

*Coburn:* One common theme I see arising is that if you're in manufacturing very long, you're not afraid of death.

*[Laughter]*

*Coburn:* And I guess that's true. I will say that ... I don't look at myself as working at Crown International a division order Harmon. I look at myself as working **on** Crown International, and been working on Crown International for eight years, I'm still not satisfied, but still working on Crown.

So who is Crown? Crown is No. 1 in sound amplification. That's commercial sound amplification. In this room, it's being amplified and it's probably about 150-200 watts. Our systems are 8000 watts. Our systems go into a major stadiums, major cinemas, major venues around the world.

We've been No. 1 for a long time. Back when it was family owned, we were No. 1. We got bought in 2001 and we're still No. 1. We were bought by Harmon International, a big audio company, \$3 billion in sales. So we're pretty familiar with how the audio chain works and how things happen there. Very confident in what we do, but we also know it's a global economy and we got to do everything we can to stay on top.

Here is what some of our amplifiers look like in – they look small. They are small. They're only probably three inches tall, 19 inches deep, but very powerful, weigh about 17 pounds, have 4,500 components inside them. Technology is kinda the leading edge. We're up here in Bose country where they don't compete directly with us. They have some big speakers that compete with a sister company, JBL, that we own.

But here's some of our items that you see. The nice thing about it is to power a stadium like Colt's Stadium, it takes about 400 amplifiers. Amplifiers sell probably between \$1,500.00 and \$2,700.00 a piece. So it's good for us.

We also make microphones, but we're not a leader in microphones. We just make them. It's a niche product, high margin for us.

This is just some more of the recent ones, but we usually get all the big stadium. This is the Alamo Dome in San Antonio, Beijing Olympics. Like the previous presenter, we gladly make and send a lot of times into China – the Pacific Rim. They are big customers of ours, big customers for years. And kinda rare for an electronics company to say they ship into China, but we do and we're proud of it. So it's a good thing for us.

One thing about manufacturing, I don't like being a victim. When I hear manufacturing guys talk about being victims, I say, "It's your choice. You can be a victim if you want, but I don't recommend it." I think you should always work to not be a victim. Do what you got to do and be a leader. You are the Calvary.

When you think about it – I always think about it this way, you're either in manufacturing or you're supporting manufacturing. And everybody else is just pawns. They got to be there. They got to do their part, but if you look at it that way, you quit being a victim. Except for accountants. Now that's a little different. I always say accountants - their job is to go in after a battle and bayonet the wounded.

*[Laughter]*

*Coburn:* That's one of their major claims to fame.

So Beijing, the opera house and everybody's seen that. Cinemar Theaters, we're huge in the cinema market. Prudential Arena for the New Jersey Devils. Any major venue. The Vatican, the Plaza Hotel Vegas. We still have a lot of amplifiers in Vegas in, obviously. Anything entertainment and sports-related venues... music, hip-hop. We do all that.

So what I'm here to talk about today is risk. I'm gonna get off the platform a little bit. Is there any risk in your businesses? Does anybody have any risks? I pay for answers.

*[Laughter]*

*Coburn:* Any risk? Yes.

*Audience:* \_\_\_\_\_.

*Coburn:* What's your risk?

*Audience:* Well, primarily \_\_\_\_\_.

*Coburn:* Power outages.

*Audience:* \_\_\_\_\_.

*Coburn:* Any other risk? Yes.

*Audience:* Staffing \_\_\_\_\_.

*Coburn:* Staffing? Good catch.

*Audience:* \_\_\_\_\_

*Coburn:* Any other risks?

*Audience:* Shortages of my supply.

*Coburn:* Shortage is a good one. Yes.

*Audience:* We often times will sell in dollars, but then produce something in Mexico or elsewhere where we have risks associated with the dollar valuation.

*Coburn:* Allright. Currency risk.

*Audience:* Currency risk. Thank you.

