

SAME TRACK

THE CULTURAL NEWSLETTER FOR WABTEC EMPLOYEES

Competitive Edge

Mark Linebach explains how the New Product Innovation (NPI) team works with other functions to develop items that are better for the customer, Wabtec, and employees.



Leader's Letter

Justin Downs shares how the spirit of innovation has been a part of Wabtec's history from the beginning and will continue to drive our success in the years to come.



Managers' Roundtable

Wabtec managers discuss how frontline workers can fuel ingenuity by building stronger collaborative bonds with their managers.



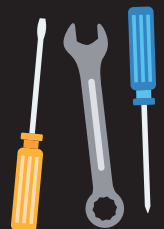
Frontline Spotlight

Amrita Bharti and Sheo Pratap have helped build the culture of innovation at the Bihar facility since it launched as a greenfield project four years ago.



Picture This

Moonshine shops build solutions for specific problems at Wabtec to improve efficiency and cost as we move and improve the world.



Leader's Letter

Innovating Together

Building on a legacy of continuous improvement

Justin Downs shares how the spirit of innovation has been a part of Wabtec's history from the beginning and will continue to drive our success in the years to come.



Team,

Wabtec has a long history of excellence in engineering and innovation. From the air brake to the pantograph to the FLXdrive locomotive, we have developed solution-oriented products to meet the needs of our customers and drive our company's growth. Wabtec's innovative spirit has established the company as an industry leader.

In this edition of *Same Track*, we focus on innovation and how a strong innovative culture is driving continuous improvement and overcoming challenges. Our Global Operations team is innovating every day by taking new product designs and turning them into reality. Each new product introduction has its own unique challenges, requiring our team to devise new approaches to building it. The FLXdrive and NYCT work trains are perfect examples.

We are also innovative in making the day-to-day work we do safer, more efficient, and cost-effective. Your efforts established the industry's mixed model moving line at the Contagem plant. We submit ideas to our moonshine shops to design tooling that drives greater efficiency and improves ergonomics. Our teams have implemented digital capabilities across plant operations that have improved decision-making and generated higher productivity. We also have been leveraging new manufacturing technologies, such as additive manufacturing, that are showing positive results.

It is important to note that none of this innovation happens in a vacuum. All of it is because we work as one team, collaborating and learning from one another. I hope you learn from the success stories in this newsletter, and it inspires more innovative ideas that deliver for our customers, shareholders, and each other.

Thank you for all the work you do,

Justin Downs

TAKE THE SURVEY

We want to hear your thoughts on the *Same Track* newsletter, so we've created a survey for you to speak your mind. Follow the QR code to share your feedback.



Competitive Edge

Collaboration on the Cutting Edge

Building the best innovations together

Mark Linebach explains how the New Product Innovation (NPI) team works with other functions to develop items that are better for the customer, Wabtec, and employees.



Every day at Wabtec, we take on challenges that affect multiple teams and functions. To overcome these challenges, it often takes collaboration from each of those teams to innovate and find a solution. Here, Mark Linebach, Locomotive Lead System Engineer in Erie, who works on new product innovations (NPIs), shares how contributions across teams lead to the strongest innovations.

Change for the better

Mark enjoys working with the NPI team because he knows that Wabtec prioritizes innovation across the company. “The one constant in the world is change, and the great news is that Wabtec isn’t afraid of that,” he says. “We look at the long-term view of what customers want and what that will entail on our end. That brings new products and innovations, which keep the

