Redzone

2022 Frontline Workforce Engagement Study

The results from 50 factory onsite assessments

Contents

Background on the Study

This study is the first biennial study on frontline workforce engagement, which compliments the biennial Redzone Productivity Benchmark Report. The Redzone Connected Workforce Solution is widely recognized for delivering step changes in productivity in manufacturing plants as is demonstrated in that report.

For the community of over 850 plants, anecdotal stories of an improving culture characterized by enhanced frontline engagement leading to reduced turnover, started circulating since the first customers joined. These anecdotal stories turned into a consistent and predictable outcome, and for many it has become the primary driver, even ahead of productivity gains, for which the solution is widely recognized.

Given this emerging focus, this report was commissioned to shine a light on the specific changes in frontline engagement and establish whether a clear link can be demonstrated between frontline engagement, staff retention and productivity.

A Perfect Storm

For manufacturers, a labor crisis has been on the horizon for some time with The Manufacturing Institute and Deloitte forecasting a skills shortage throughout the rest of this decade and even beyond.

Like a stock market crashing – "It happened slowly, until it happened fast" – the pandemic greatly accelerated a mass exodus of the boomer generation who has been the backbone of the industry. Referred to as the 'silver tsunami', the departure of these baby boomers created a 'brain drain' as tribal knowledge continued to leave business at an ever-greater rate.

With one generation leaving the labor force, it became evident that positions left vacant were not being back filled by the next generation. Manufacturers are suddenly facing an 'image problem' from the 'now generation' who do not envision manufacturing as an industry to work in. In addition to new competition from the emerging gig economy which offers high levels of flexibility, and hundreds of thousands of new jobs being created in distribution centers – all pulling from the same labor pool – a perfect storm was created and the 'labor crisis' eschewed.
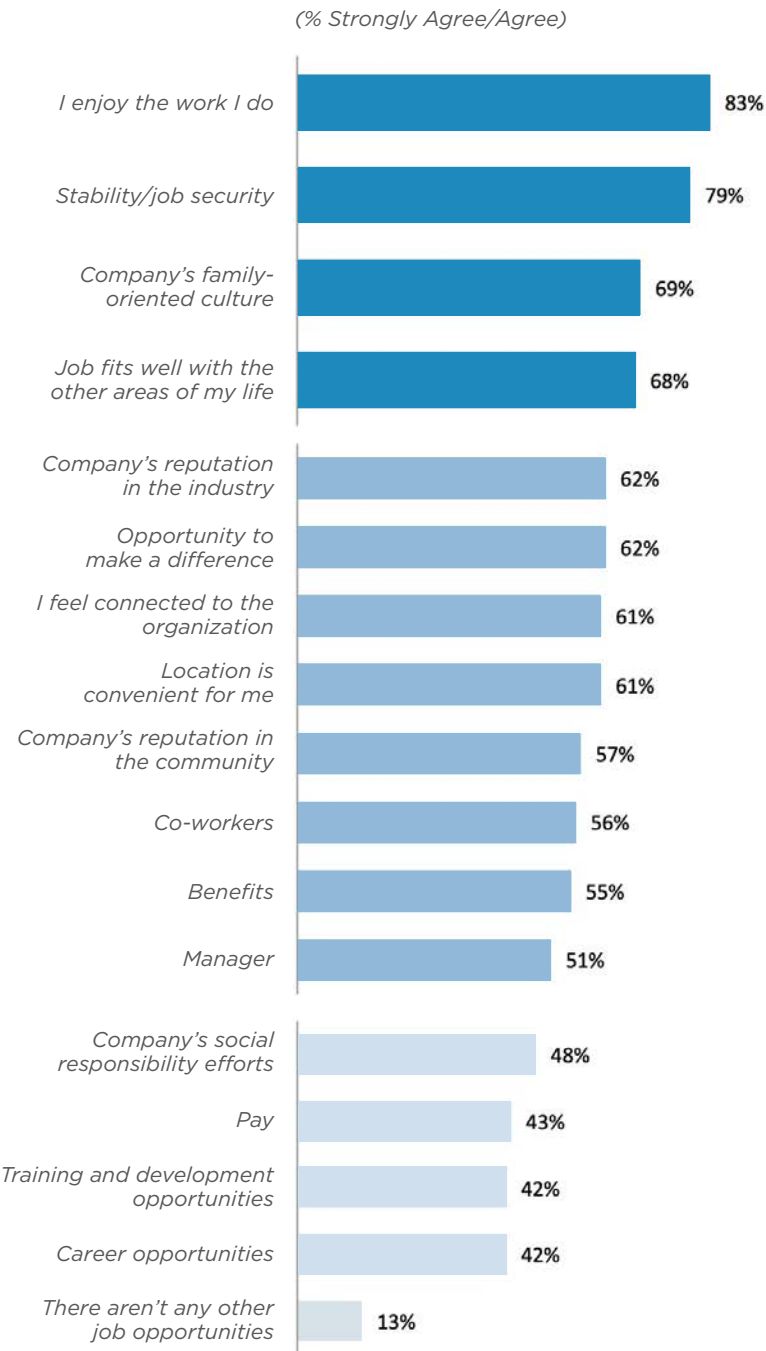
As manufacturers searched for a quick fix, hourly rates spiraled quickly, with 'signing bonuses' becoming universal. As wages have grown, contributing to an already inflationary environment, so has frontline turnover, leaving manufacturing leaders scratching their heads and looking for different answers.

A New Generation Demands Change

The future of the manufacturing industry relies on its ability to attract the next generation of workers and that requires manufacturers to understand a generational shift and develop a new mentality – moving from 'jobs for a paycheck' to 'jobs with a purpose.' This change is illustrated in The Manufacturing Institutes research of frontline employees and reasons why they stay. Pay didn't come anywhere close to the top; in fact, it ranked 14th out of 20 reasons that people stay with their current employer.

