while he was sick in the hospital, he was asking how Liyalani Roebuck was recovering. To commemorate this amazing individual, Chris DePace will be added to the 'Jersey Guys' list and a portion of the funds raised will be given to Liyalani and her family to help with her hospital bills.

Liyalani "Lili" was a former participant in the Team Eagle Foundations' LEDR program and in August of 2020, she was an innocent victim of a senseless shooting. Lili was shot in the head right before leaving for college.

Anthony DeSantis 'Service to America' scholarship is reserved for Active-Duty guard members, veterans, or immediate family members of active duty /veterans of the

U.S. military and provides funds to offset the costs of higher education or technical school.

Bob Beaman 'B-Involved' scholarship are funds set aside to recognize young adults who are actively involved in their local community. These individuals show exceptional promise as community leaders and are critical to the future of New Jersey.

Chris DePace was born in Sewickley, PA and moved many times before finding his home in Hamilton, NJ. Chris joined NJMEP in 2016 and was an avid golfer. His team won the 'Jersey Guys' Golf Outing in 2018 and he will always be an honorary 'Jersey Guy.'

BE A PART OF THE PARTY

Donation opportunities are still available. As the nation recovers from a disastrous year, events like 'Jersey Guys' are here to help elevate our local community. Each and every New Jersey resident benefits when the state is supported on the local level. By taking the time to enjoy a beautiful day on the golf course, so many individuals benefit.



SCAN TO LEARN MORE

2021 SCHOLARSHIP RECIPIENTS

Veterans and Interns Supported by 'Manufacturing Cares' and Team Eagle Foundation

Education is vital, in every form. Whether it's education in the trades or in the classic academic environment, no one can take away those skills and that knowledge. NJMEP raises money each year for scholarships and numerous charities. There was no better time to award incredible young adults with these scholarship funds than during the COVID-19 pandemic.

'Manufacturing Cares' is the framework for New Jersey manufacturing companies to join together and conduct charitable giving efforts. The 'Manufacturing Cares' initiative is the charitable arm of NJMEP. It includes any charitable effort hosted by NJMEP and its partners. Many of these programs help fund two available scholarship programs: the Anthony DeSantis 'Service to America' Scholarship' and the Bob Beaman 'B-Involved Scholarship'

Two groups of individuals received scholarship money from the 'Manufacturing Cares' initiative and NJMEP's partner, the Team Eagle Foundation in 2021. Active-duty military and NJMEP student interns were both given scholarship funds to help offset the cost of their education. In addition, the 'Manufacturing Cares' initiative includes money for stand-out young adults, setting aside funds and raising money for New Jersey community food banks.

New Jersey Community Scholarships Sponsored by 'Manufacturing Cares' and the Team Eagle Foundation

Anthony DeSantis 'Service to America' Scholarship, Bob Beaman 'B-Involved' Scholarship, and the Team Eagle Foundation

The 'Manufacturing Cares' initiative includes different scholarship funds that support different New Jersey communities. Scholarships include the Anthony DeSantis 'Service to America' Scholarship and the Bob Beaman 'B-Involved' Scholarship. Part of the 'Manufacturing Cares' initiative includes partnerships with organizations like the 'Team Eagle Foundation' which offers even more opportunities based on unique criteria, all of which support local youth programs like the LEDR program and young adults directly as they work toward their career and higher education.

Military Scholarship



Ben Erickson

Anthony DeSantis 'Service to America' Scholarship has a focus on active-duty members of the armed forces and their families. Ben Erickson is an active-duty member of the United States Air Force and is currently completing training in cyber security at Keesler Air Force base in Mississippi. He reached out to

NJMEP's 'Manufacturing Cares' scholarship fund with his essay focused on how these funds would be used to advance his education and military career. The DeSantis family chose Ben as the 2021 recipient of the 'Service to America' scholarship.

"I am very honored to have received this scholarship. It will help me in my engineering studies that will propel my military career," said Ben Erickson.

\$3,000 in scholarship funds were provided to Erickson to help with the cost of attending NJIT as he works toward his degree in Computer Engineering.

The manufacturing community in New Jersey is able to come together through initiatives like 'Manufacturing Cares' to raise funds for families like the Ericksons. Anthony DeSantis 'Service to America' Scholarship was developed to give back to people just like Ben, making the challenge of pursuing education while serving the country just a little bit easier.

Anthony DeSantis has six children who remain active in supporting the 'Service to America' Scholarship fund. The DeSantis family chose to award Ben these funds based on his military service, and academic achievements. More information on the Anthony DeSantis 'Service to America' Scholarship can be found by visiting, NJMEP.org/NJMEP-Scholarships

Internship Scholarship

Real-world experience is invaluable to college students. Experiencing a business, learning how it operates, and having the opportunity to contribute to an organization's shared goal is invaluable to any student. NJMEP gives young adults the

chance to experience the manufacturing industry by offering internships to New Jersey college students. Amanda Casabona, Community College of Morris student, and Ken Schwemmer, Fairleigh Dickinson University graduate are NJMEP's latest interns.

Internship positions are paid programs and each participant receives additional scholarship funds that are put toward their education.



Amanda Casabona

President of the STEM club at the Community College of Morris and a pre-med student, Amanda has been working with NJMEP since February 2021. She has been a vital member of the Critical Supply Chain team, spearheaded by Robert Stramara, COO, NJMEP. Her contributions have helped the Critical Supply Chain team identify manufacturers that can play a direct role in supporting the Offshore Wind Project taking place off the coast of Atlantic City. Amanda will be putting her internship with NJMEP on hold to begin her two-month fellowship at Morristown Medical Center, in Morristown, New Jersey in July.

The funds provided by the Team Eagle Foundation – LEDR program and the Bob Beaman 'B-Involved' scholarship were awarded to her to help with the purchase of textbooks for the 2021 spring semester.



Ken Schwemmer

Brought on to help support NJMEP's advocacy efforts, Ken has been working to strengthen his position in the New Jersey local community by supporting the Manufacturing industry. He recently graduated from Fairleigh Dickinson University with honors and continues to work with NJMEP's internship program. Ken has been working with the local community since 2011 and continues to get involved in state government. He contributes directly to NJMEP's advocacy efforts, assisting with critical advocacy-driven events like State-of-the-State of manufacturing and Hill Day.

Team Eagle Foundation – LEDR program and Bob Beaman 'B-Involved' scholarship funds were provided to Schwemmer at the start of 2021 to provide financial support for this community-centric individual.

Supporting the Local Community



Liyalani 'Lili' Roebuck

This year a special need arose when Liyalani, former LEDR program participant and New Jersey local, was the victim of a senseless violent act on August 7th, 2020. 'Lili' as her friends know

her, was shot in the head, leaving her bedridden. She was about to take the next step forward in her life and begin her freshman year at Hampton University on August 20th. Instead, she is now forced to recover from a gunshot wound and her pursuit of being a forensic scientist is put on hold.

Funds from the 'Manufacturing Cares' initiative and the Team Eagle Foundation - LEDR scholarships are being put aside to help cover the costs of her recovery and get her back on her feet to achieve all her goals.

Additional money is being raised from the sixth annual 'Jersey Guys' Golf Outing, held on July 23rd to give back even more to Lili and her family.

New Jersey Manufacturing Gives Back

'Manufacturing Cares' and the Team Eagle Foundation are designed to help support local New Jersey residents through scholarships, internships, and exciting educational community programs. These organizations make it easy to combine the efforts of the local New Jersey manufacturing community. Funds raised are distributed to students, active-duty military families, and those in need each year.

As of 2021, over \$350,000 has been raised through the 'Manufacturing Cares' initiative and the Team Eagle Foundation. With help from the manufacturing community, this is just the start! To contribute to the 'Manufacturing Cares' mission, please visit NJMEP.org/Manufacturing-Cares and start giving back today.



Remembering July 2, 1956 - April 14, 2021

Chris DePace was one of NJMEP's longest serving Account Managers and will be remembered by anyone lucky enough to have met him. Losing him came as a shock but we can take solace that he passed peacefully surrounded by family and loved ones at Robert Wood Johnson University Hospital in Hamilton.

He lived all over the country before settling in New Jersey nine years ago with his wife, Donna. Chris was a valued member of the New Jersey manufacturing community and the NJMEP team.

Caring, friendly, and able to brighten any room he walked in, Chris was an amazing individual. We're thankful for every day he contributed to our organization and want to wish his family all the best during this difficult time.

He will not be forgotten.

A scholarship has been dedicated to his memory. Every year the 'Jersey Guys' Golf Outing will raise funds for the Chris DePace memorial scholarship and funds will be awarded to stand-out Young Adults to help pursue further education.





MANUFACTURING PARTNERSHIPS

MAKING WAVES

brought to you by



In 2021, New Jersey Manufacturing Extension Program Inc., (NJMEP) has come up with yet another way to stay connected and to open lines of communication with manufacturers all throughout the nation through the Manufacturing Extension Partnership (MEP) National Network. The 'Manufacturing Partnership...Making Waves' podcast hosted by NJMEP's CEO, John W. Kennedy, PhD, delves deeper into the world of manufacturing and the national support network available to these businesses. The podcast covers an array of different topics including... the skills gap, supply chain, and even how tourism can directly impact the manufacturing industry.