*Coburn:* Any other risk? So we all have risks. So what are we gonna do about it? Are we gonna be victims and just say, “Woe is me and fate is mine”? What if our suppliers go under? What are we gonna do? So we have to look at those things, and that’s one of the things that motivates us. Our burning platform issue, especially at our factory - I needed burning platform issued. I had to motivate the team. I had to make a turnaround. I had to make a big change, so I needed something. I started looking.

I look in the audio magazines. Our competition, called QSC in California was having an open house on Tuesday night and it was open to the public. I am the public. So we got on a plane and we went there and we said to ourselves, “We’re gonna go into this plant and we’re gonna see what they got to tell us. It’s our direct competition. If they ask who we are, we will tell them who we are and they will throw us out and we will be fine with that.” They didn’t ask who we are, so we all went in. They kept us from 8:00 until 11:00 at night. They told us all about their marketing strategies and manufacturing strategy - fed us and answered all our questions.

So we shamelessly took that back to our factory and pulled everybody together and told them everything that happened and told them why that it was important that we needed to really get our act together and really make some massive improvements to stay competitive. So we did that.

About a month later, I was over in Shin Szin (?), China. We were just looking around at suppliers then we had to go into this company called Orient Power. We didn’t really know what to expect, and what we found is that they took us to the fourth floor – they do things on multiple floors. They took us to the fourth floor, and as we come onto the floor, we go, “Whoa. These are amplifiers. Who are you making these for?” And they were making them PB and S (?), another of our competition.

We proceeded to say, “Well, how many are you making? Where you sending them to? What kinds are you making? Are they foreign? Are they domestic?” If they wanted our business, they’ll tell anything. So we had all that information. We got back to the United States and, boom, we got to have another meeting.

“Folks we got problems. These guys are making amplifiers and they’re doing a real good job, and they’re making 40 an hour. The QSC plant had an automated line worth \$8 million of automation making their amplifiers in 2 hours increments.” And here we were saying we’re No. 1, we don’t have to change. And I said, “We got to change. We got to change big time.”

So that was the burning platform. We got everybody motivated. We got to go. We got to do some massive things. Do everything differently. Crown had looked at manufacturing as kind of a necessary evil. They didn’t look at it as a competitive weapon. And I would say, “You’re missing the whole point.” You’re missing the whole point that this is a competitive weapon and what are we gonna do with it. How are we gonna make a lotta money? How are we gonna really impress the customer?

So look at this factory. As you can see, notice this little stairwell right there, okay? So you see the factory. ... At the time when I took over manufacturing, we had a different kind of a MRP system, if you will. It wasn’t quite Pull. It wasn’t quite Push. It was jerk.

*[Laughter]*

*Coburn:* It didn’t work that good. Nobody knew what was going on half the time. We always had wrong stuff. We never had the right stuff. And all the work centers were bogged up. Then everything took forever to get through and it was always confusing and everybody – the Crown Salute was this at the time (fingers pointing opposite directions). It was always somebody else’s fault and we couldn’t get there from here.

We made our own castings, metal castings. We had five shades of black. And marketing guaranteed me that you had to have five shades of black to sell in the big markets because it was very important. Well, I’ll say it this way. Common sense is not very common. It’s very rare, and that’s where manufacturing guys got to step up and actually do something about it. But otherwise, we’d be led down a primrose path to suffer in oblivion and never get out of it and be done.

So remember the staircase. Watch the staircase. After (whoops, back up one) After a little bit of work, we had 32,000 square feet and we don’t

need more, okay? We were increasing sales the whole time, so we freed up that space. That's my space. It now has a little gold chain around it and nothing goes in there unless I approve it to go in there. But we don't need that space to produce anymore. We had wasted space, wasted time, wasted inventory and just all kinds of waste that we cleared up.