The employee/employer relationship is changing across all industries. This is no different for frontline workers who make up the majority of people employed in manufacturing. No longer is 'clocking in' and 'clocking out' a desirable state of employment. Employees want to have dignity in their work and want recognition for a 'job well done'. They want the opportunity for growth in terms of career progression and financial gain. And more than anything else they want to enjoy their work and desire purpose in their work – the idea that they are working for more than just a paycheck, but that they are part of something greater. They want to know that they are indeed contributing to something bigger than themselves; that through teamwork and empowerment, they can make a difference in how things are made – something that will make them proud of their work and themselves, every day.

Fig 1: **Reasons for Staying with Current Employer**

(% Strongly Agree/Agree)

Reason	%
I enjoy the work I do	83%
Stability/job security	79%
Company's family-oriented culture	69%
Job fits well with the other areas of my life	68%
Company's reputation in the industry	62%
Opportunity to make a difference	62%
I feel connected to the organization	61%
Location is convenient for me	61%
Company's reputation in the community	57%
Co-workers	56%
Benefits	55%
Manager	51%
Company's social responsibility efforts	48%
Pay	43%
Training and development opportunities	42%
Career opportunities	42%
There aren't any other job opportunities	13%

Manufacturers recognize that they need to act; indeed, the most progressive manufacturers have been focused on their frontline employee experience for some time with many attempting to 're-invent their employee experience'. For those that have succeeded in truly improving their employee experience this has not been achieved with 'artificial' stimuli; the new initiative with a fancy slogan, t-shirts and a pizza party might be fun for a while, but the enthusiasm will soon wane without employees seeing meaningful change and real success that they are contributing towards. Humans are wired to want to win and be part of a winning team and success begets success. The more manufactures can create an authentic culture of winning, the more engagement is likely to be realized.

The purpose of this study was to identify five factors that would reflect authentic and meaningful changes in frontline engagement:

1) **Ownership of Performance**

2) **Autonomous Problem Solving**

3) **Connection to Other People and Teams**

4) **Cross-team Collaboration**

5) **Feeling Competent and Recognized**

The study aimed to assess the impact that the deployment of the Redzone Connected Workforce Solution has on each of these five factors and see if a consistent change is reflected in each characteristic, resulting in a real and meaningful change in engagement.

Once it was established that a change in engagement is identifiable, the study aimed to assess if there is a correlation with frontline turnover and productivity to help manufacturers deal with the omnipresent challenges; margin pressure and staffing their plants to meet orders.

As our first biennial study on frontline workforce engagement – its inauguration comes at a time when manufacturers are particularly challenged by attracting, engaging, and retaining frontline workers. We hope the study will be an important dataset for the community as manufacturers navigate what looks set to be the big challenge of the next decade. We also hope it will ignite further discussion on employee experience and how manufacturers can create environments for winning so their frontline employees can thrive on the factory floor and find purpose in their everyday work while enabling businesses to improve profitability and grow. The ultimate win-win.

2.1 Data Collection Method

The inaugural Redzone Frontline Workforce Engagement Study includes data and onsite assessments of 50 plants from the Redzone Community that launched the solution between 2020 and 2021. Each of the plants deployed the same identical technology and went through the same identical 90-Day Coaching Program on the back of the launch, creating a meaningful apples-to-apples comparison. The profile of the companies included in the study were:
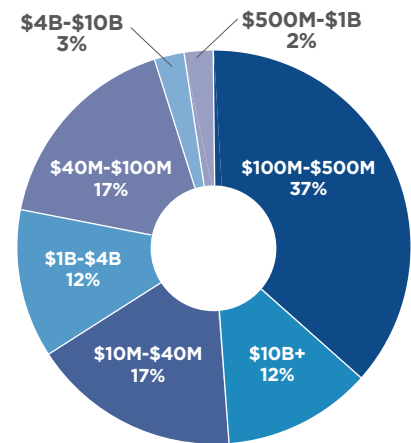
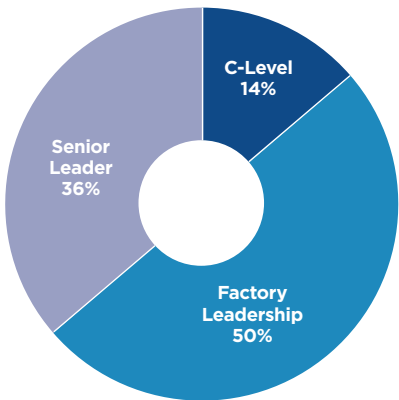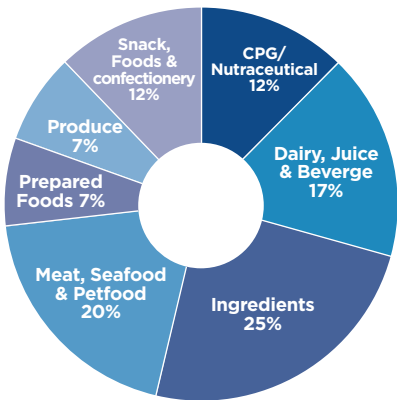*Fig 2:* **Company Revenue**

Fig 3: **Respondent Role**

Fig 4: **% Plants by Market Segment**

This data was collected initially via a survey directed to plant leadership (Plant Manager, VP Ops, CEO, Owner) that assessed the starting point on each of the engagement characteristics prior to the launch of Redzone and then again at the end of the 90-Day Program. Once the survey was completed all 50 plants were visited to verify and observe the changes via an onsite assessment. The onsite observation included looking at the new activities and standard work being performed associated to each of the characteristics, reducing the subjectivity that can flaw survey-based data. The overall engagement score is an average of the five subcomponents of engagement. Employee retention and turnover numbers were collected directly from plant leadership, typically from the HR function. The productivity results were analyzed directly from the Redzone database which automatically measures productivity using instrumentation from the production lines.

