Welcome to the Food & Beverage Track

Martin Bryant

Mbryant@OSISoft.com

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Martin Bryant

- OSIsoft Systems Engineer and Food & Beverage Industry Champion
- 30 years working with PI, 17 with OSIsoft
- Philadelphia, PA USA

Petter Moree

- OSIsoft Industry Principal: Life Sciences

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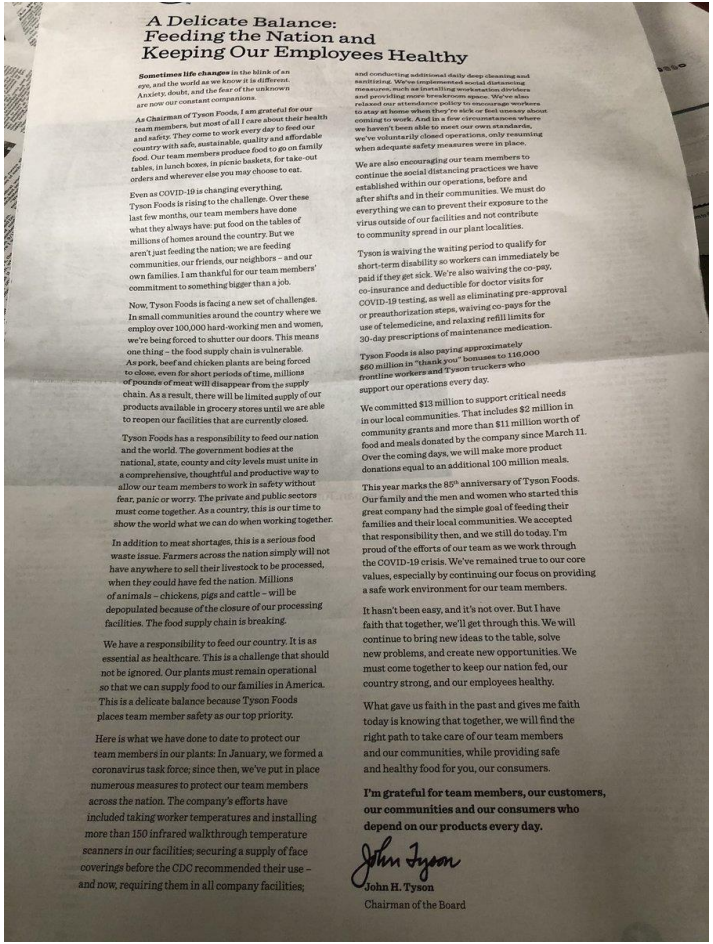

A Delicate Balance: Feeding the Nation and Keeping Our Employees Healthy

Sometimes life changes in the blink of an eye, and the world as we know it is different. Anxiety, doubt, and the fear of the unknown are now our constant companions.

As Chairman of Tyson Foods, I am grateful for our team members, but most of all I care about their health and safety. They come to work every day to feed our country with safe, sustainable, quality and affordable food. Our team members produce food to go on family tables, in lunch boxes, in picnic baskets, for take-out orders and wherever else you may choose to eat.

Even as COVID-19 is changing everything, Tyson Foods is rising to the challenge. Over these last few months, our team members have done what they always have: put food on the tables of millions of homes around the country. But we aren't just feeding the nation; we are feeding communities, our friends, our neighbors – and our own families. I am thankful for our team members' commitment to something bigger than a job.

Now, Tyson Foods is facing a new set of challenges. In small communities around the country where we employ over 100,000 hard-working men and women, we're being forced to shutter our doors. This means one thing – the food supply chain is vulnerable. As pork, beef and chicken plants are being forced to close, even for short periods of time, millions of pounds of meat will disappear from the supply chain. As a result, there will be limited supply of our products available in grocery stores until we are able to reopen our facilities that are currently closed.

Tyson Foods has a responsibility to feed our nation and the world. The government bodies at the national, state, county and city levels must unite in a comprehensive, thoughtful and productive way to allow our team members to work in safety without fear, panic or worry. The private and public sectors must come together. As a country, this is our time to show the world what we can do when working together.