As you can see, the lighting is reverse lighting, so we don't have shadows. We have specialized floors for ESD. Cleanliness is at an all-time high. Five S is a big deal. We actually reward it. We don't just mandate it. We reward it, too. So we do a lot of good things. If you look at kinda how we work. You've got strategy tools and culture that you always have to deal with. And Crown was just like every other manufacturer, they're trying to figure out what to do with it and how we were get better?

You know if you have the vision part of it, strategy and culture come together. If you've got part of it, that helps. But you still haven't integrated the tools and you don't know what you're gonna do with it. So you got a piece of the puzzle. You get the tactics around – this is where you say you got the strategies and the tools coming together. But then you still don't feel like you've got a cohesive plan or what to do with it. Then you get the Operational Excellence when the tools and culture kind of come together and people say, "Okay. We're all in the same page. How are we gonna make things work?"

But ultimately, you want to get them all coming together and you got the Optimum Yields. When you start saying, "Everything's really clicking," and it's kind of a swagger thing. It's "Bring it on. Who's the competition? What are they doing? Who cares? Let's beat them." And that comes with working on all the issues and getting better all the time. And it's very visible. It's not something that you just kinda say it happened. It's very visible. It's something that you feel and see and you kind of smell it when you go through the place. Because everybody knows we're tons better than it used to be.

Crown at one time it was kinda like this and they kinda didn't know what they wanted to do. They kinda were, you know, 'program of the week.' "Let's try this." "I heard this." "Let's try that." Buzzword de jour. They had all kinds of buzzwords and nobody knew what they were doing. I come down there and said 'Kan Ban', and they said, "Don't say 'Kan Ban'." I said, "Why's that?" They said, "Well, that's a dirty word because when people did that before it just fell on it's face." I said, "Why'd it fall on his face?" They said, "Well they tried to cut inventory and they shut all the lines down."

I said, "Well, that shouldn't have never been called Kan Ban. The goal of Kan Ban is to satisfy customers. Never to cut inventory. That's a side

effect sometimes, but never the goal.” So let’s not get confused with what we’re here to do and who we’re here to serve. And a lot of times people get confused and they have to circle back around..

(Now my clicker doesn’t wanna work. Okay.)

So I equate all this with a different kinds of Pain. So you have your reputation at risk in the market because you’re not that good and you’re just hanging on by what you did in the past. Financial waste. At one time when I first came to Crown, they didn’t care about profits. I didn’t quite understand it. I told them they were crazy and they still hired me. I didn’t understand what they were trying to do. They said, well we paid everybody. The vendors got paid. The employees got paid. We got paid. Everything was good.

I said, “You’re on a banana peel. You’re gonna die. You got to get better.” So nobody look at it as a way to make money. Well, when we got bought by a Fortune 500 company, that changed. They were very concerned about profit. We’re gonna change that real fast.

We had the other thing, Market Driven Deadlines trumping design. I don’t know if you guys had it. You guys ever had any designs come to the manufacturing floor that are half baked? That never happened?

*Audience:* Mm-mmm.

*Coburn:* Me neither. I mean it happens all the time and they just never – they were trying to get dates. They knew it was half baked, but they want to make you believe it was in pretty good shape. But there was a real problem especially with our kinds of technical amplifiers. We’re pushing the leading edge all the time with new patents and taking it to the next level. Everybody’s always working hard, but are you getting anything done versus just frustrated. And many times it’s just frustrated. You’re not getting anything done. You come home and you say it was disaster and I hate to go back tomorrow, but I’m the boss. I got to go back tomorrow. You got to straighten that out. You just can’t stay there. It’s not a good place to be.

We were very product focused. And we didn’t look at the opportunities. In other words, we’re always looking at the product, we weren’t looking at the process. We’re not thinking of the customer, so we had to change that.

Anybody know what the problem is with hidden factories? What’s the problem? It’s an obvious problem.

*Audience:* They’re hidden – you can’t see them.