Factors assessed for a change in engagement:

Characteristic	Characteristics of Low Levels (0-5)	Characteristics of High Levels (6-10)
Ownership of Performance	Targets are unknown or unobtainable. Finger pointing exists between functions	Teams' targets are well known and aligned. Immediate action is taken to win the shift
Autonomous Problem Solving	People wait until management requests corrective actions after reviewing lagging data	Frontline teams conduct root cause corrective actions during shift while problems occur
Connection to Other People and Teams	Operators request Maintenance support through a chain of multiple leaders	All frontline teams have instant access to each other for troubleshooting and support
Cross-team Collaboration	Rare instances where cross-functional frontline teams work on a common problem	Regular shop floor huddles, handovers, and Kaizens occur with cross-functional frontline teams
Feeling Competent and Recognized	OJT is left to chance; when problems occur, leaders blame the person instead of the process	Knowledge, expectations, and feedback are shared rapidly. Employees see growth opportunities

2.2 Executive Summary of Findings

The headline finding from the study is that pre and post deployment of Redzone an overall increase in engagement scores was shown to be 74%, with plants ranging from +47% to +170%. All 50 plants demonstrated a positive change in engagement as demonstrated by the defined characteristics. This finding supports the notion that changing culture does not have to be a drawn-out 'journey of a 1,000 steps' but can in fact happen remarkably fast if the right environment conditions are present.

The engagement characteristic that demonstrated the most significant change was ownership of performance which increased by 112%, with scores ranging from 25% to 200%. Contrary to the view that frontline team members do not want to be responsible and accountable for performance, this finding suggests that the frontline strongly desires to be empowered to own the results of their production line and have agency over their work.

The 50 factories in the study experienced a 32% reduction in employee turnover. This turnover reduction was observed even after the negative impact from COVID-19 and the 2021 labor crisis. The broader manufacturing industry saw turnover get worse by 50% meaning the observed 32% improvement is an 82% positive swing.

Plants in the study had a baseline OEE of 50% and after 90 days increased to 62.8%. This increase in OEE equals a 26% increase in productivity (e.g. cases per hour). Each plant in the study showed a positive increase in OEE. These results are similar to the broader Redzone community's productivity increase from the most recent benchmark report which saw a 22% increase.

Results from the Frontline Workforce Engagement Study:
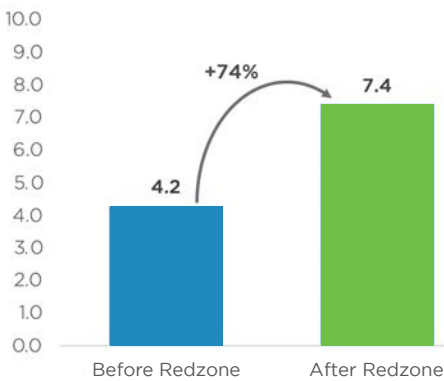
Fig 5: **Engagement**
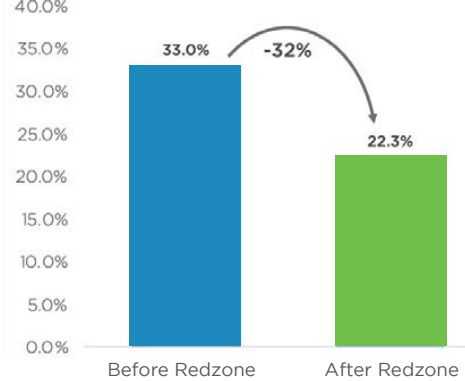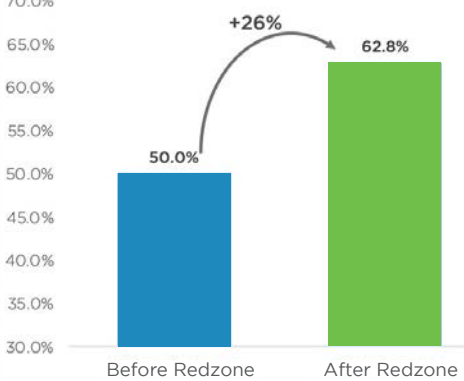
Fig 6: **Employee Turnover**

Fig 7: **OEE**

2.3 Engagement Characteristics

2.3.1 Ownership of Performance

The cure-all for any CEO and operations executive is to know that frontline teams in the factory approach performance issues with the same urgency and thoughtfulness as a business owner. There were three key observable behaviors that make up the subcomponents of *Ownership of Performance:*

Ownership of Performance	Characteristics of Low Levels (0-5)	Characteristics of High Levels (6-10)
Frontline teams know if they are winning or loosing	Very limited awareness of goals and performance is reviewed on a daily or longer-basis	Real-time visibility, high degree of focus on vital few outcomes that are important to the business
Team mentality	Employees and leaders blame issues on other departments or equipment	Goals are aligned between departments and teams want to help others reach their goals
Bias for action	Most employees resolve performance issues only in response to a supervisor's direction to do so	A culture of urgency exists to correct performance issues in the short-term and long-term

The study shows the highest increase in this characteristic of engagement with 112% more ownership of production line performance.

The behaviors observed in a typical plant before deploying Redzone's connected workforce solution include:

– Frontline employees do not know where they stand to the goals for the shift

– 'Winning' = 'not messing up'

– Performance issues are blamed on material, machines, or management

Productivity improvements in factories with this culture tend to be stagnant or at best grow 2-3% annually. This is likely because most improvements are made by managers and engineers which are a small number of overall factory employees.

After a factory has deployed Redzone's connected workforce solution both survey and onsite audits and observations found a very different state for performance ownership. The traits found in these factories included:

– Employees know if they are winning in real-time

– Winning means exceeding targets for safety, quality, and productivity

– Focus on improving processes not blaming people

A culture where performance is owned by frontline teams is likely the engagement component most closely linked to plant productivity improvements.