In addition to meat shortages, this is a serious food waste issue. Farmers across the nation simply will not have anywhere to sell their livestock to be processed, when they could have fed the nation. Millions of animals – chickens, pigs and cattle – will be depopulated because of the closure of our processing facilities. The food supply chain is breaking.

We have a responsibility to feed our country. It is as essential as healthcare. This is a challenge that should not be ignored. Our plants must remain operational so that we can supply food to our families in America. This is a delicate balance because Tyson Foods places team member safety as our top priority.

Here is what we have done to date to protect our team members in our plants: In January, we formed a coronavirus task force; since then, we've put in place numerous measures to protect our team members across the nation. The company's efforts have included taking worker temperatures and installing more than 150 infrared walkthrough temperature scanners in our facilities; securing a supply of face coverings before the CDC recommended their use – and now, requiring them in all company facilities; and conducting additional daily deep cleaning and sanitizing. We've implemented social distancing measures, such as installing workstation dividers and providing more breakroom space. We've also relaxed our attendance policy to encourage workers to stay at home when they're sick or feel uneasy about coming to work. And in a few circumstances where we haven't been able to meet our own standards, we've voluntarily closed operations, only resuming when adequate safety measures were in place.

We are also encouraging our team members to continue the social distancing practices we have established within our operations, before and after shifts and in their communities. We must do everything we can to prevent their exposure to the virus outside of our facilities and not contribute to community spread in our plant localities.

Tyson is waiving the waiting period to qualify for short-term disability so workers can immediately be paid if they get sick. We're also waiving the co-pay, co-insurance and deductible for doctor visits for COVID-19 testing, as well as eliminating pre-approval or preauthorization steps, waiving co-pays for the use of telemedicine, and relaxing refill limits for 30-day prescriptions of maintenance medication.

Tyson Foods is also paying approximately $60 million in "thank you" bonuses to 116,000 frontline workers and Tyson truckers who support our operations every day.

We committed $13 million to support critical needs in our local communities. That includes $2 million in community grants and more than $11 million worth of food and meals donated by the company since March 11. Over the coming days, we will make more product donations equal to an additional 100 million meals.

This year marks the 85th anniversary of Tyson Foods. Our family and the men and women who started this great company had the simple goal of feeding their families and their local communities. We accepted that responsibility then, and we still do today. I'm proud of the efforts of our team as we work through the COVID-19 crisis. We've remained true to our core values, especially by continuing our focus on providing a safe work environment for our team members.

It hasn't been easy, and it's not over. But I have faith that together, we'll get through this. We will continue to bring new ideas to the table, solve new problems, and create new opportunities. We must come together to keep our nation fed, our country strong, and our employees healthy.

What gave us faith in the past and gives me faith today is knowing that together, we will find the right path to take care of our team members and our communities, while providing safe and healthy food for you, our consumers.

I'm grateful for team members, our customers, our communities and our consumers who depend on our products every day.

John Tyson

John H. Tyson
Chairman of the Board

Tyson Chairman John Tyson:

"The Food Supply Chain is Breaking"

as Tyson closes plants due to COVID-19

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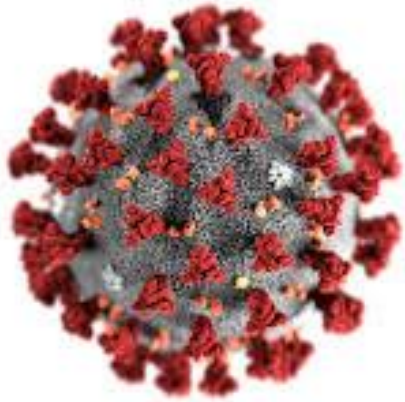

It’s anything but “business as usual”

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Current State of Industry

Short term:

- Emphasis on Quality – more cleanliness, more care, more checking
- Awareness of availability of supplies / stores
- Employees working remotely from home & other sites (no travel)

Data driven decision making

We can help with these things

Current State of Industry

Longer term: **Supply Chain**

Data driven decision making in the (not distant) future may mean data sharing

Upstream (your suppliers)