*[Laughter]*

**Coburn:** (Bad throw, candy hits attendee.) You guys signed a waiver that if you get hurt, it's not my fault.

*[Laughter]*

**Coburn:** But, yeah, you can't see them. And they're around everywhere. What do you call it? Standard work. After a point in time it's just how we do things around here. You got to have a rework department. What would all those people do? We got them all trained up now. We can't get rid of rework now. We got to have – so a lot of things like that was just “stinkin' thinkin'” that you had to get rid of. You had to say “Forget that. We can't do that anymore.” It doesn't work for us.

Doing touch up. Over scheduling. Wrong stuff at the wrong place, testing and retesting. It's just a mess. So we have this one up. It's kinda the churn. You see the churn going around all the time. We're too busy drowning to learn how to swim. So what do we do? We just keep trying to drown. We just keep struggling and thrashing around. We never learned how to swim.

But what you got to do is you got to figure out, “Hey, take it one at a time. What are we doing tomorrow? What are we gonna do the next day?” Get outta the churn. Start fixing things. Start putting things in order. Line up something. Don't just wait and say it's just impossible and it's the hot list of the day and go home at the end of the day and all he did was put out fires.

This one, this is one of my favorite slides. From my design department, which needed a lot of straightening out, and remember, I worked on Crown, not at Crown. I showed them this little slide that I got from Evan Miller at Hertzler, and this just drives them wild. You'll say, “Look at here. We've got Toyota and they do EC changes,” okay? And right here's launch. Then we have North American auto manufacturers, they do about the same number of EC changes. Look what the difference is, they launch right there. Toyota launches down here. Big difference.

If we're on Rev 32 and a young product, you know something's wrong. You know something's way out of kilter. And when I showed this to the design guys, they're just going, “Well, let's not reality. You're making a big deal out of it.” No, I did make a big deal out of it because it's a big deal. If you don't have it designed right, don't bring it to the floor. If you've got a lot of revs to do afterwards or it doesn't work, or high quality problems, don't bring it to the floor. You're just wasting

everybody's time and it's gonna cost you a fortune and you're gonna hear about it in the field. The field eventually will hear about these issues when you start making these changes. Everybody will be confused.

The cost differences. Obviously, if you're the Toyota version your costs are way down here when you're doing those changes. If you're the North American auto, you're doing those changes it'll cost you a fortune because it's hard to change once you're moving.

So the word accountability is a good word. Everybody uses it. It gets overused and all like that. Inside the word accountability is the word count. Now you'd be surprised how many manufacturers I go to and they're always talking about accountability and they're always talking all these good buzzwords, but they're never counting anything.

When you start counting things, you'll start finding out how good you are or how good you can be. But you got to count. You can't just have flowery words. We don't work in marketing. Marketing has all the flowery words. We got to use numbers.

So here what we're measuring, is where we used to be. This is the number of hours that it used to take to get fabricated parts to our plant, 264 hours, everything batch and queue. Everything just took forever. What we took it down to: 26 hours. 90-percent improvement. That's pretty good. Ninety-percent improvement in getting things through our shop. So that makes it better, obviously, but we had to work on it. We didn't have time to start figuring out what keeps us from being fast, kick out the crutches, get things really moving fast.

Likewise, circuit board assembly. We started out at 172 hours it took to get circuit board through because we did them in nice batches and slowly, pushed the material around the plant and took the time and checked it out with different people. Took that down to 17 hours, 90-percent improvement. Ironically, that's we were aiming for, was 90 percent improvement, because remember the competitor I told you about that said they could do amplifiers in two hours? They did do it two hours. They really kept figuring it out. They did a good job.

This was our way of saying we got to cut back. We just can't give up. And how we gonna do it without 8 million dollars? Because that \$8 million and we take away the demand, that's a boat anchor they got to pay, not us.

Its interesting - we started looking at efficiency and – how I would explain this is just amazing to me. I mean I had supervisors – they got promoted to supervisor and they thought the game was over and they won and that



they didn't have to do any more and everything was okay.