Fig 8: **Ownership of Performance**

+112%

Before Redzone: 3.8
After Redzone: 8.0
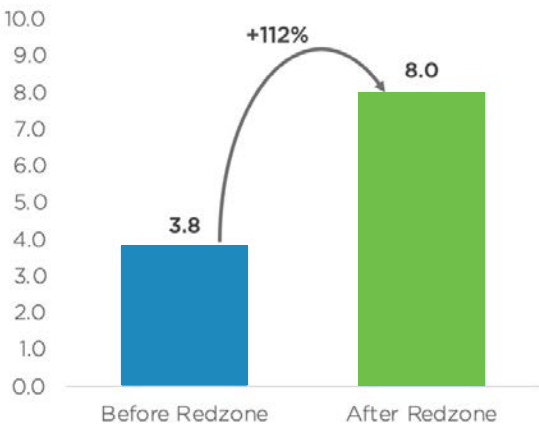
Example from the Redzone Community:

At Crest Foods, the number one thing frontline teams spend their time on is changing over production lines. They have as many as 20 changeovers in one production shift, so safety & effectiveness is key. The Crest Food's Line 70 Changeover team came together to achieve goals that were thought to be unobtainable a mere 6 months ago. Through focus and dedication, the team can now boast that they have shaved days off their changeover time! Their 50% reduction in changeovers is now standard across the plant. The team knows that engagement and appreciation for fellow team members have enabled them to win and grow as a team. "Not only did we see individuals take ownership of their portion of the process, but collectively we have seen a team that is owning the entire process and focused on success holistically instead of just in their silo," said Operations Manager, Jared Stumpenhorst. Creating new digital standard work, multimedia training material, and updating OEE targets with changeover clocks in Redzone allowed them to sustain and continue to improve throughout the summer to where their capacity gain was nearly doubled again. With a team mantra of "always keep moving ahead," Crest Foods has truly changed their business and their own lives for the better by the work they have done.

2.3.2 Autonomous Problem Solving

Engagement starts with having an 'ownership mindset' and is a critical characteristic, however things inevitably will go wrong, and the frontline teams need to be able to react to problems in the moment. The degree to which teams can get to a root cause to independently address their own problems in real time is a key measure of engagement.

Autonomous Problem Solving	Characteristics of Low Levels (0-5)	Characteristics of High Levels (6-10)
Problem identification and prioritization	Problems are not visual for frontlines to prioritize. Misalignment exists between departments	Problems are visualized to frontlines and in priority order based on business needs
Skills to contain problem and solve it at the root	Some individuals solve problems at the root cause, but most people only resolve symptoms	Teams and individuals use tools to solve problems at the root cause considering all inputs to the process
Action generation and completion	No system for managing actions or many actions go unresolved with manual tracking system	Few stale actions because systems and culture exist for creation, prioritization, and resolution

Autonomous Problem Solving was studied in each plant in the dataset. The results show a 50% increase in autonomous problem solving meaning that significantly more people are getting involved in both simple and complex problem solving.

*Fig 9:* **Autonomous Problem Solving**
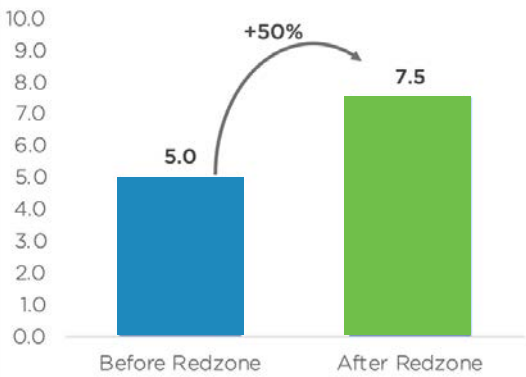
In a typical plant before deploying the Redzone Connected Workforce Solution, root cause analysis is typically done by a small number of people in supervisory or support roles, not frontline employees. Even in plants with mature continuous improvement programs, the frontline teams typically do root cause analysis only when told to or prompting a predefined trigger (e.g., two hours of unplanned downtime requires a 5-why). Often the corrective actions spawning from these activities tend to be administrative: 'Retrain employee.'

Onsite assessments and data collected from plants using the Redzone Connected Workforce Solution show that teams are conducting root cause problem solving activities in a different way. Simple root cause analyses are conducted as muscle memory to repetitive problems during the shift. When large systemic issues put long-term goals at risk, frontline teams demand that a Kaizen team be assembled. Lastly, the improvement actions coming out of these activities focus on solving the problem forever by eliminating, substituting, or engineering out the root cause to prevent reoccurrence.

Example from the Community:

Thomas Foods USA plant in Swedesboro, NJ deployed Redzone in mid-2020. As the Thomas Foods' team says, the Redzone modules and coaching helped them reshape the company's culture for the future. Their motto of flipping the pyramid, diligently listening to employees' needs and putting action behind those requests "brought big wins and new opportunities." According to the company's COO, Corey Arrick, "We have added a whole new production line and furthered our parent company's belief in us because of our engaged employee workforce." Excitement and pride (in both English and Spanish) were palpable as the frontline team shared how their efforts had directly contributed to the elimination of weekend overtime and multiple internal promotions. Angelica Quiroz has gone from a lead to a supervisor driving Kaizens with another promotion of a CI role on the horizon. Irma Cortez is proudly a lead on lines 21 and 24 with responsibilities including training new Thomas Foods team members. The desire for line leads to be trained in more skill sets is infectious. This team knows that getting more efficient and sustaining these results is a domino effect for future wins. What used to take the shop floor seven days now takes three days, and they say they are just getting started! This is truly a team winning together. The shift in morale turned conflict into collaboration, making everyone's jobs easier.
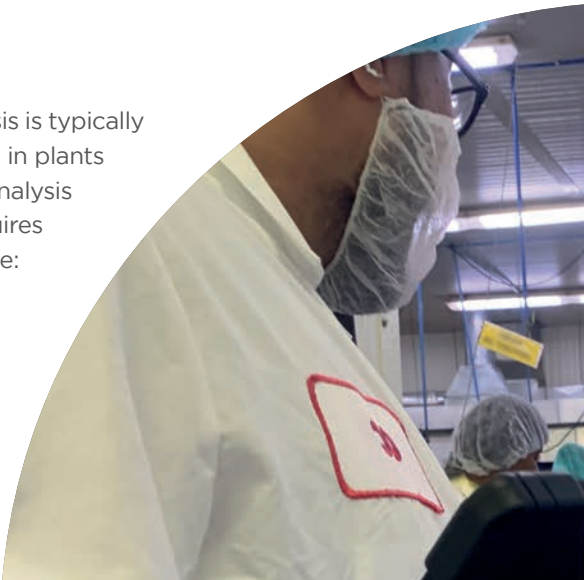
2.3.3 Connection to Other People and Teams