Mr. Kennedy sits down with a new guest (virtually) to discuss the issues they face in their local manufacturing industry. Guests from all over the nation are invited to attend and provide true insight into the challenges in their specific state and region. However, with manufacturing, challenges are often universal. With an array of guests and tons of insights being discussed there is quite literally always something new to talk about. Bringing in a variety of experts and industry professionals ensures there is an unbiased and complete image of the entire challenge and the factors that play a role in each.

The 'Manufacturing Partnership...Making Waves' podcast can be streamed on most podcast streaming platforms and can also be viewed on YouTube. New episodes are released on the last Friday of each month. Be sure to tune in and learn about a new subject in the vast universe that is manufacturing by visiting NJMEP.org/MakingWaves.



BUCKLEY BRINKMAN EXDECUTIVE DIRECTOR & CEO, WCMP

A People Problem - Manufacturing's Biggest Challenge: Buckley Brinkman, Executive Director & CEO, WCMP goes in depth on the skills gap and the "body gap" that manufacturers are currently facing



DR. ETHAN KARP,
PRESIDENT & CEO. MAGNET

What is Iteration? Guest, Ethan Karp, CEO of MAGNET discusses the iteration program that MAGNET has implemented to assist startup manufacturers



ALYSSA RODRIGUES,
DIRECTOR, THE ALASKA MER

On this episode, guest Alyssa Rodrigues, Director, The Alaska MEP talks about how tourism and its decline during the COVID-19 pandemic has affected the manufacturing industry in the state of Alaska.



DELOIT WOLFE,
PRESIDENT & CENTER
DIRECTOR, IMPACT
WASHINGTON

Join Deloit Wolfe, President, Impact Washington as he explores the different verticals over Impact Washington ranging from food to maritime manufacturing.



TONY DEMAKIS,
PRESIDENT, ALLIANCE
SPECIALTIES AND LASER
SALES

Guest Tony Demakis, President, Alliance Specialties & Laser Sales discusses the workforce shortage from the manufacturer's point of view and how MEPs can help.

Staying up to date with the latest in the complex manufacturing industry is challenging. 'Manufacturing Partnerships – Making Waves' is here to help make busy business leaders' lives easier. Listen now at NJMEP.org/MakingWaves and follow along with the ever expanding and transformative American manufacturing industry.





MEP MEANS MORE FOR MANUFACTURING

As part of a national network, the New Jersey Manufacturing

Extension Program is empowering local manufacturers to excel in a global market.

WHAT IS MEP AND WHY WAS IT CREATED?

Manufacturing is the lifeblood of business, industry, and the global economy. When manufacturers excel, so do the countless industries and occupations that rely on them. Conversely, a struggling manufacturing sector is often the first symptom of a lagging economy. Recognizing the vital importance of this industry, the U.S. government sought to establish a program that could empower American manufacturers to thrive and grow, especially small- to medium-sized companies that might not have the budget or resources enjoyed by their larger, more established counterparts. They started the Manufacturing Extension Program (MEP), a public-private partnership created as part of the Commerce Department's National Institute of Standards and Technology (NIST) with the specific goal of

providing U.S. manufacturers with every available resource for ensuring their continued growth and success.

WHERE DOES MEP OPERATE?

The MEP National Network consists of 51 MEP Centers located in all 50 states and Puerto Rico, offering access to over 1,400 advisors and experts at more than 385 MEP service locations.

HOW DOES MEP HELP MANUFACTURERS?

MEPs provide manufacturers with direct access to a very wide range of services such as market research, recruiting, plant layout, waste mitigation, training/workforce



development, sales support, tax/legal advice, product development, and cybersecurity services. This is achieved through a comprehensive network of subject matter experts and consultants who work closely with manufacturers through their local MEP Center. Last year, MEP Centers interacted with 27,574 manufacturers, contributing to \$13.0 billion in sales, \$2.7 billion in cost savings, \$4.9 billion in new client investments, and helped create or retain 105,748 jobs.

The local legislature is educated through these advocacyfocused events which ensure manufacturers have a voice on the public stage.

Manufacturing is supported by NJMEP through projectbased work as well as advocacy support to help these businesses thrive from within while creating a more probusiness environment externally.



WHAT IS NJMEP?

Created in 1996, the New Jersey Manufacturing Extension Program Inc., is New Jersey's local MEP, serving clients in the state and providing them with the tools and services to meet the specialized needs of New Jersey's manufacturers. NJMEP experts assess capabilities and business opportunities, identify appropriate resources, consult on best practices, and forge synergistic partnerships. Combining the scale and resources of a national network with a localized, boots-on-the-ground operational model, NJMEP is uniquely positioned to empower small- and mid-sized New Jersey businesses with the most effective and efficient methods to sustain growth and boost profitability. Our services are categorized into the following three areas: Operational Excellence, Innovation and Growth and Workforce Development.

NJMEP does not lobby for manufacturing, but it does advocate for the industry. The organization worked together with local legislators to create the bi-partisan bi-cameral Legislative Manufacturing Caucus. In addition to the efforts put forth by the Caucus, NJMEP advocates on its own through events like State-of-the-State of manufacturing which work to highlight the needs and challenges local businesses face.

HOW DOES NJMEP CONNECT MANUFACTURERS WITH EMPLOYEES?

NJMEP created the Pro-Action Education Network™(PEN) to benefit New Jersey manufacturers in need of workers and New Jersey residents in need of careers. The effort works to overcome the growing skills gap by locating job seekers, providing them with training, and helping fill crucial manufacturing jobs with these qualified candidates. Working with Community Partners, CTE schools, vocational/technical schools, and community colleges, the PEN provides a platform to effectively respond to employer demand by empowering students, incumbents, and dislocated workers with the skills they need to succeed in today's manufacturing workforce. To this end, the PEN oversees a wide range of training and recruitment initiatives, including apprenticeships, mentorship programs, on-the-job training, and scholarships.

HOW DOES NJMEP CONNECT MANUFACTURERS WITH LAWMAKERS?

With its State-of-the-State event and the work with the Legislative Manufacturing Caucus, NJMEP provides a unique forum for direct dialogue between New Jersey manufacturers

and members of the state legislature who are shaping the laws and regulations that affect the industry. Through these feedback channels, lawmakers can share viewpoints in real time with their constituents on crucial issues like worker safety, regulatory statutes, workforce challenges, environmental impact, and tax legislation. NJMEP helps New Jersey companies keep abreast of the trends that are guiding state and municipal governments. The advocacy work creates an environment where industry is considered before legislation is imposed. Educating lawmakers goes a long way in their understanding of which industries are contributing to the GDP and how these manufacturers need to be supported.

HOW HAS NJMEP MADE AN IMPACT IN NEW JERSEY?

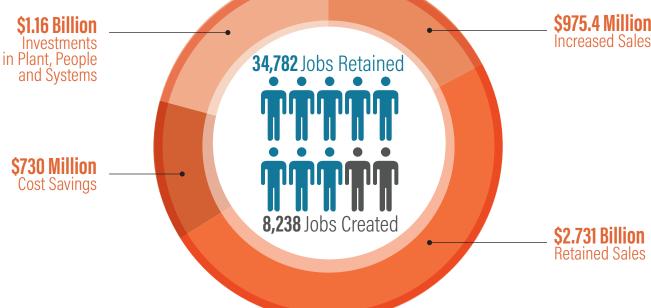
Since 2000, NJMEP has worked with thousands of manufacturers, leading to more than \$3.7 billion in increased/ retained sales, \$730 million in process improvement savings, \$1.16 billion in capital investments and helped create and retain more than 43,020 jobs. During that period, NJMEP has helped manufacturers realize more than \$5.6 billion in value.

During the height of the pandemic, NJMEP's advocacy team worked with the Governor's office to create a plan to ensure all manufacturing in the state was deemed essential and that these companies had the tools and information to keep their employees safe.

NJMEP's main goal is to give the manufacturers of New Jersey every tool and every bit of support they need to operate effectively, profitably, and compete globally.

Apart from the considerable financial value it has created, NJMEP has been instrumental in making New Jersey a more suitable location for manufacturers, workers seeking quality jobs, and families in search of opportunities for their children. NJMEP will continue its mission to provide the resources that fuel a better economy and a brighter future for New Jersey. Learn more at NJMEP.org. 9

Since 2000, NJMEP has helped manufacturers realize more than \$5.6 Billion Realized Value





Revel Nail

Few New Jersey manufacturers embody the American dream quite like Revel Nail. This exceptional manufacturing business continues to push the boundaries of innovation and product development. Starting at their kitchen table, Revel Nail continued to outgrow facility after facility until they found their current home in Blackwood, New Jersey. The business develops and manufactures nail products that are safer than acrylic polishes. Founder Phon Malone even developed a novel product named Up2You.

Innovative products like Dip Powder and their proprietary, Up2You along with a commitment to quality and customer satisfaction drove them to become an industry leader.

Continuous improvement is a priority at Revel Nail. Phon Malone, CEO, and his entire leadership team are constantly striving to grow, eliminate waste, and explore ways to become more productive and efficient. When manufacturing processes improve, it means happier customers and more opportunity for expansion. See how Revel Nail was able to drive their business forward with Lean Manufacturing training by reading the full Success Story on page 18.