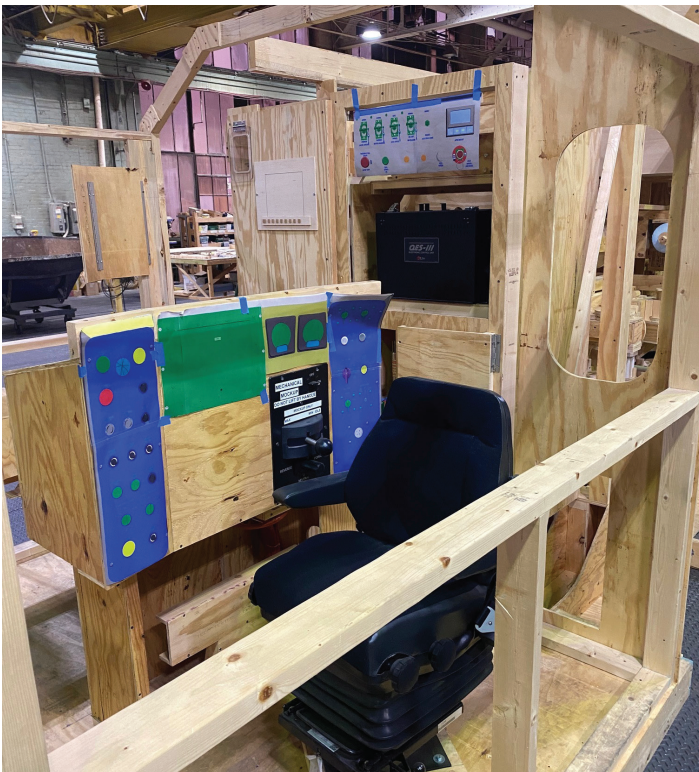
team interested, keep the business healthy, and build opportunities everywhere.”

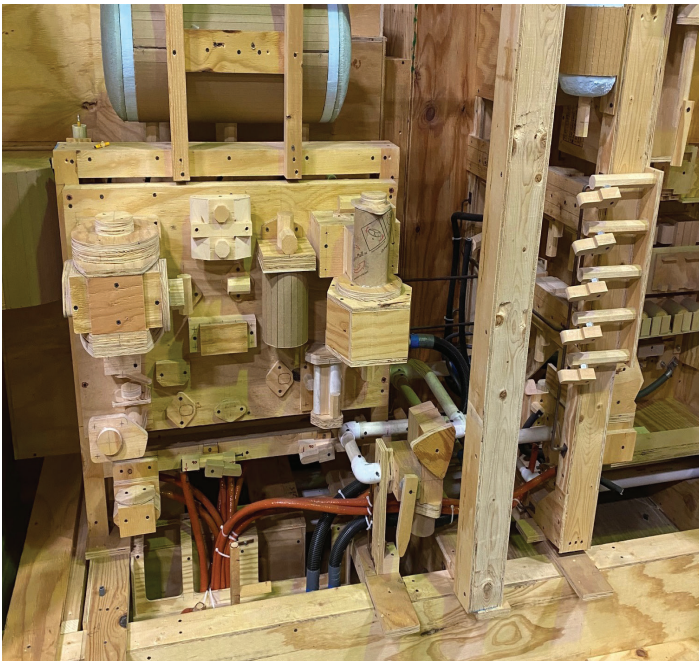
Mark is a proponent of communication to fuel innovation. He likes to see different teams communicating early and often to develop solutions, knowing that they share the same goals. “We want to keep everyone safe, and we want to get the design right. When we get everyone in the room early in the design process, they can improve the final result,” he says. “All we’re trying to do is make it a better product to manufacture and assemble while meeting all the requirements. The better we make it, the happier the customer is.”

Communication and collaboration are central to how the NPI team operates. For most of their processes, they work closely with engineering and program management to make sure the designs work well for

them. Then they’ll give the design a trial run with the help of frontline employees, who bring a helpful perspective. “Once the design is complete, we’ll run it with unit one on the shop floor,” Mark says. “No matter how hard you try, there are always things that get missed, that you didn’t foresee, or you didn’t expect.”

“**When we get everyone in the room early in the design process, they can improve the final result.**”





Moving the world forward

Some Wabtec facilities have been using cutting-edge technologies to expand their ability to innovate. “We have VR rooms where users can put on 3D headsets and walk into full-scale design environments,” Mark says. “You can walk into doors and use virtual wrenches on items.”