The third component of engagement is *Connection to Other People and Teams.* This component includes the ease, quantity, and quality of real-time communication in a factory.

Connection to Other People and Teams	Characteristics of Low Levels (0-5)	Characteristics of High Levels (6-10)
Ability to connect to other teams	Some frontline team members have access to devices like radios or phones, but most do not	Most or all frontline employees have easy access to communication systems in their work area
Speed to connect to other teams	Frontlines communicate through manual means like suggest boxes, white boards, or email	Real-time communications exist to connect to others like chats and video calling
Communication up and down the organization	Employees typically follow the chain-of-command to communicate problems or improvement ideas	Systems and culture exist where communication is shared freely – up, down, and horizontally

Before implementing a connected workforce solution, a typical factory suffers from 'the telephone game.' This means, a problem must be communicated to the observer's supervisor, then to the problem solver's boss, then to the problem solver. This is obviously suboptimal for multiple reason:

1) Communication is slowed

2) Priority is not communicated properly

3) Back-and-forth discussion is hampered

These inefficiencies result in slow resolution, frustrated team members, and worst of all, frontline employees feeling unsupported, and untrusted.

Fig 10: **Examples of Typical Problem Communication**
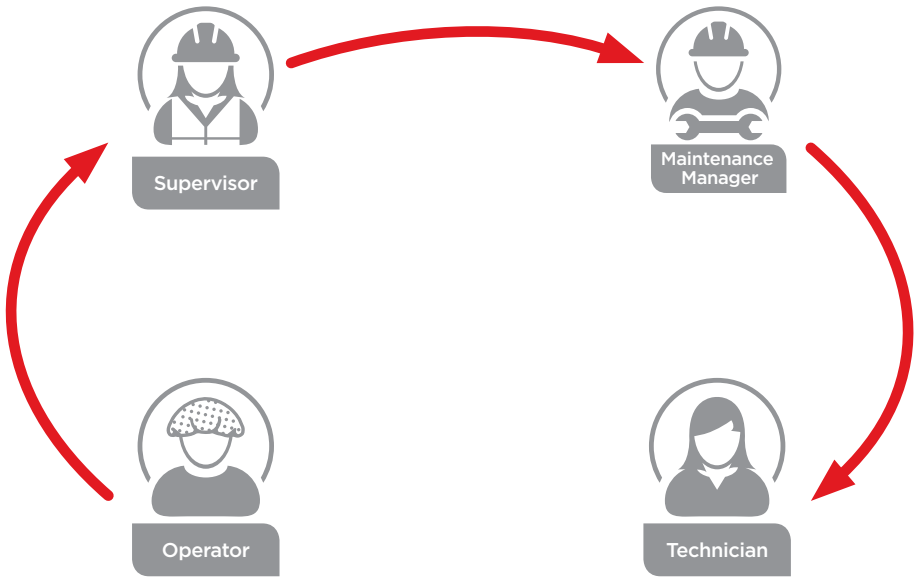
The frontline experience is much better for factories with a digital connected workforce solution. These plant's employees experience constant communication regarding plans, problems, and priorities regardless of their position in the organization's hierarchy. Operators talk directly to technicians, technicians speak directly to operations supervisors, etc. This occurs because physical, language and organizational barriers are digitally eliminated. These plants experience a 71% increase in communication and connectedness

Fig 11: **Communication and Connectedness**
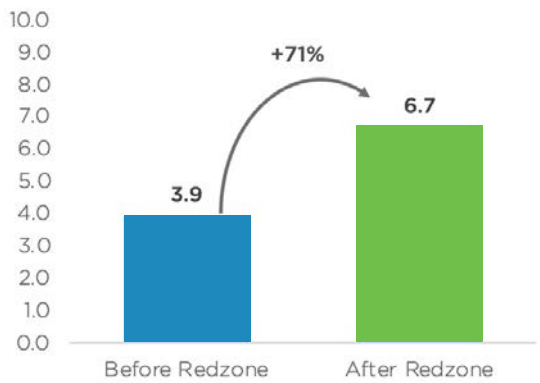
Example from the Community:

Nestlé Purina's Davenport team's ability to communicate and collaborate seamlessly across shifts has allowed the team to reach new heights. Dennis Drummond and the Line 7 team had a chance to break the production record, so they obsessively communicated across a line that's longer than a football field to ensure that they would beat it, which they did at 12,683 bags in a single shift. "Packaging folks are really taking to this and embracing it. It's easier to communicate with the palletizer now. It's easier to send a chat than hear on the radio," said Justin Sanderson. With an unwavering one-team mentality, every shift, department, and team are connected into Redzone. "We've had more communication in the last 3 days than in the past few months," added Tony Stevens. "Responsibility and ownership are the name of the game at Purina Davenport when Redzone is by your side – literally in your hand or on screens above you". Before Redzone, production issues could not be addressed right on the spot. "I had bags that were wrong, there were a couple different bag lengths. Now I can take a picture with the iPad and let people know of the issue," said Teresa, another line worker. The visibility alone gives empowerment on and off the clock. Michelle Beck and the QA teamed-up with Operations to eliminate the number one quality defect in Treats. Ryan Jones and warehousing supported a sanitation Kaizen so that Sanitations are not only better, but faster.