Rose Brand Wipers

Creating an environment that pulls an audience's attention is no easy feat. Rose Brand Wipers helps make creating an unforgettable experience easier. No matter the event or production, this Secaucus-based manufacturer is a leader in theatrical draperies, production supplies, and custom stage assemblies. Innovation is unavoidable in their space. It takes imagination and an incredible amount of ingenuity to develop an immersive environment in a variety of physical spaces. There is no limit to their capabilities when it comes to incorporating the latest fabrics, fabricating custom complex tracks, and utilizing advanced motorized systems.

Rose Brand Wipers takes being an industry leader seriously. They are constantly looking for ways to maintain their position as a pioneer in their space. A commitment to progress is costly but leadership is always working to gain a competitive advantage while exploring ways to offset the costs of innovation.

New Jersey manufacturers are rewarded when they break the mold. Research and Development may paint the picture of scientists in clean rooms with lab coats. However, manufacturing businesses of all kinds take part in R&D. Businesses often don't even realize what they do can be considered R&D according to the state. Rose Brand Wipers creates custom environments and processes which require a massive amount of creative thinking, research, and exploratory development. See how this New Jersey manufacturer was able to turn their R&D into cash for the business by reading the full Success Story on page 23.

New Jersey manufacturing is Built to Last. These businesses and the employees that make it all possible are truly, 'Unsung Heroes'.

Check back in Manufacturing Matters every quarter to see the Built to Last manufacturing list.

To be included, contact Mike Womack at mwomack@njmep.org and show the world your company is Built to Last.

REVEL NAIL GETS LEAN AND SEES RESULTS



BACKGROUND

Revel Nail is currently located in Blackwood, NJ and has over 190 employees. The manufacturer, founded in 2006, develops alternative nail products safer than acrylic polishes.

This company is the embodiment of the American dream. The founders began by bottling their product on their kitchen table and later grew to a small, run-down warehouse in Deptford NJ. Both owners were working full-time jobs in addition to building the business. Phon Malone, CEO, even developed a novel product named Up2You, allowing people to create gel polish out of their favorite nail polish color. This product, in addition to its dip powder, accelerated the company's growth. This allowed them to move into a bigger warehouse and sell to larger brands. All this growth took place over a few short years.

Leadership is always looking to improve the brand and the Revel Nail line of products. This culture has helped them grow their business to become an international name. Continued growth at this rate does not come without growing pains.

CHALLENGE

Continuous improvement is built into the Revel Nail culture. Revel Nail is constantly striving to be a leader in the industry. In 2019 they began to explore Lean to overcome a massive but welcomed challenge; "we literally had too many orders for us to process," said Phon Malone, CEO Revel Nail.

This New Jersey manufacturer faced a similar challenge many growing businesses experience. They were struggling to keep up with demand because of production delays.

Revel Nail is focusing on international growth. Their New Jersey facility must be able to keep up with demand. Growth and a massive influx of orders are always exciting, but they can cause production delays when lines aren't efficient. Revel Nail has been growing for seven years. The manufacturer outgrew five facilities in the first five years. Managers at Revel Nail were not familiar with the best way to solve their production bottlenecks, Lean Manufacturing.

SOLUTION

NJMEP conducted a complimentary business assessment with Revel Nail to identify where they were struggling and areas that leadership wanted to improve. The challenges identified were production delays stopping the manufacturer from keeping up with demand. Lean Manufacturing training and organization was identified as the best solution for the growing New Jersey manufacturing business.

12 separate production organization initiatives, training, and educational activates were held throughout the year-long Lean Manufacturing project. Employees were introduced to Lean as a concept, NJMEP worked with Revel Nail to "Lean" their facility and implement best practices, and hands-on Live simulation training was conducted. The training was constantly reinforced by leadership through tools and best practices provided by the Lean facilitator. NJMEP's account manager continued to engage with Revel Nail leadership to provide support and guidance throughout the journey. Revel Nail's leadership was active and engaged, ensuring the success of this progressive step forward in the business' culture.

""The training we went through with NJMEP really, really helped us, I'm a chemical engineer by trade. I have my Green Belt Six Sigma from a long time ago, but a lot of our managers weren't familiar with the concept of LEAN. So having that overview training allowed them to analyze their process, their department, and make it better." "

Phon Malone, CEO, Revel Nail

Below are examples of Lean exercises that were conducted with Revel Nail:

- Value Stream Mapping
- Introduction to Lean Manufacturing
- Lean Employee Training
- Lean Overview with Live Simulation
- Lean Workplace Organization
- Implementing 5s for Workplace Organizations
- Lean Setup and Reduction

RESULTS

Revel Nail was thrilled with the results of the Lean training provided by NJMEP. Investing in their workforce provided an undeniable ROI. Coupled with the fact that NJMEP worked with the State to ensure all manufacturing was considered essential during the pandemic, Revel Nail was able to continue producing their products, keep their workforce employed, and provide an economic boost to their local community.

Revel Nail recorded the following impact during their NIST survey conducted 6-12 months after the conclusion of the Lean Manufacturing project with NJMEP:

INCREASED SALES: \$30,000,000

EMPLOYEE CREATION: 100

RETAINED SALES: \$5,000,000

RETAINED EMPLOYEES: 90

COST SAVINGS: \$3,000,000

ROSE BRAND WIPERS INC. IS REWARDED FOR INNOVATING - WORKING WITH NJMEP TO SECURE R&D TAX CREDITS



BACKGROUND:

Rose Brand Wipers is currently located in Secaucus, New Jersey (9th Congressional District; 32nd Legislative District) and is a leader in theatrical draperies and production supplies in the entertainment, educational, and exhibition space. This 'MADE in New Jersey' manufacturing business fabricates custom stage curtains and assemblies for venues ranging from Broadway productions to school auditoriums and have been doing so since 1921. They specialize in transforming a space to create an immersive environment for anyone in attendance, no matter the audience.

Clients come to Rose Brand Wipers because of its ability to fabricate custom complex tracks, incorporating the latest fabrics, and electronically controlled motorized systems. Driven by innovation, this manufacturer is constantly pushing the boundaries of what's possible. Company leadership is always looking for new, innovative ways to support their customers while providing the best quality service possible. Rose Brand Wipers turned to NJMEP as a partner to support their growth and competitiveness in New Jersey and abroad.

CHALLENGE

New Jersey manufacturers need to constantly strive to improve their production process, cut costs, and take advantage of any incentives available in order to remain competitive. The high costs of doing business in the Garden State can be offset when a business works with a partner like NJMEP to identify ways they can improve the bottom line. Creating and manufacturing custom environments for such an extensive client base requires constant innovation and investment.

Rose Brand Wipers needs to invest their time and money refining their production process, service offerings, and exploring advanced materials to remain a leader in their industry. Without innovating, they would quickly fall behind the competition. All this innovation requires substantial investment. The combination between the business expanding and constantly striving to improves tremendously costly.

SOLUTION

Rose Brand Wipers heard about another manufacturing business partnering with NJMEP to improve their competitiveness. A complimentary business assessment was conducted to gain an understanding of the company and its manufacturing processes after Rose Brand Wipers reached out to NJMEP. It was discovered the manufacturer would be a great candidate for R&D Tax Credits.

At first, leadership dismissed R&D Tax Credits, stating no R&D was conducted at the facility. NJMEP's Account Manager insisted they meet with the subject matter expert to explore what qualifies as R&D. Many manufacturers immediately envision lab coats and clean rooms when R&D is being discussed. However, nearly every manufacturer requires some form of innovation or has developed or is constantly developing new processes that allow them to perform their job better, safer, or produce their products more efficiently.

"Learning about R&D Tax Credits came around at just the right time because we were going to move into areas with much more trial and error," Bob Bertrand, Rose Brand Wipers General Manager stated.

NJMEP worked with Rose Brand Wipers to conduct a closeup inspection of their facility and operations. An in-depth study was conducted with NJMEP's subject matter expert to see which of the manufacturer's actions met the following criteria.

- The goal must be to discover some technological information that does not already exist within the organization.
- There must be a level of technical uncertainty related to the product or process development.
- Any qualifying event must have a process of experimentation to prove or disprove a technical theory.
- The research must have goals attributable to function, efficiency, capacity, or other performance criteria.

After a preliminary review of the eligible R&D costs, NJMEP combined this information with additional organizational data to provide Rose Brand Wipers an approximate Federal R&D tax credit.

The R&D Tax Credit Process includes:

- Reviewing the list of development projects and selected eligible R&D projects.
- Client preparing a narrative or description of each project for the accounting firm's review.
- The accounting firm reviewing the narrative and made some revisions to eliminate ineligible areas or activities.
- The client suppling information enabling the accounting firm to allocate costs to the eligible projects.
- NJMEP working with the client to gather costs related to the R&D projects.
- The accounting firm preparing the necessary tax forms and submitted the tax return and R&D tax credit on the client's behalf.

NJMEP supported the manufacturer's needs every step of the way to secure the largest possible R&D Tax Credit. The tax credits they received continue to help the organization expand and grow in New Jersey.