They weren't immersed in the details. They didn't hardly know what was going on on their lines. If the lines were running, they did their job, and the lines weren't running very well. So we have a morning meeting- 8:30 – last 15 minutes long. Come prepared. Know what you're talking about. We go through everything. All the lines are running. Problems, issues, who's handling them. Break, go back to work. Come back at 3:00 and do it again, hand off to second shift. But it was amazing at how many people had considered that because of inventory and because of other reasons, they didn't have to really know what was going on on our lines.

How many people got MBAs in the room? Lots of MBAs. I've got an MBA, too, but I also have another degree. It's called MBWA. It's a Master of the Business by Walking Around, and I do a lotta walking around. And what do I do when I walk around? I observe. I talk to people. "What's going right? What's going wrong?" And when I go to those 8:30 meetings, I was informed. I'd say, "How's your line going?" "Oh, it's going okay." "Are you gonna make the production scheduled?" "Well, probably. We'll see."

See, now you got a problem at Station 2. You got a problem at the test area and you got a bit of a problem and you better get working on it and you better have somebody on it. I do that a couple times, they started coming prepared. It was no longer, "Things are okay," or shrug of the shoulders. And through the efficiency, but it was looking through it really wasn't that hard. It was just dumb stuff that nobody ever worked on it. The maintenance of the lines, the bringing of materials, quality from the suppliers, just block and tackling stuff that everybody was just living with instead of doing something about it.

Unplanned Absenteeism – If the chart went back further, it was worse - like 16 percent at one time. What we had was – this is kinda funny - We had kind of an honor system, and so I said, 'Well, nobody's going to cheat on the honor system.' They'd say 'oh, no. They'd sign in. They'd sign out. Nobody's going to change cheating. I said, "Well then nobody'll have a problem if I put a time clock in here. There won't be any issues."

So we put a time clock in and, boy, we had some issues. Either the time clock was lying or something was wrong. But they weren't quite there all the time that they used to be. So we had that. So we had to also fix the attendance policy. The attendance policy was a mess. It was a six-point system and it was kind of who could tell the best story. If could tell the best story, you were off the hook. If you told the truth, you got penalized. Or if your supervisor didn't like you, you got penalized.

So we changed that real quick. We made it a 12-point system instead of a 6-point system. It was no-fault. And a second late, is late. Period. We pulled all the supervisors, “If you don’t like these rules and we catch you breaking these rules, you will be on the outside looking in. And not to be mean about it, but it’s got to be better and we got to get better quickly,” and look how it improved to where now unplanned absenteeism is not that big a deal. But running an assembly line without people is very hard to do. If anybody knows how to do that, let me know because I don’t. I don’t know how to do that.

The other thing we did – it was like a carrot and a stick. So we got the stick, but the carrot was that we had hours that we used – personal hours – and to them it was sick and personal hours and they used them just like vacation. I said, “That is not the intention of using those hours that way,” so we wanted to change that.

So we said, “If you don’t use your sick and personal hours and you have perfect attendance, which means you’re not a second late all year long, we will pay you triple for those hours. Triple.” Ironically we do that just about before Christmas and it’s kind of a nice thing. We had the first year, 51 people, second year 61, last year 74. So when people said those clocks are wrong and they’re lying and they’re cheating me, I said, “That’s funny because 74 people – how did the clock know not to cheat them and cheat you? So how does that work? We don’t understand that yet.” So it came around. The people that don’t have perfect attendance but didn’t use all their sick and personal hours, we would pay them double. So again, more carrot. And so there’s a way to win, of course, there’s way to lose. We hope you win.

Manufacturing Headcount. Even though we do lean, we’ve never had layoffs, we’ve reduced. That’s kind of like the – if you want a strategic plan, go to the CEO, got to marketing and sales. If you wanna know what the numbers are, go to accounting. If you want some cost reductions, who do you go to? Manufacturing. If you want some major turnaround, who do you go to? Manufacturing.

