

The Cult of the Maintenance Evangelist

Joel Leonard is out to solve the maintenance crisis one sermon at a time

Erik Schmidt, Assistant Editor

A man stands at a proverbial pulpit, dressed like a company executive but speaking like a fire and brimstone southern preacher.

Words shoot out of his mouth in rapid succession, powered by a heartfelt purpose and doused with an indeterminate southern twang—it's North Carolinian by way of California with a little Chicago edge thrown in for good measure. The syllables sway, bouncing up and down in a hypnotic, rhythmic cadence, daring you not to listen.

"Hello, I'm Joel Leonard," he says, "They call me the maintenance evangelist."

A hearty smile spreads across Leonard's face as he begins to preach, a sign of good fortune that belies the truth. Sure enough, as the sermon takes shape, the smile slowly fades into a solemn glower. Leonard gesticulates powerfully with his left hand and pounds out a series of bone crunching questions:

"What are we gonna do when the baby boomers retire? What are we gonna do when 35% of our skilled workers are no longer available? What are we gonna do when we have all these activities we need to do to perform maintenance but we don't have the resources or the capacity to deliver? What are we gonna do when we realize our machines and our equipment are beyond repair because we deferred it for so long?"

We face a maintenance crisis, he says. And that's the unfortunate Gospel truth.

But then his eyes soften at the creases, his fist becomes an open hand, and the questions give way to real, tangible answers.

"I really believe that if the United



Joel Leonard (left) and his nephew Baker Leonard pose with his "Game Changer Award" during a Greensboro Grasshoppers game.

States became the reliability nation, and we build a surplus of skilled maintenance technicians and we have a ready resource 365 days a year to help us address our chronic problem, we will be able to not just compete in the global economy, we will actually thrive. "

Welcome to the Revival.

The Game Changer

Over the past 25 years, Leonard's business card has been in a constant state of upheaval.

Since graduating from Elon University in 1987, he's held dozens of different of job titles. At various points he's been an editor, an author, an advisor, a consultant, a supporter and a community developer.

Of course, only one name has truly stayed with him after all this time.

"I was doing these workshops on how to turn maintenance from a cost center into a profit center," Leonard says, "and there was a professor from the University of Tennessee who at-

tended this conference. He said that I was the first speaker he ever heard talk about maintenance that didn't put him to sleep.

"He said I talked with such energy and passion that I was the maintenance evangelist. I've been called other things, but that one stuck."

It's certainly a strange name at first glance, like two random words were pulled out of a hat and thrown together in sequential order. But despite the oddity of the title, there is no doubt that Leonard absolutely *is* one.

A broad shouldered, barrel chested southern transplant with faith in his heart and the fear of God in his voice, it would appear that Leonard was fated for this kind of work. But actually, he happened upon it by accident.

"I kind of fell my way into it," he says. "I started off going to orthodontistry school at the University of North Carolina. I got sidetracked and wound up transferring to Elon to get a degree in business and marketing. In order to pay my way there I ended up getting

a job at a furniture factory at night. I worked on the machines and then they hired me as an industrial technician to work in the engineering department.

“They made me do every job in the factory. So I went from working with the wood to the saws to the shaping department to the assembly department to the finishing department, where they put on the lacquer, to the shipping department. I did that for about two years.

“While I was there, they assigned me to kind of tag along with the most interesting guy and the most hated guy there, whose name was on the loud speaker every ten minutes — the maintenance guy. The maintenance guy was responsible for keeping the water, the electricity, the power, all the machines, the whole facility running.

“It was very interesting to see all the things he did and I developed a great respect for him, although I didn’t see anyone have respect for him because anytime a machine wasn’t running and he wanted to take it down to fix it everyone would be chewing him out because they didn’t want to lose their production counts.

“But I got a big dose of appreciation and respect for maintenance there.”

In the fall of 1990, Leonard started work as a business developer at DPSI. He developed marketing and sales strategies to implement computerized maintenance management systems for major corporations, including Procter and Gamble, Burlington Industries and Coca-Cola.

For the next decade Leonard bounced around the maintenance industry, and during that time he began speaking at events for the Association of Facilities Engineering (AFE) — a decision that would ultimately push him towards developing the maintenance evangelist persona he still maintains today.

And it was at one of these speaking events that Leonard finally got his big break in the world of maintenance.

It was because of — and this is no metaphor or verbal trickery — “American Idol” and a bunch of crazy kids.

Seriously.

“In 2002, I attended a conference in Nashville, TN,” Leonard says. “At this

conference, the editor of *Maintenance Technology Magazine* got up before the crowd and asked, ‘How many of you are going to retire in the next 10 years?’ Over 90% of the audience raised their hand. These were people from Coors and Coca-Cola and other major corporations from around the country. These were the best of the best.