2.3.4 Cross-team Collaboration

Communication and collaboration are interconnected but different. Communication is the simple exchange of ideas and issues; collaboration is working with others to solve a problem or achieve a common goal. There are four common behaviors found in factories with high levels of *Cross-team Collaboration:*

1) Multiple shop floor huddles per shift

2) Daily production meetings interlocked with shop floor huddles

3) Regular cross-functional Kaizens

4) Evenly distributed action ownership with well-oiled action cycles

Cross-team Collaboration	Characteristics of Low Levels (0-5)	Characteristics of High Levels (6-10)
Regular frontline huddles	End-of-shift handoffs occur regularly but mid-shift huddles do not occur or occur sporadically	Huddles occur at least twice per shift with Production, Maintenance, and Quality in attendance
Daily reviews and feedback	Operational reviews occur daily. Most discussion is about what 'might have happened' and most actions are to 'follow-up'	Most participants are prepared to talk about performance misses, actions taken, and recognition
Cross-functional improvement teams	Solving a big problem is assigned to the 'department lead' as de facto reprimand	Eliminating a big problem is seen as an opportunity to activate a cross-functional Kaizen team
Shared sense of responsibility	A mentality exists where employees 'pass the buck' so actions land on other departments' desks	Actions assignments are reviewed regularly, and people volunteer when others are overloaded

This component of engagement saw the second highest increase at 81% above the baseline level. Without a connected workforce solution, it's common to find plants void of shop floor huddles (because they don't have the data) and void of cross-functional problem solving (because they don't have the time or skills).

Fig 12: **Cross-team Collaboration**
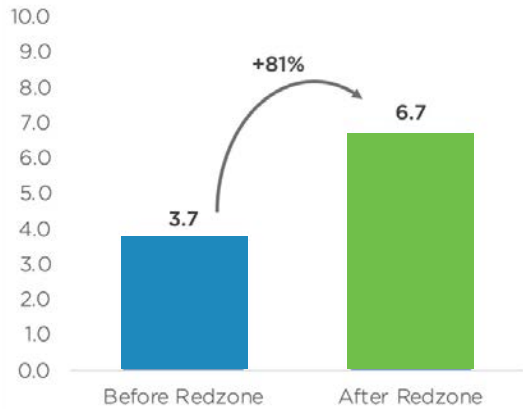
The hidden but potentially largest benefit of these behaviors is that a virtuous cycle is created when teams solve problems together: the team solves a problem ➜ the team builds trust and comradery through the shared experience ➜ the team wants to solve more problems ➜ the team gets better at solving problems ➜ repeat.

Example from the Community:

At both Honeyville's Ogden and Rancho Cucamonga, the energy, spirit and drive to succeed is contagious. "An employee goes home after a 12-hour shift with excitement about what they have been able to accomplish and knowing they have made a difference because they see and understand the scoreboard. That is amazingly rewarding as a leader," said Nathan Hyde, Chief Operating Officer at Honeyville. "It's easy to see thru the data the tremendous improvements to Downtime, Changeovers, and OEE Honeyville has accomplished, but what's way more important than the numbers is the positive affect these improvements have had on our frontline people," he adds. "Redzone has helped us all come together as one unit! It's changed our culture by creating a better understanding between Quality, Maintenance, Production and Warehouse," said Production/Sanitation Supervisor, Dave Ruiz. Maintenance Technician, Eric Dunham, enjoys Redzone not only for its day-to-day functions, but also to get to know new employees during his doctors' rounds. At both facilities, Maintenance team members smile when speaking about the change from static mic communication and writing everything down to preventative maintenance, pictures, and videos. The Maintenance teams at both facilities could teach us all a lesson or two on chats, tagging and responding quickly in the app with "I got this!" or an "I can grab that!" Honeyville uses Redzone as their tool to see the strengths of team members and further cross-train. If a tech is better at electrical tasks, then they will be put on more of those jobs to further drive the success of the plant. This ability, to let people shine in their best skillsets, has transformed the Rancho plant from operating on 3 shifts 6 days per week, to now producing more volume in 2 shifts over 5 days.

2.3.5 Feeling Competent and Recognized

The final component of engagement assesses how much frontline employees feel competent and recognized at work. Improving this component is likely the largest contributor to the increase in retention that high performing plants experience. To evaluate this element of engagement, the study looks at the entire lifecycle of an employee:

1) Basic onboarding

2) On-the-job training

3) Knowledge sharing

4) Career progression

Feeling Competent and Recognized	Characteristics of Low Levels (0-5)	Characteristics of High Levels (6-10)
Onboarding and training	New employees watch a safety video and then are sent to the shop floor to shadow someone	New employees receive a clear learning plan, a brief company orientation, and a buddy
Knowledge sharing	Knowledge is shared in classroom training, ad hoc OJT or often outdated SOPs in 3-ring binders	The majority of employees contribute to a knowledge system with standards, videos, and hands on OJT
Formal and informal recognition	Employees are recognized for overtime, catching-up from problems and the occasional promotion	Systems and culture in place for regular peer-to-peer recognition, cross-skilling, and promotions

Operations leaders can relate to the study's findings for average plants before a connected workforce solution: new employees typically watch a quick safety orientation video then, shadow someone randomly. Experienced employees lack good instructions and are afraid to ask questions, so they make mistakes. The problem continues with a lack visibility into a career-path so, employees disengage and/or quit.