You don’t go to those other departments because you’ll get the dumb look and the shrug shoulders and they can’t do anything about it.

Another thing we measure is the direct labor hours per unit. It’s kind of a poor man’s efficiency, so it’s good to look at, and you want to keep that always going down. Hours per unit is a good way to look at that from a standpoint. And something that everybody can relate to on the floor. It’s something you tell them efficiency and some of them get it, some of them don’t. They don’t if they trust it, but direct labor. And this is with making improvements and changing the hours on builds. It happens - its changing

the hours down.

Service department. We made a big change in the service department. The service department's kinda like tool and dye makers, kinda like maintenance guys, - a little bit Prima Dona type folks. Good folks. You need them. But nobody can tell them how to do stuff because it's kinda hard to tell them how to do stuff. But we took them through an improvement process in which we said, "Let's create some expectations. Let's put some measures in."

We got the improvement, as you can see. And then we said, "Now we're gonna standardize all the technician's benches," and we lost some ground, but we got standardized and lost some ground. And then we said, "Now that we've set the expectations and standardized, now look at the improvement." We got 40-percent improvement and everybody's happy.

The service backlog was huge. And as we improved the efficiency of the service area, obviously it went right down.

Vision Program. Somebody said earlier, "How do you get people involved in making improvements?" Our system called Vision Volunteers Involved Securing Improvement Opportunities Now- which actually we ran an ad on that with the name. Gave a guy a \$100.00 gas card if he came up with the name. What is, is it's a volunteer system where only hourly people can get involved in it. What they do is fill out a slip of their idea of how to make an improvement.

Then that slip goes to a board, a little board of four people, and they meet about once a week to go over it. And they authorize them to do it. They have to do it on their own time. We don't let them go away from their workstation to work on it. It has to be done on their own time. If they do something in the department, they get 25 points. If they do something for the – I mean in their work area's 25 points, in their department is 50 points.

If they do it as a team, they get more points. We worked it that way. These are lifetime points for as long as they work the plan. So they get rewarded. As they hit 100, they could get \$100.00 cash. They could get a gift certificate. If they get 500, it could be cash or gift certificate. The top prize right now is 5,000 points or \$5,000.00 or a trip for two anywhere in the United States.

We have had in less than two years, we've had 450 people put in ideas. They have saved us \$302,000.00 at a cost of \$15,000.00, including prize money. So it's a 20 to 1, 20 to 1 payback. So does it work? Heck yes, it works. The other thing is the board that I put on it, I want them to be err

on the side of the employee. In other words if it's an okay idea, not a great payback, let them do it. If it's a great payback, make them do it.

But it does work. It's a very good system. We copies this shamelessly. So we do a lot of benchmarking and we copy shamelessly all the time from anybody and everybody.

I'll go through this fast. It's just how do you progress. You start at the center, looking at the products and detection. Then you work your way out to process control and prevention, process optimization, and then ultimately you want to get to design optimization, and elimination of the problems.

We use Hertzler as a [system to monitor our quality around the plant](#). Its very critical to look at what's important, where are you going to check, what should be measured. Is the data good? And a very important one, this is huge, but a lot of people got data but they don't have this. They don't have the right data, in the right form, right now. Nothing's worse than working on two-week-old data trying to make some good decision's on it. It just drives you crazy. You can't get anywhere, and the stuff you're working on has already been fixed or it's no longer happening and you just can't get anywhere. So I can't emphasize enough the right data, the right form, right now.

Getting things like ICT and circuit test for all of our different products lines is a snap. Getting things like defects by individual models. It's very quick, five minutes or so. Some of this stuff used to take four to five hours to do. Here we go.