RESULTS

Rose Brand Wipers has a long history of pushing the boundaries of its manufacturing process and service offerings. The ability to fully understand what processes qualify as R&D is critical so they can take full advantage of the R&D Tax Credit incentive program. The credit helps offset some of the costs of constantly improving and allows them to continue leading their industry.

"If we didn't have the R&D Tax Credits, I'm not sure we would have had the ability to make some of the acquisitions that help Rose Brand Wipers maintain its standing as an industry leader," said Bob Bertrand, Rose Brand Wipers General Manager.

An independent third-party survey captured the impact of Rose Brand Wipers engaging with NJMEP after 12 months:

INCREASE SALES: \$9,000,000

EMPLOYEE CREATION: 27

RETAINED SALES: \$17,000,000

EMPLOYEE RETENTION: 10

COST SAVINGS: \$385,000



*2019-2020 Survey Period



Celebrating 'MADE in New Jersey' Manufacturing

Highlighting Essential 'MADE in New Jersey' Manufacturers That Drive NJ Forward



FOOD TRENDS CATERING & EVENTS in Little Ferry, NJ provides catering options for either intimate dinners or conferences exceeding 2,000 attendees. This 'MADE in New Jersey' manufacturer offers clients menu design, staffing, rentals, venue, décor, and the freshest ingredients from local vendors.

Humanscale[®]

HUMANSCALE CORP. is the leading designer and manufacturer of ergonomic products improving the health and comfort of work life. This award-winning 'MADE in New Jersey' manufacturer is located in Piscataway and provides a range of seating, desk, monitor, and lighting products.



KOZAK MICRO ADJUSTERS located in Randolph, NJ has been in business for over 30 years, constantly achieving sustained growth. 'MADE in New Jersey' is filled with innovative companies and this one is no exception by providing plastic or metal components to aid in R&D efforts all the way through full-scale production.



SWEPCO TUBE, LLC. calls Clifton, NJ home and is a 'MADE in New Jersey' manufacturer. They are a leading supplier of stainless steel, high alloy, and corrosion-resistant pipe and tubing.



DOUGLASS INDUSTRIES INC. has been serving customers from their Egg Harbor City, NJ facility since 1954. This 'MADE in New Jersey' manufacturer supplies high design, quality fabrics to a variety of customers domestically and abroad.



MIND CHASERS INC. in Manahawkin, NJ is a 'MADE in New Jersey' engineering services and technology company with a mission to delight customers while envisioning, designing, and delivering connected devices that provide a secure, private, and easily understood solution.

Manufacturing is a critical part of the New Jersey economy. These businesses play a critical role in their local community and have proven to be essential to the state and nation. 'MADE in New Jersey' is a complimentary program that helps highlight these businesses which are incredible economic stimulators and providers of competitive employment opportunities. With over 11,000 manufacturers that make their products right here in New Jersey, be sure to check back every week for the latest 'MADE in New Jersey' manufacturer shoutouts!

Sign up to become a MADE in NJ member by contacting mwomack@njmep.org.





From the time of the first European settlers in the 1600s to the present day, New Jerseyans have always loved their beer. In fact, some of the very first manufacturers here were brewers. Our beer heritage is reflected in a long and storied tradition of brewing history, which began in the 1640s with a Dutch brewery in what is now Hoboken, part of the New Netherland colony. As more German and Dutch settlers arrived, demand for beer skyrocketed and new breweries sprung up in nearly every population center. During a peak in the late 1800s, there were no less than 27 breweries in Newark alone, including Pabst, Ballantine, and Rheingold. With the onset of World War I, anti-German sentiment forced many beer makers to close up shop, and things went from bad to worse in 1919 when the Volstead Act ushered in 14 years of Prohibition.

Since then, the Garden State brewing industry has returned to its former glory, as the craft beer movement has grown from a specialty niche market to a global phenomenon. The New Jersey Brewers' Association was established in 1995 to be a vocal advocate for microbreweries and brewpubs, representing a new generation of beer makers...and beer drinkers. Some of these breweries have gained recognition as part of NJMEP's 'MADE in New Jersey' program, and are proudly carrying on a manufacturing tradition that began more than 400 years ago. In a demanding market that is becoming more competitive with each passing year, these New Jersey-proud companies have all the ingredients to become industry leaders offering world-class beers for discerning connoisseurs.



JERSEY GIRL BREWING COMPANY

Beer enthusiasts are seeking out more complex flavors and styles to quench their thirst for the exotic. Jersey Girl Brewing Company is answering the call with a line of full-flavored beers to suit any palate. Since its founding in 2016, the Mount Olive-based brewer has established itself as an innovator, using an extensive range of ingredients, such as fruits and herbs, to create beers that add a refreshing twist to traditional Old World recipes.

Jersey Girl's 10,000 square-foot facility features a tasting room where customers can sample some of the dozen beers available for purchase, and a few exclusive styles only available at the brewery. The facility also offers event space for private parties and live music, as well as informative tours and tastings.

https://jerseygirlbrewing.com



CAPE MAY BREWING COMPANY

With its facility located at the Cape May Airport, Cape May Brewing Company (CMBC) can truly offer "flights" of beer! CMBC was founded in 2011 with the mission of creating refreshing, no-nonsense ales and hard seltzers for the beach and beyond. Their specialty IPAs and wheat beers rely on the freshest possible ingredients and state-of-the-art brewing techniques.

Visit the tap room and beer garden at CMBC for an experience that combines some of New Jersey's best beers and beaches. You can also take home your favorites from the Brewtique.

https://www.capemaybrewery.com



CARTON BREWING COMPANY

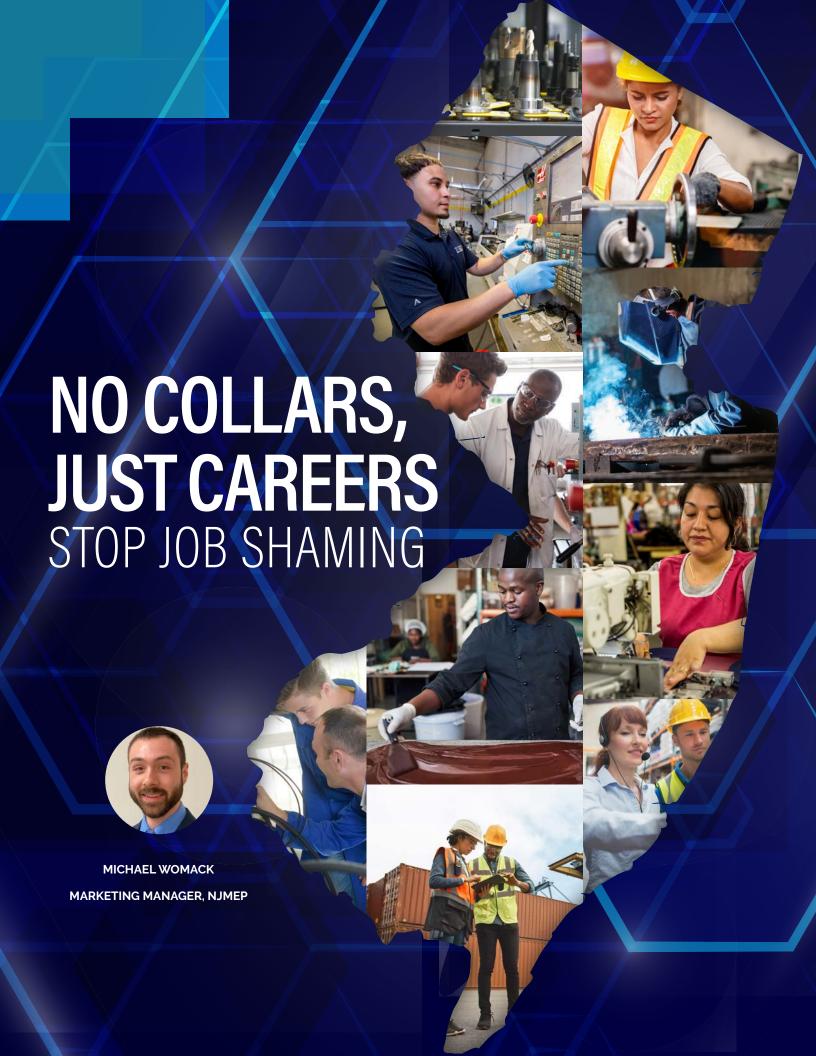
In the seashore community of Atlantic Highlands where they were born and raised, cousins Chris and Augie Carton found a turn-of-the-century red brick warehouse and adapted it to accommodate a 15-barrel brew house. Their line of gourmet beers incorporates an incredibly wide and eclectic range of flavors and exotic barrel-aging, like the Imperial Cream with almond flour aged in Willet Bourbon barrels.

Inviting dedicated beer lovers to "drink off the beaten craft", Carton Brewing Company is dedicated to the principle of constant innovation, and offers home delivery of its products in bottles, cans, and kegs throughout New Jersey.

https://cartonbrewing.com/

New Jersey has a rich manufacturing industry. From the textile mills of Patterson, NJ to the deep-rooted tradition of brewing beer, it's all made right here in the Garden State. Brewers and manufacturers of all kinds can be recognized for their incredible work by signing up to be a 'MADE in New Jersey' manufacturer at no cost right here: https://www.njmep.org/made-in-new-jersey.