The most important part of this technology is how it enables collaboration and communication. “It’s an extremely valuable tool when you’re working alongside a team in Egypt or India, or if you’re showing a customer a locomotive that won’t be physically built for another five years,” Mark says. “It’s an opportunity to see an issue and solve it before you even build it, which is a win-win.”

Many other innovative processes the NPI team is using can be seen with the New York City Transit (NYCT) project. “NYCT is really exciting because it’s one of the first government contracts we’ve had in a while, meaning they have stricter requirements, extra rules, and extra regulations.” For Mark, the additional challenges of a government contract give the facility a new way to raise the bar. “To address these expectations, we use a mock-up process in our area with full-scale models of the locomotives. Anything that the service team could use on the NYCT loco is incorporated into the model.”

“It’s very cool to come up to the NPI area and say I have a whole NYCT locomotive sitting on the floor two years before we’ll actually start building,” Mark says. “And we’ve done the same thing with FLX. It’s a very useful tool for production, engineering, manufacturing, and the customer.”

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Engineering, drafting, and manufacturing were in the room with us, all looking at ways to improve how we do this.

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Figuring it out together

In fact, Mark thinks the models have required a level of collaboration that raises the standard for everyone involved. “FLX locomotives have much more cabling and sensors than other locomotives because everything that used to be mechanical is now electric,” Mark says. The difference in technologies means the designs and space limitations have shifted, which could cause issues for manufacturing, assembly, or maintenance.

To account for these changing variables, the NPI team works with other stakeholders to ensure the designs work for everyone. “Engineering, drafting, and manufacturing were in the room with us, all looking at ways to improve how we do this. That happens very regularly,” he says. “This is new to everyone, but when you get in a room, the

collaboration and communication are key in finding the win-win-win solution we’re looking for.”

Building a brighter future

Mark is aware that some employees might view NPIs as threats, but he sees ways that they can make open doors for everyone. “Opportunities really abound here. It’s important for people in my role and people on the shop floor to talk about why we’re doing things and the impact we can have,” he says. “Communication is usually the solution for a lot of the problems we face.”

With employees in all departments on board, Mark believes that we can all be a part of something truly special. “We all see the trends of where the world is going, but we might not see the whole vision. We might not see the five-year plan with things like the Bell locomotive, with huge benefits for workers, Wabtec, and the world.”

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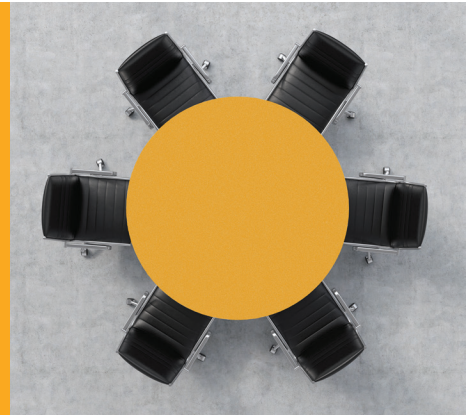
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Managers' Roundtable

Innovation Across Levels

Building creativity in a competitive market

Wabtec managers discuss how frontline workers can fuel ingenuity by building stronger collaborative bonds with their managers.



Why is innovation important at Wabtec?

Cleber: Innovation is very important at Wabtec, especially regarding our sustainability purpose. It challenges us to find new solutions and technologies. We build new products for our customers to be more productive while ensuring quality and safety.

Allen: I believe that our company is in a highly competitive market with global considerations, so we have to be innovative to not only keep up, but to be a leader in the marketplace.

Dana: Innovation helps us keep in front of what our customers want, it improves safety, and helps us out with quality and efficiency.

Juanpablo: Innovation must be a lifestyle. As time goes on, technology and knowledge evolve, and we must stay up to date as a world-class company. Our goals must lead to improvement actions and ensure the best products to be reliable and competitive.



How can employees on the front line innovate in their roles?

Cleber: Our employees on the front line are in direct contact with our customers and operations. They understand where the problems, challenges, and opportunities for innovation are. We lean on them to bring new innovations for the customers.