Again, looking at individual components down to the component level and what's the problem at the component level. We can do that in a snap. And again, now we've got it kinda lined up, not done, not satisfied, but we're doing well from the standpoint of our tactics, our vision, our operational excellence and getting to that Optimal Yields is working now. And everybody feels like winners. Nothing's worse than working your butt off and feeling like a loser. You got to work hard to make sure that doesn't happen.

Document data delivery. I'll skip ahead and kinda show you a picture of that. If you look at the screens, all these screens are work stations. What you have are some work instructions there. They have Pareto analysis of what's happened in the past at their work station. They have a training video there. We can put quality alerts there. We can send special messages. It's good for all shifts. We can update instantly around the shop. It's not something you have to go look for all the paperwork. So we actually have that out there on our lines.

And it gives the Pareto analysis at that level and then further on our production screens, they're showing the dashboard of what the efficiency is, what the quality is, by hour, by shift. The items over here are the ones that were rejected and now we even have it down here. It's a Pareto on what you are working on now. So if there's rejects or any issues of the order that you are working on now, it just displayed down in this corner. So you've got history and you've got on time, real time, what you're working on at this minute.

That's what the dashboard looks like. Again, it's standard Hertzler stuff you see in the hallway.

Pretty quick to implement, very understandable. People bring these printouts to the meetings now. They used to come in with all kinds of written stuff. They just print this out. You could get this on your CRT. You can have an alarm sent to you if things get out of control.

On the back of our projector screens, we put all kinds of marketing paraphernalia on. We talked about all the big installs we done, and how many watts are at this stadium, and how many watts are at that location. Just saying that with the data we can make decisions faster, with real data versus gut feel and all of that kinda stuff. It's one of our engineers talking. Again, more spokesmen material from our engineers. I'm going through some of this fast.

This one is talking about the deal of having real access to data. We also like to say that there's the Three As. The one A is the actual issue at the actual time at the actual place. Nothing's worse than trying to solve a problem in the boardroom when the problem is down on the floor.

Vietnam was trying to be run out of Washington DC, and that didn't work to well. We have to get to the actual time, actual issue, actual place.

Is that all that's left? I was gonna end with – I was gonna end with motivating the team. Always be positive. Point to the goals, not troubles. And push as much as you can to get through it. Going through a lean transformation is a little bit like running across a raging river. You can spend a lot of time in the middle. You'll probably drown. I wouldn't recommend it. You got to get across.

It's also been compared to putting duct tape on your arm. You can take the duct tape off slowly or you can take it off fast. I recommend fast because you won't survive. What happens is everybody loses faith. Everybody wants to mutiny, and you got to get it done and quickly. But

we also share at the end of the final analysis. We have pizza lunches and people will work for food.

There's one way of saying thanks, and what we do if they hit the goals, and our goals increase every year. That's where our raises come from our goals are always increasing. If they hit enough goals, they get pizza. If they hit more goals, they get the full meal deal. Okay, the full meal deal is a nice dinner from a local restaurant catered in.

We celebrate 5S. If you hit 5S, you get pizza. If you hit 5S like three times in a row, you get to pick your meal. The team that wins 5S, and we have an operations floor 5S and we have an office 5S.

Communicate how you implement. Daily meetings, talk to everybody. Pump up the success. Don't dwell on any issues that are negative. Always be positive. Keep the pressure on and sustain. Some other things I'd like to add is that we had a war room with a dedicated person that kept us organized. And we met weekly at least to get through the transformation.

You must attract and retain good people. I have no problem hiring people that are smarter than me, in fact, this is getting easier to do the older I get. It's not hard to find someone smarter than me.

The Common Enemy. Its very important that you describe the common enemy in your plant. Who are you there to defeat? because too many times if you don't come up with a common enemy they will decide to that its management - that's the common enemy. So you got to define the common enemy. You've got to make clear who you're fighting for – which is the customer. And who you're fighting against - which is the competition. So work very hard at that.

Again, we're always proud of what we got, but we're never satisfied. I'd like to end with that saying thank you very much.

*[Applause]*

*[End of Audio]*