Learn more about the New Jersey Brewers' Association: https://www.njbeer.org



"Blue Collar" is a term I despise. My collar was blue the day I wrote this article and I work behind a desk in a 'fancy' office. I know a welder that makes nearly double my salary. Categorizing career paths by the color of their collar is irrelevant and demeaning. Forget about the collars, focus on the career, and stop stigmatizing a critical function in society.

For decades students have been steered away from industrial work. Manufacturing was painted as dangerous, dark, dirty, only for those that couldn't make it through college. If this misinformation campaign wasn't so rampant, the \$1.7 trillion in U.S. student debt¹ might be a bit lower.

I'm not here to say college isn't a good option for some. My degree helped me find a career I love, in an industry I adore, helping break down a dangerous stigma holding back a vital economic stimulator. However, education isn't exclusive to college. Fruitful careers don't all require a college degree. No one is saying college education is off the table if an individual decides to become a master welder or expert machinist first. The career path sold by high schools today is misguided and without substance.

NO COLLARS, JUST CAREERS

The term blue collar implies the work pays less. "White collar workers are to be more respected. Blue collar workers aren't as educated. White collar workers are more successful," This is all ridiculous. I know "blue collar" workers who are more educated, have a more robust skills set, and are more successful than me. I'm a white-collar worker. How can that be? The answer is simple; the segmentation of professional careers is damaging the reputation of the industrial worker, so much so that the negative image it portrays began to root into the foundation of society. When kids were growing up, they were told that they needed to get good grades and go to college so they wouldn't have to work with their hands. They shouldn't want to be "blue collar" workers. Little did we know, this kind of work was fulfilling, profitable, and absolutely essential.

All manufacturing in New Jersey was considered essential by the governor. The New Jersey Manufacturing Extension Program Inc,. (NJMEP) worked alongside the governor's team during the pandemic to highlight the value of the industry and explain the damaging effects of disrupting the supply chain by shutting any

1 https://www.cnbc.com/2020/12/22/us-student-debt-has-increased-by-more-than-100percent-over-past-10-years.html#:~:text=The%20Federal%20 Reserve%20estimates%20that,when%20compared%20to%20decades%20prior.

manufacturing down. Employers weren't furloughing their workforce at the rate other industries experienced because the world required the products these manufacturers produced.

Manufacturing is a secure industry. Without it, we wouldn't have the keyboard that wrote this article, the screen it was reviewed on, the desk I sat at, the flooring that supported me. Nearly everything is manufactured. All off these processes to produce everyday items require human intervention in some way. Robots and automation will not eliminate the need for people in manufacturing. That myth needs to be put to rest as well. The world needs people to program these robots, support the production process, analyze processes, and transport goods. Manufacturing requires people. All of these people are essential. When one manufacturer closes, there are countless disruptions up and down stream. A career in manufacturing means a career that matters, in a big way.

STOP JOB SHAMING

The average salary for a manufacturing professional in New Jersey is over \$94,000 annually². I've seen that fact drop jaws. People don't believe me. They often start by asking "there's a manufacturing industry in New Jersey?". Many in my generation, born in the early 1990s, were sold the story that all manufacturing went overseas. People said there was no opportunity in manufacturing. The only way to get a career that can pay the bills was to go to college, rack up hundreds of

² https://www.njmep.org/ download/njmep-new-jerseymanufacturing-industry-report/

New Jersey Manufacturers,

Do You Have...

- Jobs that are difficult to fill with the right candidates?
- Positions that have high turnover?
- Occupations where a highlyskilled workforce is retiring soon?
- Challenges in motivating employees?
- Positions requiring skills that can be learned on the job?
- Difficulty attracting new and more diverse talent pools?

Contact NJMEP today to learn more about the Pro-Action Education Network™.

Building Skills. Building Confidence. Building the Future.

Workforce challenges are still the number one concern for New Jersey manufacturing businesses. NJMEP is offering manufacturers a suite of workforce programs focused on solving these businesses most disruptive issues.

New opportunities were developed using funds provided by the CARES Act. These new recruiting and upskilling programs are available for a limited time at a reduced cost.

Contact NJMEP today and start taking the right steps forward.





973.998.9801 | WWW.NJMEP.ORG | INFO@NJMEP.ORG

thousands of dollars in debt, and hope for the best once you graduate. That simply isn't true.

Manufacturers craftspeople. are Modern manufacturers mix technology with hands-on work to create the world we see around us. My favorite example to give is when I ask someone to look around the room and point out 3 things that aren't manufactured. The exercise can either end extremely quickly or in a long, drawn-out fashion with someone trying to prove a point only to eventually fold. A quick Google search or a review of the "MADE in New Jersey"3 listing will quickly highlight just how many products can be or are made within 100 miles.

"COLLEGE ISN'T FOR EVERYONE"

The phrase above is stated often when touting the benefits and value of technical education. Unfortunately, it is doing much more harm than good. It gives the impression that those that chose a different path aren't "College material". The phrase "College isn't for everyone" makes it seem like anyone that doesn't fit the college mold or chooses not to bury themselves in debt are beneath those that do go directly to college after high school.

Picking a trade after high school does not write off college. There is no 'right way' of handling one's education. Industrial workers are exposed to advanced mathematics, engineering principles, businesses fundamentals, the complexities of the modern supply chain, and countless other highly profitable and highly studied areas. Building a foundation of technical

3 https://www.njmep.org/made-innew-jersey/made-in-new-jerseycompanies/ knowledge is a fantastic way to get started in life. There's no rule saying an individual can't apply for college after a few years working in the industrial space. On the contrary, it makes financial sense. After a few years of work, this individual will be more financially secure and potentially able to pay for college without burying themselves in mounds of student debt.

TIME TO MOVE FORWARD

Everyone walks a different path. College sometimes doesn't come directly after high school, sometimes it does, sometimes it doesn't happen at all. There is no right or wrong way to progress in life, as long as progress is being made. Pushing people away from industrial careers based on stigmas is doing irreparable harm to our nation and economy.

Labeling career types, saying "some aren't material" college or "college isn't for everyone" is derogatory and damaging to society. As a culture, we are moving away from labeling, working every day to be open minded and embracing all walks of life. Career paths should not be left out of this conversation. Pre-judging a career, based on an outdated label and stigma will continue to hold back progress. People that may be perfectly suited to dive into an industrial career after high school may be steered away and instead start out life with massive student debt to overcome. These individuals that have a passion for creating or are seeking fulfilling work where they can see a tangible result from their effort could have instead been acquiring on-the-job experience in a career that can last a lifetime. There are no collars, just careers, it's time to stop job shaming for the betterment of society,



RETENTION AND HIRING CHALLENGES IN THE INDUSTRIAL SPACE

After nearly a year and a half of working onsite throughout the COVID-19 pandemic, industrial manufacturers continue to struggle against rising consumer demand and the cost of raw materials amid a massive job shortage.

According to the Institute for Supply Management, while U.S. manufacturing activity surged to a 37-year high in March, the industry currently has more than 500,000 job openings. In New Jersey alone there are over 30,000 open positions.

Here are just a few of the reasons for this gap, according to New Jersey manufacturers:

INDUSTRY MISPERCEPTION

"Nationwide perception of the industry is one of the most difficult barriers to overcome, and that's not something that I or we in manufacturing can overcome alone," said Joshua Hopp, president of HK Metalcraft in Lodi.

According to the 2021 Deloitte and the Manufacturing Institute Manufacturing Talent study, nearly 38% of manufacturers say new job applicants have different expectations for jobs and careers, while 36% say there is a lack of attraction or interest in the industry by both students and parents.

"I don't know if that idea came from the falsity that manufacturing is dark, dingy, and dirty, or that when you go into a manufacturing apprenticeship or trade, it's not the same as going to a four-year college," Hopp said. "But if you visited us, you would see that we're actually a technologically advanced, well-functioning company with extremely smart people making complicated parts out of metal.



"Plus, there are not many other ways that you can learn a skill and become educated without any student loan debt while maintaining a job and putting money in your pocket as an employee of a company."

Still, manufacturers in New Jersey say they must work overtime to sell and continuously improve upon their company missions, cultures, and benefits to prove to prospective employees how valuable a career in manufacturing can be.

"We have to convince them that there is a bright future for them here in this industry," said Gail Friedberg, CEO of ZaGO Manufacturing Co. in Newark. "As we help them to build their skills, their responsibilities and salaries will grow, too. If they want to learn more and go to school, we'll also contribute to that."

many manufacturers now Though offer tuition reimbursement, the only way to seemingly overcome persistent misperception of manufacturing is to involve those outside the industry.

"We need some encouragement from those with loud voices, whether they be in government or education," Hopp said. "Guidance counselors, for example, might say, 'Hey, maybe going to a four-year college to get a degree you may or may not use isn't the right path, but look at your custom-built car. It's evident that you're extremely handy - maybe you can use those skills to do something you'll really enjoy for the rest of your life."

Workforce Today."