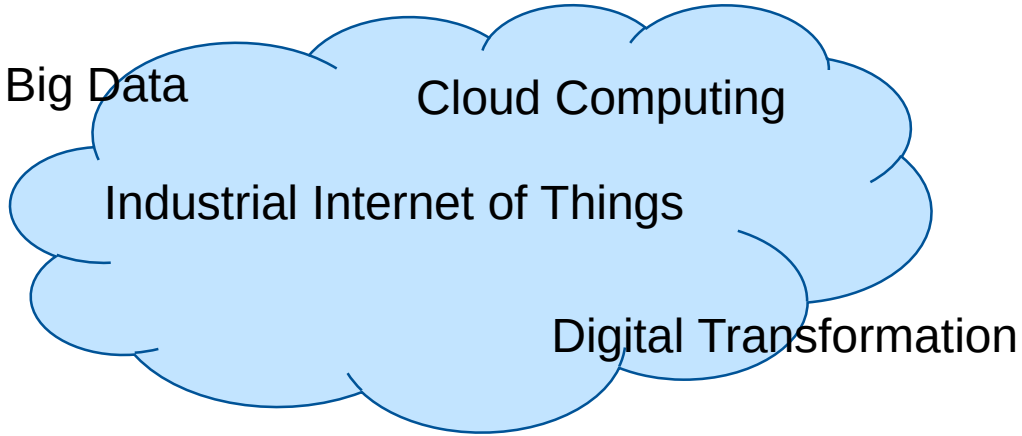
& Downstream (your customers)

Quality data verifying processes

Quantity data verifying availability

In something more like real time

Community we can help with this too



Why?

It's about
the Journey…

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Complex Analyses Increase the Need for Integration & Collaboration

Real Time Visibility

Individuals

- More eyes / more awareness
- Trends & process views
- 1 time or personal analyses

- PI Vision
- PI Datalink/Excel

Data => Information

Plants & Teams

- KPIs
- Real-time / continuous analyses
- Integration to quality & compliance

- PI Vision
- PI Datalink/Excel
- PI AF & Analytics

Power of Comparison

Enterprises

- Compare assets even across sites
- Compare time periods / events
- Common templates & language
- Multivariate Analysis

- PI AF & Anaytics
- PI Vision
- PI Event Frames
- BI Tools / Multivariate

Digital Transformation

IT/OT & External Partnerships

- Data Integration (to business data & IIOT data)
- Sharing w/ business & application partners
- Big Data Analysis
- Integration to Corporate Dashboards

- PI Integrators
- PI OCS
- Cloud Computing
- Machine learning

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Applying the journey model to Maintenance

Real Time Visibility

- Control room data visibility by field personnel
- Problem detection

Data => Information

- Calculating run times and using these and not clock hours to schedule preventive maintenance & inspections
- Other use of data by maintenance planners

Power of Comparison

- Track downtimes & causes.
- Integrate to Maint Mgt Sys – Computer Based Maintenance
- Compare current metrics, including vibration, temper-ature & more to expected values & other like equipment

Digital Transformation

- Develop Eq Health Indices for Equipment Types
- Based on the history of like equipment and circumstances – build a model that predicts failure
- Integration with maintenance partners & suppliers
- Feedback data to capital acquisitions & planning

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Using Machine Learning Predictive Analytics to Delay Glycol Capacity Expansion

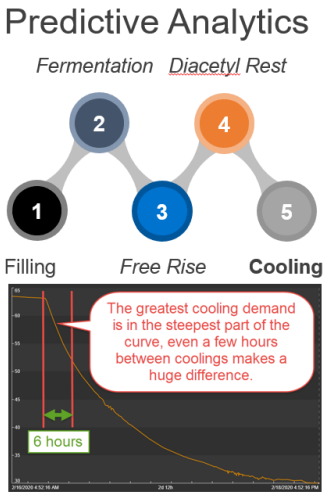
Tim Alexander & Kyle Kotaich

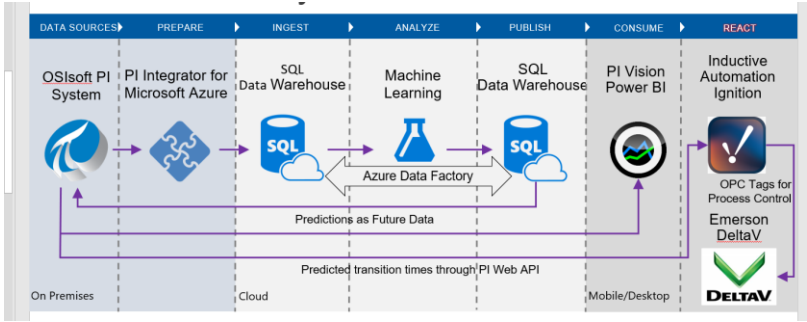
Implementing a Global Process Instrumentation Optimization Project