Allen: You live it every day, so you know what the problems are. Take the initiative to research these problems. Is there new software? Is there new equipment or a

new process, like additive manufacturing, that would resolve these problems? Talk to your fellow workers and see if they have any ideas or plans you can present to management.

Dana: Look at the small tasks you do every day and consider if that task is necessary, how we can make that task easier, or how to make it more efficient.

Juanpablo: There are two simple steps. The first one is to visualize different areas where our roles have impact. For example, my role belongs to a bunch of processes, but in the end, it mostly impacts our assembly lines. The second step is to gather with all those responsible for different areas to share ideas and create the best plan for improving actions.



How can managers and frontline employees work together to enable more innovation?

Cleber: We have a big opportunity to have managers and frontline employees collaborate on creating new stuff. Our main job, as managers, is to create room. We need to give frontline employees resources, instruments, and time for people



Allen Garver
Process Excellence Engineer
Erie, Pennsylvania



Dana Williams
Lean Leader
Erie, Pennsylvania



Juanpablo Romero
Lead Process Engineer
Arteaga, Mexico



Cleber Tavares
Innovation Manager,
Latin America
Belo Horizonte, Brazil



We have to be innovative to not only keep up, but to be a leader in the marketplace. —Allen



to experiment, test, and fail sometimes. That way, they can innovate with new technologies and solutions.

Allen: I think the first thing is just to be engaged. Frontline people should have relationships with managers, and managers should have relationships with the people on the floor. I think that management should be encouraging people to bring these problems forward with their ideas and

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Innovation helps us keep in front of what our customers want.