"The best candidates are either currently working or get offers fast," said Hope Hurley, HR leader at Thorlabs in Newton. "When you see a great résumé, you must act quickly to interview the candidate."

According to the same study by Deloitte and the Manufacturing Institute, the manufacturing industry recouped nearly 63% of jobs lost during the pandemic, but nearly 570,000 jobs had not been added back by the end of last year.

"If people were not happy in their roles during the pandemic, they may have put off looking for a new job," Hurley said. "Now that employers are hiring again, those employees are beginning to look for new jobs or are getting contacted directly by headhunters or recruiters."

Friedberg said that, although she hired four new employees in part due to growth in the medical field, and it was more challenging than usual due to reasons beyond her control.

"We had one or two new hires leave for better positions; there's a lot of opportunity out there," she said. "For example,

> almost immediately offered another position at a higher salary."

> Manufacturers are therefore forced to continually improve their offerings and opportunities for growth to remain competitive.

> we had one person start but was

COMPETITIVE MARKETPLACE

Despite higher unemployment rates than usual, U.S. manufacturers believe finding the right talent is now 36% more difficult than it was in 2018, according to a study published by Deloitte and the Manufacturing Institute in May entitled "Creating Pathways for Tomorrow's

addressed within the manufacturing sector, as many as 2.1 million manufacturing jobs will be unfilled through 2030, according to the study published by Deloitte and The Manufacturing

Institute in May.

If these and

other hiring

and retention

issues are not

TALENT AND AVAILABILITY

"Highly specific technical, scientific, and engineering roles are difficult to fill as there are fewer applicants to choose from with those skill sets," Hurley said. "We have to really fine tune where we advertise and constantly be recruiting for those roles."

Though New Jersey currently offers more than 1,000 apprenticeship programs, there are still fewer than 10,000 active apprentices in the state.

Hopp said there is also less of a desire to move up and stay with one company to better understand one's job.

"There's a need for tool designers, but if you haven't laid your hands on the

metal, if you haven't worked with the tools, you don't truly understand how the process works, and I think at best you can become a mediocre designer," he said. "Simply designing something on a computer is one aspect of it, but it's not the entire job."

Operating in a post-pandemic environment can further complicate things, as more employees seek hybrid or remote work arrangements that are more difficult to accommodate in manufacturing.

"We only have a few employees working remotely, one who was home with a child who should've started kindergarten, plus she was pregnant, plus she was earning her degree," Friedberg said. "We've certainly had employees who've had to balance a lot more with their spouses or take more time off because their kids were home."

"GHOSTING"

While most commonly used in the dating world, the term "ghosting" now applies to both job seekers and employers when one ceases all communication with the other without notice or reason.

"We were ghosted by a person we hired," Friedberg said. "They came to work on Thursday and Friday and didn't call or show up on Monday. When we tracked them down, they said they got a better job."

New Jersey manufacturers say employees will miss scheduled interviews or even weeks of work after being hired without any notification whatsoever. However, this trend does not apply to the manufacturing industry alone.

According to a survey conducted by Indeed.com in February, 28% of job seekers have ghosted an employer - a more than 10 percent increase since 2019. Of those job seekers, 20% did so because they received another offer, 13% were dissatisfied with the offered salary, and 15% simply decided it wasn't the right fit.

This causes much more than frustration amongst employers.

"It costs us a lot of money and productivity to hire someone, especially for certain [specialized] positions," Hopp said. "When we assign you to one of our employees, our employee

is likely now running at 70%, and for the first 120 days, that new employee likely isn't providing much value add, either.

"Every time we hire someone, we are making a conscious investment in that individual."

INCREASING COSTS

New Jersey annual average wages in the manufacturing sector have increased by nearly \$1,600 over the past five years, with the average industry salary calculated to be over \$94,000.

"There is always upward pressure on salaries," Friedberg said. "It's the increase in minimum wage, which I support, but salaries have been increasing in general to try to stay competitive."

Now that every company is trying to bounce back from the pandemic, both salaries and benefits have needed to increase dramatically, Hurley said.

"They are very competitive with starting salaries, sign-on bonuses, and special offers to get applicants to come work for them," she added.

Such increases might even limit manufacturers' current workforce, especially now that the cost for raw materials is reminiscent of prices paid during the Great Recession, according to the Institute for Supply Management.

"Sometimes employees simply cannot pass up new opportunities that offer higher salaries or more opportunities for growth," Hurley said.

Meg Fry



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COLLABORATION IS CRITICAL TO BOLSTERING THE NEW JERSEY MANUFACTURING WORKFORCE

The African American Chamber of Commerce of New Jersey (AACCNJ), the Statewide Hispanic Chamber of Commerce of New Jersey (SHCCNJ), and the New Jersey Manufacturing Extension Program, Inc (NJMEP) come together to ensure every New Jersey community has access to professional development opportunities. These training and workforce development programs provide individuals with a path toward an incredible and rewarding career in manufacturing.





Who are the AACCNJ and the SHCCNJ? AACCNJ

The AACCNJ plays an essential role in the New Jersey economy. Their mission is to empower and sustain African American communities and businesses through capitalistic initiatives while also working in conjunction with the National Black Chamber of Commerce. Utilizing direct outreach programs and providing a collective voice for New Jersey's African American business leaders, the AACCNJ advocates and promotes economic diversity and at the same time creates an environment that encourages industry and individual growth.

Everyone can be a member of the AACCNJ. Learn more about the benefits of membership by visiting aaccnj.com.

SHCCNJ

The SHCCNJ works every day to promote the continued growth and development of all New Jersey businesses. With a focus on the Hispanic community, they work to accomplish their overarching mission of helping their members, both Hispanic and non-Hispanic, find expanded business opportunities through networking and mutual support. By encouraging and facilitating partnerships between private and public entities, they play an active role in strengthening the New Jersey economy. They are also vital partners in the political space by advocating vigorously for the small business community.

All are welcomed to join the SHCCNJ. Visit shccnj.org to learn more today.

What Workforce Programs are Available?

Both organizations have an extensive network and a variety of outreach programs. Partnering with NJMEP opened up a new industry and new doors to new professional development opportunities for their members and community. Manufacturing is an exceptional industry that provides individuals with the opportunity to apply the skills they develop through workforce development programs to a plethora of New Jersey manufacturing businesses actively seeking new hires. These careers have an average annual salary of over \$94,000 and provide fantastic benefits.

Training programs range from single workshops that provide an overview of manufacturing as a whole all the way to indepth accelerated apprenticeship programs. Finding the program that works best starts with a single phone call to either AACCNJ, SHCCNJ, or NJMEP. Individuals can ask for access to manufacturing upskilling opportunities where they will be able to learn more about the specific classes available and to be put in touch with an NJMEP workforce development expert to find a path toward an amazing manufacturing career.

Where Will This Training and Upskilling Take Place?

Training and upskilling opportunities are available all over New Jersey. Some courses and workshops are available online as well. NJMEP opened a brand new training facility in Bellmawr, NJ so communities around the state can have easier access to hands-on training, including the new Augmented Reality welding equipment recently added to the suite of workforce upskilling services.

No matter where a person is located, they will not be too far from professional development support. AACCNJ, SHCCNJ, and NJMEP are committed to ensuring that individuals from all over the state can find opportunities to elevate themselves and their families. Easy access to the skills which open up doors in the manufacturing industry is crucial.

Resources like the Educational Resource directory or njmep. org/GetTrained provide a clear roadmap to local professional development programs. For people not sure where to start, contact AACCNJ, SHCCNJ, or NJMEP for guidance, today.

When Can People Start Taking Advantage?

Immediately. Both employers and job/career seekers can start taking advantage of this collaborative group partnering to tackle the workforce challenge in New Jersey right away. Programs are currently available to underemployed and unemployed New Jersey residents. Some of these programs are available at no cost to the trainee. The industry needs individuals looking to start on the path toward a fruitful career as soon as possible. AACCNJ, SHCCNJ, and NJMEP are actively training people all over New Jersey. It's vital to take advantage of these opportunities. Support for programs like Project 160 and Registered Programs is not guaranteed.

This partnership helps those seeking employment as well as the employers themselves.



citrincooperman.com



2021 Manufacturing & Distribution Pulse Survey Report

Citrin Cooperman is excited to announce the launch of our 2nd annual industry survey.

The aim of this research is to take the pulse of manufacturing and distribution company leaders - following COVID-19 - to measure the health of their businesses and take stock of future priorities, concerns, and challenges.

Read the Report



HOW Employers & New Jersey Residents Take Advantage

Manufacturers are all struggling to find reliable employees. New Jersey residents are seeking employment with competitive wages and good benefits. Bringing together the skills, knowledge, and expertise of AACCNJ, SHCCNJ, and NJMEP begins to bridge the skills gap.

HOW DO EMPLOYERS IN NEW JERSEY CONNECT WITH TRAINEES?

Manufacturers seeking qualified professionals can connect with the collaborative group by reaching out to the Pro-Action Education Network™ at NJMEP. org/workforce or calling (973) 998-9801.

There are individuals located around New Jersey that have gone through related technical instruction and are actively interested in a career in the manufacturing industry. The only way to solve the workforce challenge is by having manufacturing businesses take advantage of the opportunities currently available.