“It kind of woke me up. To see roughly 500 people of 600 raise their hands really hit me hard. That literally changed my life. From then on, I ad-

opted the problem of building the next generation of skilled technicians as my life’s chore.

“That was a big, momentous occasion, because that evening after I heard that I went outside to stretch my legs even though it was 30 degrees out, and standing outside were 5,000 kids trying to get on ‘American Idol.’ I realized that there were no kids [pursuing technical careers], but they were willing to sit in the cold air and try to sing. That evening a buddy and I were sitting



HIGH LOADS AND HIGH SPEEDS. PRECISELY.



NSK NH/NS Series Linear Guides

NSK NH/NS Series Linear Guides are innovatively designed for reliable performance over a wide variety of applications. They feature new ball groove geometry and state-of-the-art technologies for smooth operation, reduced noise and increased durability in high-load, high-speed environments. NSK NH/NS Series Linear Guides offer outstanding accuracy and load absorption, decreasing maintenance costs, increasing operating life and maximizing precision precisely.

1.800.255.4773

www.nskamericas.com

Think **NSK**.

BALL BEARINGS | ROLLER BEARINGS | LINEAR MOTION PRODUCTS | TECHNICAL SERVICES

DieQua offers more gearboxes

plus the experience and expertise to select the best one for your needs.

For Power Transmission

Spiral Bevel Gearboxes



- 9 Sizes
- 1-250 HP Capacity
- Low Backlash Option
- Ratios from 1:1 to 6:1
- Output Shaft Options
- Machined Housings

Worm Reducers



- 7 sizes, 28-110mm CD
- Fret-free Connection
- NEMA or IEC Adapters
- Coupling Input
- Aluminum Housings
- 2-Side Worm Support

Helical Gearmotors



- 1-75 HP Capacity
- Motorized or Adapters
- Right Angle or Inline
- Shaft Mount Designs
- Multi-Stage Ratios
- Modular Design

For Motion Control

Planetary Gearheads



- Precision or Economy
- Inline or Right Angle
- 40-155mm Frames
- Low Backlash
- 1 and 2 Stage Ratios
- Lubricated for Life

Servo Worm Gearheads



- 3 Backlash Levels
- Shafts or Hollow Bores
- Single or Dual Outputs
- 11 sizes, 25-200mm CD
- Capacity: 10-7000 Nm
- 20,000 Hour Ratings

Robot Gear Units



- Zero Backlash
- Precise Positioning
- High Repeatability
- High Stiffness
- Supports Tilting
- 10 Sizes

See our complete product line!

DIEQUA
Corporation
www.diequa.com
630-980-1133



around a table in Nashville and I said, 'Wait a minute, getting engineers to tell more engineers that we need more engineers is not going to generate the response that we need.'

"I said, 'What we really need to do is write a song. Then [my friend] said the magic words that really got me going: He said I couldn't do it."

Well, it turns out that Leonard *could*

do it. He called up some musicians and 10,000 YouTube hits and nine different versions later, the maintenance evangelist had his own personal theme music.

Wherever Leonard goes, the aptly named — if a bit on-the-nose — "Maintenance Crisis Song" booms behind him, succinctly summarizing his mission statement with a bluegrass, toe-



According to Leonard, completely automated machines like this modern sock machine are one of the main reasons maintenance personnel are so important.

For Related Articles Search

maintenance

at www.powertransmission.com

tapping chorus.

No one wants to work in the boiler rooms

*No one wants to work with the tools
Nation's youth are takin' the easy way out*

*There's no one left to fix our schools
Maintenance technicians are about to retire*

Company executives have got no one to hire

How safe does it make you feel?

"That song really helped me propel my message forward," Leonard says. "If I wrote a book, nobody would read it. I've written thousands of articles—literally—and that gets some momentum. But the song has just been amazing."

The "Maintenance Crisis Song" has been played before Congress, at the Rock and Roll Hall of Fame, and in dozens of countries around the world, including Helsinki and Milan. It is, in a way, Leonard's universal communication device in his hopes of solving a worldwide problem.

"The problems of maintenance are universal," Leonard says. "We may have different cultures and different languages but the same challenges face everybody. Regardless of where we're at, we're facing the same issues worldwide."

In the wake of the success of the "Maintenance Crisis Song," Leonard wrote other tracks, including "Find Me a Maintenance Woman," which features this memorable line:

You can have your Britney Spears

Find me a woman who can work with gears.

It's all part of Leonard's grand plan to make maintenance more accessible and "sexy" to the nation's youth.

"I've been trying my best to break down stereotypes and stigmas and get businesses to hire based on performance," Leonard says.