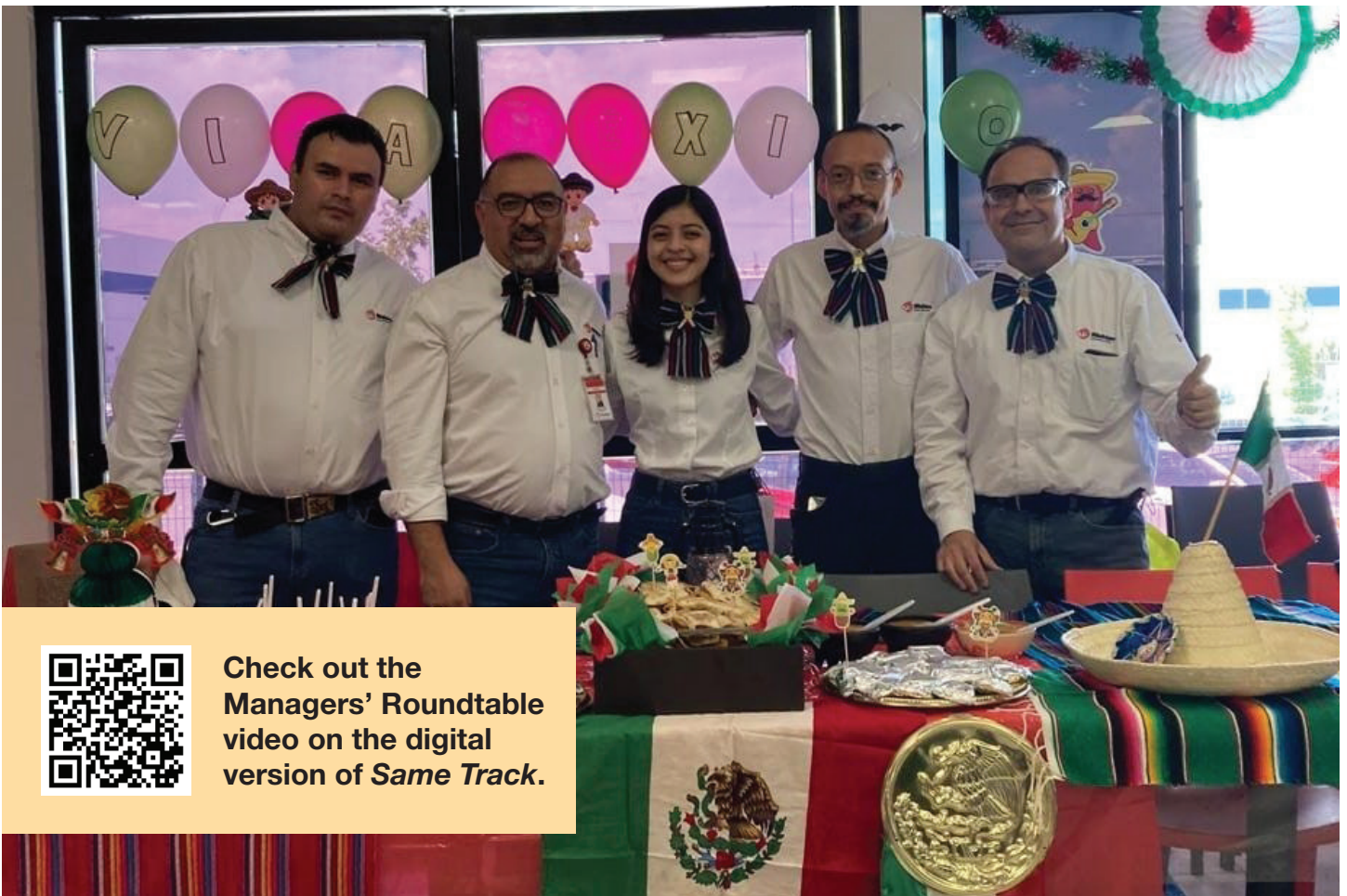
—Dana

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empower them, while giving them some time to research solutions.

Dana: Be willing to try new ideas. New methods, ideas, and products can really have a huge impact.

Juanpablo: Once you have an improvement idea, it's time to show management the plan so you can get support to achieve your goals.



Check out the Managers' Roundtable video on the digital version of *Same Track*.

Frontline Spotlight

From the Ground Up

A foundation of innovation in Bihar

Amrita Bharti and Sheo Pratap have helped build the culture of innovation at the Bihar facility since it launched as a greenfield project four years ago.



Innovation comes in response to challenge, which made the launch of the Bihar, India facility four years ago a perfect setting for groundbreaking solutions. Here, Amrita Bharti, Junior Engineer, Production Testing, and Sheo Pratap, Lead Manufacturing Specialist, share how they've embraced innovation since the facility opened.

Starting from scratch

Amrita joined Wabtec with the launch of the Bihar facility, which has marked a significant accomplishment as part of a nationwide initiative to expand manufacturing. "The Make in India project was something to be proud of for everyone in India, and I was no exception," she says. "The greenfield project with Wabtec was a great chance to start my career with lots of learning opportunities."

Sheo was able to be a part of the Bihar facility as it was built from the very beginning. "During the journey from the initial concepts of the greenfield project to full-fledged locomotive commissioning, we faced multiple challenges, including building a team, preparing them with proper training, and transferring the right technical know-how," he says. "The main

difficulty was gaining traction in a remote location with fresh faces out of college. We were tasked with making them ready for a world-class setup."

Of course, opportunity comes with responsibility, which people like Amrita were able to capitalize on. "Since it was a greenfield project, it was both challenging and interesting for us," Amrita says. "We were the learners as well as the doers when it came to meeting production demand."

Building a culture of continuous improvement

For the Bihar facility, there's been a singular focus on improving efficiency since the beginning. "We have a contract to make 100 locomotives per year so, from a business perspective, the time on product (TOP) line is fixed," Sheo says. "With one variable fixed, the only option to improve was to remove system waste."

As the Bihar facility picked up steam, Sheo saw that Amrita has a talent for driving efficiency. "Amrita demonstrated a mind for innovation by improving processes through various kaizens [continuous improvements], which helped the team save manufacturing hours and fuel while becoming simpler overall," he says. "She led many learn-teach-learn (LTL) sessions with the team, which is a process of continuous learning. She initiates and proactively raises concerns, which strengthens the team."