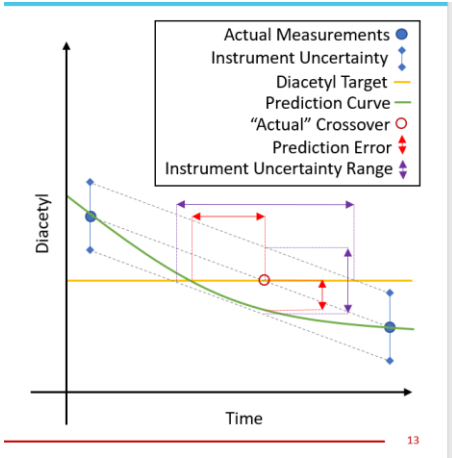
Chris Christie & Robert Rice

Right Sizing PI Client Tools for Digital Transformation

Mark Massey







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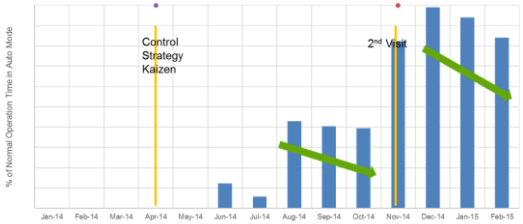
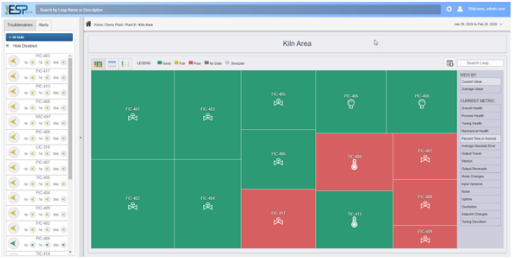
Benefits from Process Optimization short-lived

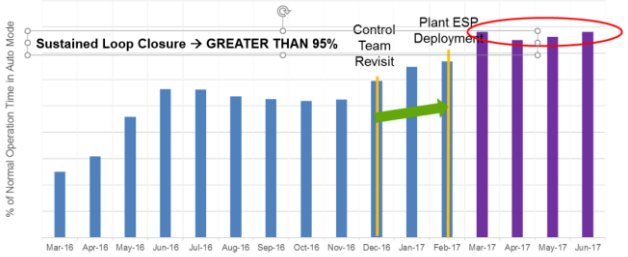


Detailed Loop Performance

Area Performance Overview



Enables Sustaining Improvement in Control performance



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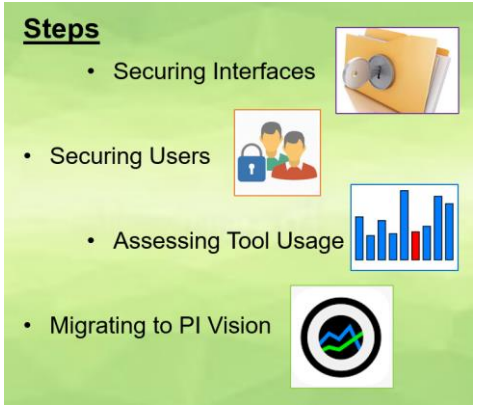

PI Interface and User Security Summary

Utilizing Windows Integrated Security to access the PI system

- Create service accounts for buffers and interfaces & associate with Identities
- Create AD groups for users to associate to PI Identities
- WINS creates a secure connection from data collection sources to the data archive server
- WIS creates a secure connection from client tools users to the data archive server
- Exposes an audit path for client tool usage
- Validates that all client tool users have the appropriate Identity to access the client tool
- It puts a smile on the face of your IT security team
- Check out the OSIsoft Live Library article Why use Windows Integrated Security for more reasons.