Currently, Leonard works for The Forge in Greensboro, NC, where he is attempting to generate a higher level of skills and talent in the area. For his

Made for Motion 



SYNTEX®
Torque Limiter

BoWex® GT
Coupling


ROTEX®
Curved Jaw Coupling

Power Transmission Solutions


- One-stop shopping for power transmission components
- Quality, reliability & compact design
- Online selection tools

KTR Corporation
219-872-9100
www.ktr.com


Curious about Cotters?

Ask our engineer. 

asktheengineer@diamondchain.com



©2015 The Diamond Chain Company. DCPTE-415
www.diamondchain.com | 1-800-872-4246
Diamond, the Diamond Chain logo, and "Nothing Outlasts a Diamond" are trademarks of Diamond Chain Company, Inc.



DIAMOND
CHAIN COMPANY
NOTHING OUTLASTS A DIAMOND



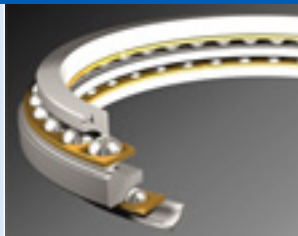
Quality For Heavy Duty

- 20 years in the North American marketplace
- Proven Quality "Made in EU"
- Large diameter bearings up to 95" O.D.

Roller Bearings



Thrust Bearings



High Precision Machine Tool Bearings



Slew Drives



PSL of America

1400 South Chillicothe Road
Aurora, Ohio 44202
Phone: 330-405-1888
Fax: 330-405-1398
sales@pslamerica.com
www.pslamerica.com

efforts, he was awarded "The Game Changer Award" by the city. Leonard received the award in front of a sellout crowd during a Greensboro Grasshoppers game (Class A affiliate of the Miami Marlins).

"It's kind of funny, I've gone my whole career helping maintenance guys and technicians and to show their appreciation for it they gave me a baseball bat," Leonard says. "People still know me as the maintenance evangelist, but I like this new title 'game changer.' That's what the people [in Greensboro] know me as.

"They're using it to get me more resources by saying 'He's a certified game changer, he got named that in front of a whole baseball stadium.'"

The Gateway Drug

Leonard is pounding his pulpit in Greensboro.

He's trying his damndest to get the folks of central North Carolina (and beyond) to see his vision — that maintenance isn't just a cost sink, but in actuality, a way to make a lot of money.

"I like the idea that people are finally realizing that maintenance is actually a profit contributor," Leonard says. "If any area built a surplus of skilled technicians they would have a huge economic advantage. No area is trying to do that, and that's what I'm trying to get [Greensboro] to adopt."

According to Leonard, one of the key ways to accomplish this is by getting college kids hooked on drugs.

No, it's not what you think.

"3-D printing is the gateway drug to manufacturing," Leonard says. "When the kids learn how to use a 3-D printer they also learn quickly because they have to take care of it. If they don't, it'll break and fall apart and they have to do maintenance.

"The kids love 3-D printing and that's a great hook to get them interested in working on other machines and the whole world of manufacturing."

One of the other main issues of maintenance today is trying to get companies to see the big picture.

"We still have to get companies to look long term," Leonard says. "So many companies are focused on short term outputs that they don't look at

maintenance as an investment. As a result they shortchange their entire business capabilities. We have to continue to upsell maintenance."

For example, when Leonard was in Dubai he encountered a man who had a \$14 million paint budget for all the drill systems in the Persian Gulf that his company was trying to cut out. Leonard informed him that if they went through with it, all the pipes would rust within three years opposed to 15 years.

That's where Leonard has provided his most value to the maintenance community — not with his passionate speeches or catchy tunes — though that surely has gone a long way in establishing his footprint — but with his ability to see beyond the dollar signs that can cloud people's judgement.

"Seeing what [Leonard has done at The Forge] in just a year and a half is amazing," said Dan St. Louis, director of the manufacturing solutions center in Conover. "I never would have dreamed when he showed me the initial plans that all this stuff would be happening. It's a tough area of town and now there are all kinds of things going on. It's not smoke and mirrors.

"He understands what manufacturers need. He's down in the trenches and a lot of times folks look at it from a high level and say, 'Oh, we just need more engineers.' Joel understands that we need technical people. He understands this from the ground floor."

Leonard, despite his now inseparable moniker, said he's a religious person who prefers not to talk about it out in the open. When pressed, he said his religion was simply "to make things better."

Well, he's toured the world, his song sweetening the air around him, and he's slowly built a devoted following — a cult of people who believe that his ideologies on maintenance are dogmatic truths. For 25 years he's done this, and any person of faith would have to believe that the maintenance evangelist's mission isn't over just yet.

"If more could join this cult," Leonard says, "our machines would be more reliable, businesses would become sustainable, our economy would be stronger and our technical skills gap would be solved." **PTE**