The employee experience changes dramatically after deploying the Redzone Connected Workforce Solution. Employees have clear goals and are supported by people who know their job well and can help them develop. Experienced employees have work-instructions and the ability to receive and share knowledge with other people. Their skills and performance are noticed by peers and plant leadership alike; so, employees receive regular recognition and ultimately achieve new skills or promotions.

Fig 13: **Feeling Competent and Recognized**

Before Redzone: 4.9
After Redzone: 8.0
+73%
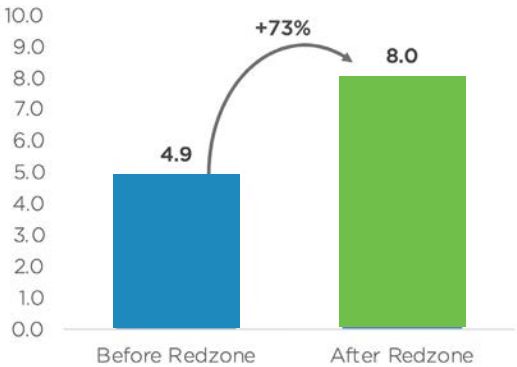
Example from the Community:

The employee experience at Dot's Pretzels includes supervisors and shift leads claiming this is the best job they've ever had. Whether it's Robert Mitchell who started as a general laborer and is now a second shift supervisor or Christina Castro who started as temp in 2017 and now works between packaging, mixing and warehouse in addition to training fellow Dot's employees at other facilities – the theme of employees moving up quickly in the company is so common it's jaw dropping – and this is not because positions need to be filled. With tears of joy in her eyes, Christina said "4 years ago the company was in complete chaos, with endless paperwork. Redzone has brought us into the 21st century. I love what we do!" It is common to find a Dot's employee after hours and on the weekends wearing their 'work swag' because they are bursting with joy, eager to speak about where they work in their local communities. Leadership shares the sentiment that Redzone is a source of pride, a tool to promote their staff, and that they are growing exponentially with the data right in the palm of their hands. Mary Leslie, Director of Operations, said the drive to never disappoint customers has frontline workers working extra shifts and longer hours. "Everyone wants it!" Plant Manager, Matt Miller, and CI Manager, Angie Martin, shared that there's no red tape at their plant – when construction was happening at one facility, frontline worker, Cecil Washington, suggested to move barrels in a certain area out of the way so more products could be placed there. The idea was green lighted, tried and listened to. With such high demand – they almost can't keep up!

2.4 Impact on Employee Turnover

In addition to the five characteristics of engagement, the study explicitly measured changes in the turnover rates of frontline employees. The 50 plants in the study averaged an employee turnover reduction of 32%. In the same period, the national turnover rates increased by 50% because of labor crisis which is a swing of 82% compared to the plants in the study. To illustrate the impact of this swing, a plant in the study's sample must hire 13 people to retain 10. By comparison, an average plant in the United States must hire 25 people to retain 10 in the same time period. The improved turnover rates significantly improved costs associated with hiring, training, safety, poor quality, and line performance.

Fig 14: **Employee Turnover**
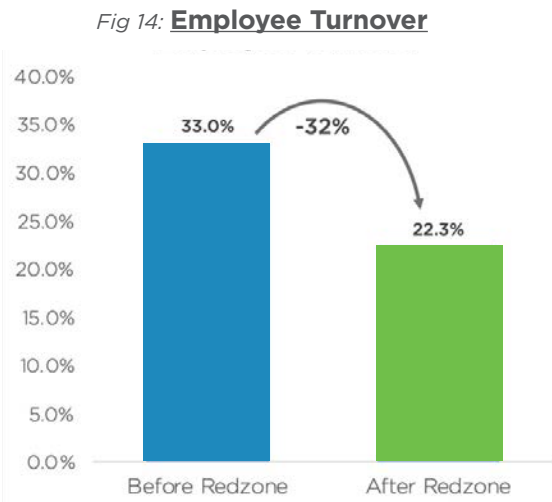
Example from the Community:

Marianna Industries is a manufacturer of health and beauty products in Omaha, NE. Before Redzone, the plant had 50% temporary employees and 50% permanent employees. The business drivers for temporary employees were not seasonality nor financial, it was because Marianna couldn't keep the people they hired. The factory had 400% turnover annually meaning they needed to onboard 400 new employees for every 100 positions on the factory floor to maintain staffing levels. After implementing Redzone, their turnover dropped to nearly 0% said Cory Jensen, Chief Operations Officer.

Correlations between Engagement, Retention, and Positive Business Outcomes

A goal of this study is to understand potential correlations between engagement, retention, positive business outcome. To determine if tangible business results were improved, the study's data included productivity increases for the 50 plants. Productivity was determined by capturing the overall equipment effectiveness (OEE) at the beginning and end of the 90-Day Program. The change in OEE divided by the starting OEE is the productivity increase which was then confirmed by local plant accounting representatives. The average starting OEE for the sample was 50% and after 90 days increased to 62.8% which equates to a 26% increase in productivity on average (e.g. cases per hour). Each plant in the study showed a positive increase in OEE. This increase is similar to the entire Redzone Community's productivity increase from the most recent benchmark report which saw a 22% increase in productivity.