From Amrita's perspective, the high-pressure situations offered the chance to grow and ask questions. "We had to troubleshoot and rework several bottlenecks, but there were always multiple resources to help us in tough times. We had classroom training, on-the-job training, and LTL sessions," she says. "In the long run, we simplified the testing process by implementing kaizens continuously as we learned," she says.

Committed to growth

Employees at the Bihar facility know that their improvement is both exciting and vital for the company. "A culture of innovation makes room for creativity and freedom in a balanced manner. It helps us bring greater responsiveness to customer demands, helps us reduce waste, and pushes us to be better every day," Amrita says. "Innovation is a necessity, not just an option, for the survival of an organization."

"Innovation is a necessity, not just an option, for the survival of an organization. – Amrita"

Even though the Bihar facility has established itself, the drive to learn and grow remains a key component of the culture. "We conduct LTL sessions to help us as a team to create new ideas, because everyone brings a unique set of knowledge and skills to the table," says Amrita. "In our facility, we have a high-performance team (HPT) culture. We expect one kaizen per person each quarter as part of our HPT scorecard requirement. This always pushes us to innovate, says Amrita.

When each person strives to keep improving, it brings out the best in everyone. "The HPT concept empowers people to achieve team-based goals, developing ownership and commitment within a team," says Amrita. "We use a skills-based progression system to motivate team members in innovation by implementing kaizens and process optimizations. It helps individuals explore the talents within and grow in life, not just work."



Amrita Bharti

Picture This

Moonshine Shops

Innovating in-house

We use moonshine shops in our facilities to develop new products that address specific problems. Oftentimes, these innovations are in direct response to requests from workers on the shop floor and drive improvements in safety, quality, delivery, cost savings, and other key metrics.

How it works

1

Employee ideas

Employees share continuous improvement ideas through written moonshine requests or through the mobile app.

2

Prioritization

Requests are assigned, with safety-related requests taking top priority.

3

Solutions

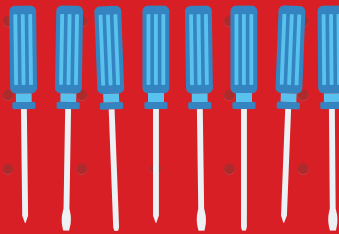
Requests are assigned and the solutions are designed and completed by the skilled fabricators and machinists in the moonshine shop.

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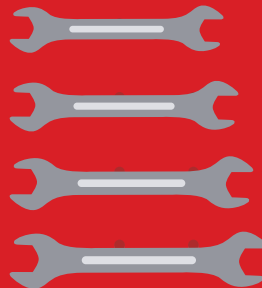
Analysis

Items created in the shop are electronically tracked for completion status, cost savings, and other important metrics once implemented.

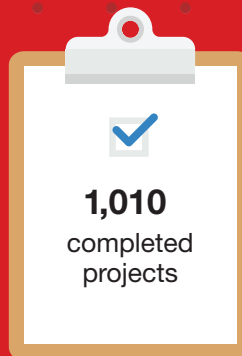
Grove City



8 highly skilled employees

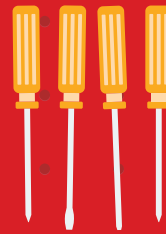


\$1.08 million in average annual savings

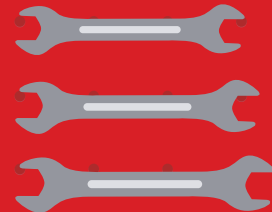


1,010 completed projects

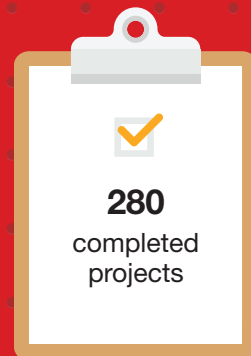
Fort Worth



4 highly skilled employees



\$750 thousand in average annual savings



280 completed projects