PI ProcessBook & PI DataLink Usage Reporting Tool

USAGE	aaaOSI01	bbbOSI01	cccOSI01	dddOSI01	eeeOSI01	fffOSI01	Duplicates	TOTAL
Duplicate PB/BV Users	0	0	0	0	0	0		0
Total ProcessBook Users	51	31	282	11	0	15	20	370
Total DataLink Users	52	24	81	2	1	2	30	132
Total BatchView Users	0	0	0	0	0	0	0	0
Total Users	**103**	**55**	**363**	**13**	**1**	**17**		

Migration Tool Output – PI Vision Display

Most everything migrated as expected. You can see the few things that didn't migrate are missing, and some of the button visuals are slightly different.

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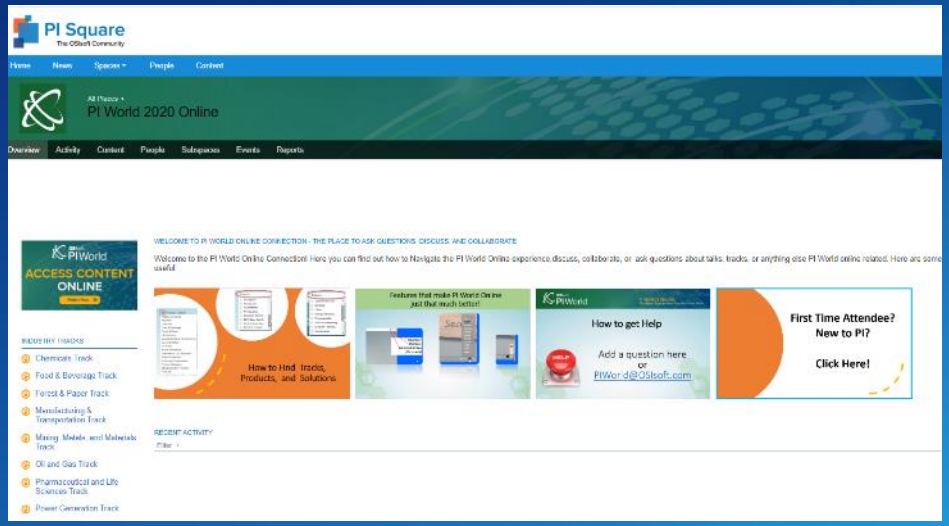
PI Square
The OSIsoft Community

"Connecting and Empowering PI System Users Worldwide"

Join the Conversation!



- Ask questions, get answers
- Collaborate with others in your industry
- Discuss PI World Online Content
- Open to everyone

https://pisquare.osisoft.com/community/pi-world-2020

Join Industry User Groups!

https://pisquare.osisoft.com/groups

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Watch "*How to Make the Most of PI World Online*" to learn more about the platform!

Need help?

Email us at:
PISquare@OSIsoft.com

Stay tuned - More to come!

Post Event Industry Discussions Week of May 18th!

Look on PI Square for logistics in the coming week!

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Questions?

Please remember to…

Fill out the post event survey! It will be emailed to you.

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Back in the 80's

Continuous Process Improvement

Large Scale multi-year, multi-vendor I.T. Development Projects

Scoped, value targeted, shorter-term projects

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Three projects & “Time to Value”

4-8 weeks	Internal engineering resources maybe 1-3 consultants	< $100,000 inc. time	Existing or inexpensive software – no new capital for software Minimal code – most of that web code or shell scripts	Minimal authorization / mgt attention Plant mgt – some add’l attention	Do these everytime you can enough will payoff to pay for the others..
2-10 months	Often involves contractors / consultants	<$1,000,000 (much less)	Minimal new licensing & custom code	Visibility to corporate management	Consider these – technological improvements are often a good idea
> 10 months to ?	Always involves contractors – usually several	>$ 1,000,000	New licensing & custom code	C-Suite/Sr Mgt visibility	Be very afraid

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Leverage is turning long term projects to medium term ones and medium term projects into shorter ones

And that requires tools like PI, good, smart people & partners

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“Go with what you know…
but know the right things”

This doesn’t mean you never change your toolset – technologists must change over time. It means you pick your tools carefully, for the long haul and learn them. That’s what infrastructure is about.

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