HOW DO TRAINEES CONNECT WITH EMPLOYERS?

Employers can reach out now and take advantage of the no-cost career support available to New Jersey residents. Speaking to a Pro-Action Education Network representative is as easy as visiting NJMEP. org/GetTrained.

COURSES AND CERTIFICATIONS AVAILABLE INCLUDE:

- Manufacturing Skills Standards
 Council Credentials (4 Modules)
- Certified Logistics Associate/ Technician
- OSHA Safety
- Maintenance and Awareness
- Quality Practices & Measurement
- Manufacturing Process & Production
- Countless training options and career paths are waiting.

Sustainable Manufacturing:

The Pre- and Post-Pandemic Way Forward



GAIL FRIEDBERG, CEO,
ZaGO MANUFACTURING COMPANY

If we have learned anything during the COVID-19 pandemic, it is that our manufacturing businesses need to be prepared for all eventualities. best preparation for the challenges that lay ahead is to utilize the practices that sustainable have served manufacturers well in the past. According to a recent Blackrock Report, companies with strong profiles on material sustainability performed better during the COVID-19 pandemic than those with poor profiles.

In addition to making clean, inherently sealing fasteners, (sealing screws, sealing bolts, sealing nuts, sealing washers), over the course of a decade, ZaGO has invested in and implemented the latest Lean manufacturing processes to conserve energy, minimize waste, and enhance operational efficiencies. These practices, which helped address environmental, economic, and

employment aspects of sustainability, combined with the implementation of Industry 4.0 technologies, prepared ZaGO and other sustainable manufacturers to weather the storm that was the COVID-19 pandemic.



For example, by relying on Lean manufacturing processes, sustainable manufacturers like ZaGO were able to continue manufacturing operations even with stringent social distancing requirements because pre-existing automation allowed employees the space to manage their own pods of machines. In contrast, manufacturing companies with crowded, unhealthy workplaces at the beginning of the pandemic fared much worse, suffering from multiple closings as COVID outbreaks spread again and again among employees and, by extension, to their loved ones.

By already focusing on the health and welfare of employees, sustainable manufacturing companies were able to retain workers who feared becoming ill during the pandemic, providing for paid time off and healthcare should they or a family member become ill. Encouraging employees to stay home when ill helped them recognize their company's desire to protect them and provide for them and their families. Sustainable manufacturers retained the loyalty of their employees, enabling them to continue operations without interruption throughout the pandemic.

Moreover, employers who paid fair and equitable wages were able to keep workers working, rather than sheltering at home relying on government benefits. Many companies discovered that paying minimal wages was simply not a sustainable practice for the long run. Workers who knew they had a future at companies were not lured away from work by increased unemployment benefits.

The bottom line: Companies managed with a focus on sustainability have proved pre- and post-pandemic to be more resilient and able to weather adverse conditions than their less sustainable peers. All the characteristics that make a company sustainable during ordinary times (if there is such a thing anymore), including material efficiency, Lean production, employee job satisfaction, and strong customer relations, make a manufacturer even more resilient during times of global crisis. While it could be argued that the jury may have been out on the case for sustainability pre-pandemic, post-pandemic, the verdict is clear. Sustainable manufacturing is the only way forward.

Many business owners are so busy manufacturing their stuff that they forget to manufacture their future which is equally important. More and more business owners are looking to retire or transition from working in their businesses daily, but most are woefully unprepared. The inevitable-- death, disability, or another event -- can accelerate the timing, which could prove disastrous for their families. Succession planning involves creating a plan for someone to either own or run your business after you retire, become disabled, or die. In simple terms, succession planning is the process of passing control of the business to others. In the following paragraphs we will examine when, how, and why you should be engaging in this process right now. Then we will outline a path to follow for succession planning success.

SMALL BUSINESS LIKE A PRO

When should you begin this process?

Succession planning must start with the business owner and should be part of initial business plans, but rarely is. In *The E-myth Revisited*, Michael Gerber says that "The goal of every business owner should be figuring out how to get out of working in their business." At the very least, serious steps should be taken 5-10 years prior to your planned exit. This is especially true for manufacturers, since there

is more company-specific information requiring a steeper learning curve for the new person to transition successfully. Delaying this process can cost you literally millions of dollars in profitability, require you to spend thousands of hours working in the business you may not need to spend, and result in having little or nothing to show for all the blood, sweat, and tears you put into building your business.

How is succession planning done?

There are many ways to transition from your business, some of which you may not have considered. Certain options are better than others, depending on your goals and expectations. Although few business owners seek to go bankrupt or close down by liquidating their assets, that is what happens a majority of the time. Succession planning is about preparing you to accomplish one or more of the favorable outcomes for you, your family, and your business, such as:

- BECOMING A PASSIVE INVESTOR
- FAMILY SUCCESSION
- SELLING THE BUSINESS
- INITIAL PUBLIC OFFERING

For example, I have worked with clients who have involved their children in the business so that they can understand how it works and be better prepared to take over. This generally works best when they start at the bottom, learning the details of every aspect of the business as opposed to coming in as a manager without a real appreciation for how the business works—and without the credibility to lead effectively. Unfortunately, many children do not want to follow in their parents' footsteps, preferring to do something else instead. Even though the situation may change, it requires exploring and preparing for other succession planning options.

I have also worked with business owners who have developed their business to a level where they no longer need to work there or have much personal involvement. They can be passive investors who benefit from what they created. Not only that, the business becomes an asset that can be sold easily or be passed on to the next generation without necessarily needing to have one's children work there. This is the optimum situation because it presents the most options and allows business owners to extract maximum value from what they have created.

In addition, I have worked with many business owners who had interest in selling their companies. Unfortunately, most of them were unprepared and either were not able to sell or ended up selling for much less than they expected to receive. Plus, it was unnecessarily stressful, time consuming, and had a negative impact on their employees.

However, I have worked with and am familiar with people who have successfully sold their businesses either through a friendly buyout, employee ownership program, a strategic acquisition, or on the open market. Generally, suppliers, customers, and competitors are the best alternative suitors.



Why is effective succession planning so important?

Succession planning done right will maximize the value of your business prior to transitioning. Maximizing value is done through business growth, optimization, and risk reduction. You can learn more about this from my previous *Manufacturing Matters* article entitled "Grow or Die." However, there are many other benefits to successful succession planning which include the following:

- INCREASING PROFITABILITY PRIOR TO TRANSITION
- IMPROVING EMPLOYEE SATISFACTION AND RETENTION
- MAKING YOUR COMPANY EASIER AND MORE ENJOYABLE TO RUN
- INCREASING YOUR PERSONAL FREEDOM AND FLEXIBILITY
- CREATING CONTINUITY AND STABILITY
- PROVIDING MORE AND BETTER TRANSITION OPTIONS
- ENABLING A FASTER, SMOOTHER TRANSITION
- ACHIEVING A LARGER PAYOUT SOONER
- REDUCING FAMILY STRESS DURING A TIME OF CRISIS

By now it should be clear how important effective succession planning can be to you and your family. A good place to start is by registering for NJMEP's succession planning workshops. Contact Kathleen Baldwin at kbaldwin@njmep. org if you'd like to sign up and learn more.

You can also talk with your NJMEP account manager about resources they can provide to help you with succession planning and maximizing the value of your business.

Andrew Frazier, MBA, CFA is Founder of the Small Business Pro University and an NJMEP Resource. He also wrote Running Your Small Business Like A Pro – The More You Know, The Faster You Grow a guide for helping business owners create a sustainable enterprise which can run without them.

)W DIGITAL CAPARII BUSINESS M

When you think of digital transformation, you might relate it to operational efficiency. But it's all about converting your manual processes to digital. Also, the real advantage of digital transformation is to have agility in the business model that today's manufacturers need to scale and grow.

THE CURRENT STATE OF BUSINESS MODEL AGILITY

Before we discuss the current state of SMB manufacturers, let's first recognize the importance of an agile business model. The best way to understand agility is to think about the speed of your response to changing business conditions. These changes could be macroeconomic such as a pandemic, trade wars, or price fluctuations due to market movements. They could also be microeconomic issues such as competitive pressures, new entrants, or M&A activities in the industry, etc.

Now let's take an example of an average SMB manufacturer. The majority of SMB manufacturers rely on paper, manual processes, or spreadsheets. Even if they might have software for various functions, the utilization and adoption of these systems are extremely poor. The manual interventions make it extremely hard to gather data and use it in a timely manner. The ad-hoc processes are rigid, making them difficult to adapt to changing business conditions.



THE AGILITY NEEDS FOR MICROFCONOMIC CHANGES

For instance, let's take an example of a microeconomic condition that requires you to approve the new pricing list discounts to rising competitive pricing pressures.

If you have fragmented systems or manual processes, you might need to talk to multiple departments. You might also require several approvals and data collection through physical documents or spreadsheets. You may need to fetch reports from various systems.

These activities might take several hours, if not days, and by the time you roll out new prices, you might already be late. The challenges would be similar to other microeconomic conditions, whether you need to launch a new product, make configuration changes to existing products, or make changes to a manufacturing process to accommodate new design changes to products or processes.

THE AGILITY NEEDS FOR MACROECONOMIC CHANGES

Macroeconomic conditions, on the other hand, would be more unpredictable and require you to adapt faster.