Fig 15: **OEE**
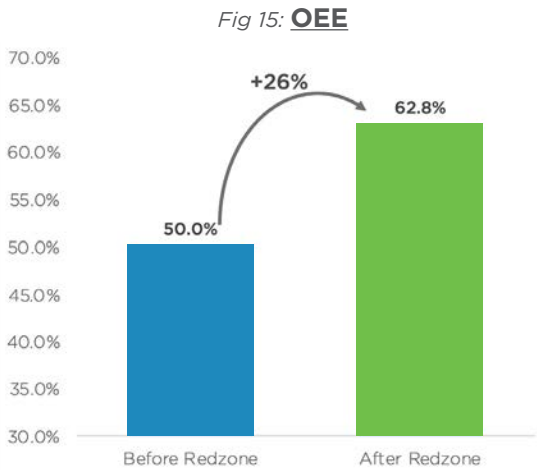
04 CONCLUSION

Across the sample of 50 plants, a clear and statistically significant change in frontline engagement was demonstrated via the survey and onsite assessments. By aggregating the five characteristics of engagement, the average change in engagement was 74%, with plants moving from an average engagement score of 4.2 to 7.4. This significant change in engagement in just 90 days, challenges the conventional wisdom that improving engagement needs to be a 'laborious' process that will be mired with resistance and requires years of planning and execution. Quite the reverse; it demonstrates that there is a strong appetite on the frontlines to be engaged in a different way. Unlike changes with plant and equipment, attitudes and behaviors can change in a 'heart beat' if the environment conditions are changed to foster this switch. This data supports what has been anecdotally clear in the Redzone Community for years; as a result of deploying the Redzone Connected Workforce Solution frontline engagement will increase significantly and quickly.

A clear correlation exists between this enhanced engagement, productivity improvements and a reduction in employee turnover. The link with productivity was to be expected since this has been widely studied and documented in the Redzone Productivity Benchmark Report.

The correlation between enhanced engagement and reducing frontline turnover has been demonstrated for the first time in the Redzone Community with data. This finding is specifically relevant for manufacturers in this current climate, where the 'war for workers' is an everyday challenge. This re-enforces the belief that manufacturers should think hard about how they approach and win this war. Signing bonuses and increasing hourly rates may be 'table stakes' but in an environment where every factory, in every town is doing the same, this does not differentiate one job from another. For a generation that prioritizes purpose in their work, wants to make a difference, craves recognition and career progression – these are the bigger drivers that make people want to stay and are the same characteristics of an engaged workforce. It would be safe to conclude that to become a town's destination employer, with a workforce that wants to be there for the long haul, fire up engagement on the frontline, create a winning environment and staff turnover will take of itself.

But what comes first, the chicken or the egg?
The results in this study unambiguously show a correlation between engagement, retention, and productivity. But, like the chicken and the egg, which came first? Does the enhanced engagement drive the productivity gains, which leads to higher retention as teams get that 'winning feeling' or did the sense of winning as productivity jumps heighten the engagement as teams looked to beat yesterday's new output record? Or was it the fact that the workforce stabilized and employee turnover decreased positively impacting productivity as fewer mistakes are made and competence levels increase? The answer of course is all the above. It is beyond the scope of this study to determine causation and that would be to miss the point.

Fig 16: **The Virtuous Cycle Over Time**
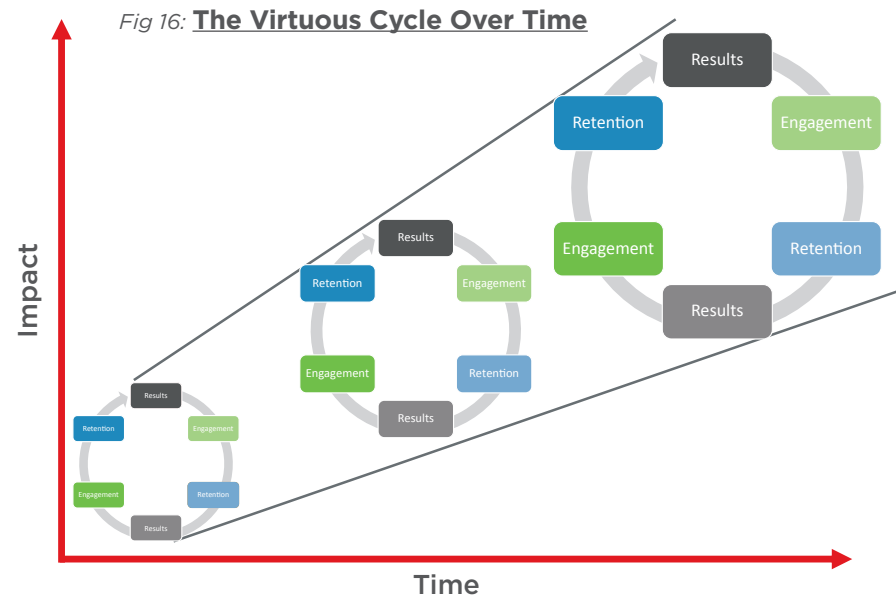
What is clearly established is that increases in productivity, engagement, and retention were observed in all 50 plants in the study and it was observed that all elements continue to increase overtime creating a virtuous cycle depicted in Figure 2 opposite.

This virtuous cycle is no surprise when we look outside of manufacturing for similar recurring cycles of progressively better results from teams of people. For any who watches or coaches a kids' sports team, you know that when they win a game, they train harder, prepare better and are more focused for the next game. As winning becomes a habit, new talent wants to join, no one wants to quit the team and confidence builds and an expectation of winning is established; the big 'M' (momentum) as it is often referred in sports. Whether it's a local kids' team or a sports dynasty the analogy holds true and this study demonstrates that this momentum can be built within teams on the frontline.

Start the Flywheel Turning
How do you start the flywheel turning in your plant? While the food trucks and a fancy slogan for the initiatives won't do any harm, for meaningful and lasting change focus on specific and practical changes that can be made on the frontlines to stimulate the characteristics of engagement as defined in the study:

1. Create an environment where the frontline teams have ownership over their own performance

2. Arm your teams with the technology, new skills and techniques and empower them to solve their own problems independently

3. Connect your workforce, give them a voice and ability to tap into the informal networks that exists in your plants

4. Tear down the silos, get your teams rowing in the same direction and solving problems together

5. Celebrate as records are broken, recognize your pace setters and build confidence

If you are looking to achieve any of the above, the Redzone Connected Workforce Solution is a great place to start. One thing is for sure – in this operating environment doing nothing is not an option.

Redzone

champions frontline
teams to work with
purpose and win
the day, every day.

Redzone