For example, you may need to trace your supply chain and critical components due to the material shortages caused by a trade war. This situation would require you to check every bill of materials and their materials' dependencies. Then, you need to check their inventory levels and vendors' exposure to pandemic-related risks.

Without an integrated system, this process would require a significant investment of time and coordination.

HOW DIGITAL CAPABILITIES CAN HELP WITH AN AGILE BUSINESS MODEL

Agility is all about the flexibility of your business process. The more seamlessly connected your processes are, the faster you can get insights from the system without spending time fetching and combining data from multiple systems.

The manual processes make cross-functional changes difficult, especially if multiple departments may be operating on different systems. For instance, the pricing changes may require data and insights from marketing departments. It may also require profitability analysis and approvals by your finance department.

If both departments operate on the same data and systems, the collaboration could be as easy as a couple of clicks

and pushing pricing changes in real-time. Similarly, if your engineering, production, and procurement teams collaborate through digitally connected processes, tracing and identifying supply chain risks will be much faster. The digital capabilities reduce redundancies, increasing the efficiency of data entry and accurate analytics.

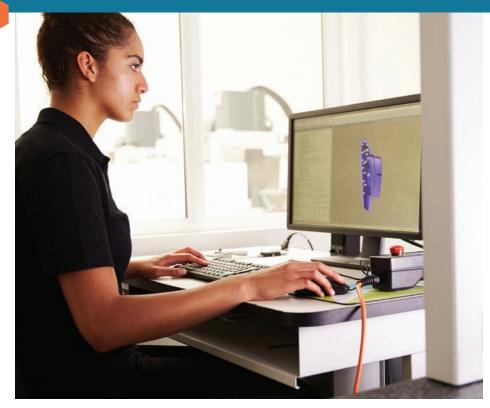
CONCLUSION

Manual processes and ad-hoc systems introduce process variability and errors, causing bottlenecks to scale. Digitally and seamlessly connected processes, on the other hand, provide the ability to make quick, informed decisions and make your processes scalable.

Just as your ability to close sales depends on how quickly you respond to customer inquiries, you need to have the KPIs for speed of response to changing conditions to measure the agility of your business processes.

So the next time you feel that you are spinning your wheels inside four walls to respond to the market, most likely, you have fragmented processes and systems with unnecessary manual interventions.

Sam Gupta has been an ERP thought leader in the digital transformation space for nearly two decades, with a primary focus on financial systems and ERP.



ceiling within the STEM community, the narrow discussion can be a hindrance in our progression. Physical and biological science occupations contribute to the most employment among women in STEM fields, around 50%, while only about 14 to 25% are within the computer, mechanical, software development, architecture and engineering occupations. In STEM academia, about 40% of Bachelor's degrees and 30 to 40% of Master's and Ph.D's are earned by women. These are least saturated in the computer, technology, and engineering fields and most saturated in the biological and biomedical fields. Aside from the gender gap within STEM occupations

Women in STEM through the Eyes of a STEM Student

STEM encompasses a vast array of fields, and many facets slip the mind when we think and speak about STEM. We often think of and describe it as the obvious and ambiguous somewhat subjects: Science, Technology, Engineering, and Math. What we do not delve into are the fields within these subjects that are often left in the background. For instance, I didn't recognize the importance and perpetual potential of the manufacturing industry and how it embraces STEM until I started interning with NJMEP. From chemical engineering of organic solvents or fragrances to fabrication of metals for intricate hardware used in aerospace and automotive industries, STEM subjects are pivotal to manufacturing but have missed the limelight. This inevitably raises the question of, what else are we missing when discussing



AMANDA CASABONA PRESIDENT, CCM STEM CLUB **& NJMEP INTERN**

STEM? These subjects are unbounded, constantly on the precipice exploration. Yet many fields within them, like manufacturing, somehow do not make the cut for conversation. Talking about and raising awareness of the opportunity in these areas of specifically manufacturing, could help bolster the inclusivity of women in these fields.

While women are continuously making cracks and fissures in the glass and education, the pay gap continues to play a stinging role for women in STEM careers. Correlating to the occupational gap, less employment in a certain field will equate to a more extensive pay gap. Therefore, computer and math occupations lead the highest pay gap at 12%, whereas physical/biological sciences stand at an 8% pay gap. These discrepancies only scratch the surface of the disproportional demographics among women in STEM. Breaking them down, black and Latina women are alarmingly underrepresented in STEM fields, as are mothers, and LBTQ+ women. Several seeds add to the growth of disparity throughout STEM fields, but scarce representation and awareness of the options in STEM is a detrimental factor. Expanding our view of what you can do in STEM fields is crucial to the future of women in STEM.

As a current female student in STEM, broadening my knowledge of STEM careers and education through my experience at NJMEP has been incredibly eye opening, specifically to my role as president of the Women in STEM Club at the college I attend as a pre-med major. Many of the central topics in our discussions within the club were around underrepresentation and biases throughout STEM fields. As I continued to learn more about manufacturing at NJMEP, I recognized the need for conversation about expanding how we view STEM careers.

At NJMEP's State-of-the-State event held earlier this year, I was fortunate enough to be able to ask legislators about how they are actively helping encourage women to pursue STEMrelated fields. Assemblywoman Verlina Reynolds-Jackson's response made me confident in the effort towards encouraging more women to explore STEM fields. She pulled out a colorful eyeshadow palette and bottle of Chanel perfume and explained how many people don't realize how much STEM fields contribute to making those products, ones that most women Assemblywoman Reynolds-Jackson's perspective has an essential impact on the future of women in STEM. She emphasizes that items that are important to women's daily lives, products we use absentmindedly to go to our jobs or see friends, are all created from STEM and manufacturing, and we should be part of that. The assemblywomen's response clearly displayed the lack of awareness of the diverse career paths that make up STEM. Having a wider view and approach to STEM is something that needs to be recognized.

It is difficult to not always be laser-

focused on my goal of pursuing medical school and becoming a doctor. However, it is important not to forget how much I enjoy other parts of science and STEM, especially topics I am not actively learning about. When NJMEP acquired four welding simulations, I was, hesitantly, first in line to try. I hardly knew the process of welding, therefore picking up a welding torch and simulating welding two pieces of high carbon steel together did not come easily. After a couple of tries, I got the hang of it. I eventually "welded" metal using an Augmented Reality training simulator. Being able to test out a piece of technology so unique and acquire an understanding of what is happening to the metal while it is being welded introduced me to a completely different side of STEM. The next day, I did somewhat of a 180° from NJMEP and shadowed an upperclassman of mine at a subspecialty vascular doctor's office. I looked in on patients with dialysis treatments as well as a fluoroscopic procedure right in the office, called an angiogram. Those two days where I went from learning how to operate a welding torch to standing in on a medical procedure encapsulate the exact diversity of opportunity in STEM we need to talk more about.

Manufacturing itself as a subject of STEM has incredible magnitude. I thought I knew what manufacturing was, imagining the conveyor belts of products in factories and warehousing, but until trying the welding simulation and learning about the never-ending fields in manufacturing I realized I did not know much, especially discovering how critical of a role STEM subjects play in the industry. Chemistry, physics, biology, precise math calculations, and engineering are directly involved with

manufacturing. Modern manufacturing involves STEM further, as technology now runs machinery and production processes like 3D printing. Training manufacturing employees using technologies like the welding simulation machine I used are all vital.

Something that is often said around NJMEP, is "take a look around the room and anything you notice is manufactured somewhere" down to the smallest bolt on a chair holding the armrest and seat together. The ubiquity of manufacturing is perfect for women in STEM.

Being a woman in STEM means more than just facing a gender gap and pay gap. It's self-doubt. Feeling as though you do not belong. It is people being focused on your looks or personality rather than your perseverance and work ethic. It is seen in every facet of STEM, from biological science to manufacturing. Therefore, supporting and encouraging women to pursue STEM or those already in STEM, is imperative to seeing more success for women. STEM fields will benefit greatly from this as well, as more women enter their fields there will be more room for growth and breakthrough. Becoming inclusive to women in STEM will simply expand the talent pool, which bolsters every field. We need to keep receiving revitalizing responses from people in positions like Assemblywoman Reynolds-Jackson and strive for greater awareness of the limitless options in STEM to bridge these gaps in these fields.



MFG DAY

'MADE IN NEW JERSEY' MANUFACTURING DAY 2021 IS ON FRIDAY, OCTOBER 1

THE MARIGOLD | SOMERSET NJ 8AM - 3PM

After a virtual year in 2020, MFG Day 2021 is back in-person with an additional virtual element.

Whether you want to attend in-person or follow along online, there's an option for you.

Attendees will experience...

- KEYNOTE SPEECHES BY INDUSTRY LEADERS
- INFORMATIVE INDUSTRY-FOCUSED BREAKOUT SESSIONS
- SPONSORED COCKTAIL HOUR
- AN EXQUISITE BREAKFAST BUFFET AND LUNCH
- NETWORKING WITH HUNDREDS OF MANUFACTURING PROFESSIONALS





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NOMINATIONS FOR MANUFACTURER OF THE YEAR OPEN NOW!

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