Analytics At Speed

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Agenda

- Who is Kinney Group?
- Generalizing Four (4) IoT Use Cases
- Splunking an IndyCar
  - Racing History
  - Project Recap
  - Sneak Peek to Next Season

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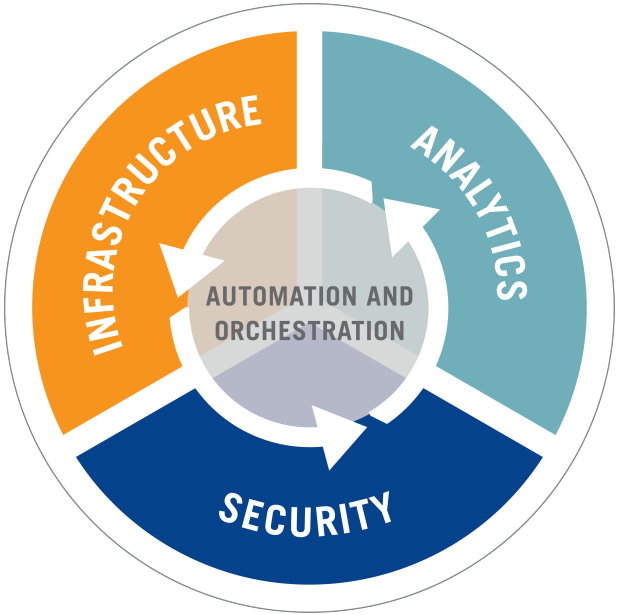
Who is Kinney Group?

We harness the power of IT in the cloud to improve lives



- Design & build analytics infrastructure
- Develop of dashboards & reports
- Security analytics & process integration

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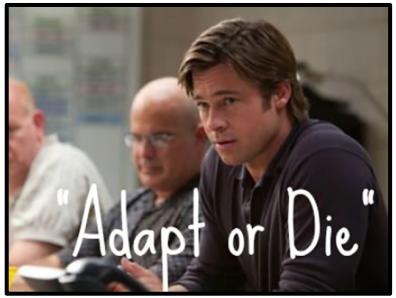
Generalizing Four (4) IoT Use Cases

1. Factory Floor
2. Just-In-Time Inventory Sparing
3. Business Management
4. Sports Analytics



Regardless of the IoT use case, find the "IT" factor…

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(1.) Factory Floor

- Real-time inventory management
- Line Pacing Problems
- Productivity assessment
- Pacing assessment
- What matters right now?

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(2.) Just-In-Time Inventory Sparing

- High cost of redundant on-site spares
- End-of-Life issues are exacerbated
- What factors determine root cause of failure?
- How is best to approach the problem?

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(3.) Business Management

- What is happening at the ground level of the business?
- Decision focused analytics (analytics that help leaders make decisions)
- Demystifying operations, sales, finance

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(4.) Sports Analytics

- Power of insights on sports
- New ways of collecting
- Figuring out what matters?
- What can this do for Racing?

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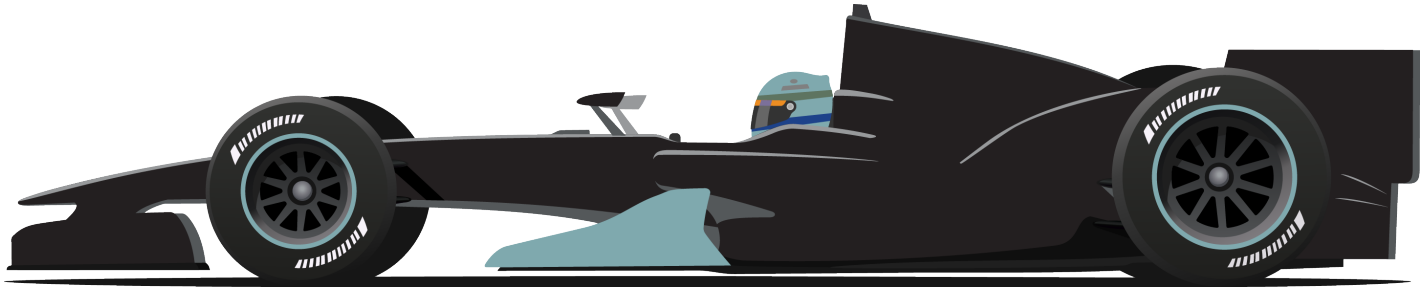
What is IndyCar?

- Open-wheel racing league, lap speeds of 147MPH
- The Birthplace: Indianapolis Motor Speedway
  - Constructed: 1909
  - Track distance: 2.5 miles
  - Lap duration: 1 minute
- 2016 was the 100th running of the Indianapolis 500



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Overview Of The Indycar Initiative

- History of IndyCar Racing
- What was the problem?
- Working with non-IT Domain Experts
- Introducing Machine Learning (ML) App
- The run-up to race day
- Race Day Insights

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We've Come A Long Way, Baby

- From Dirt, to Bricks, to Asphalt, to Concrete

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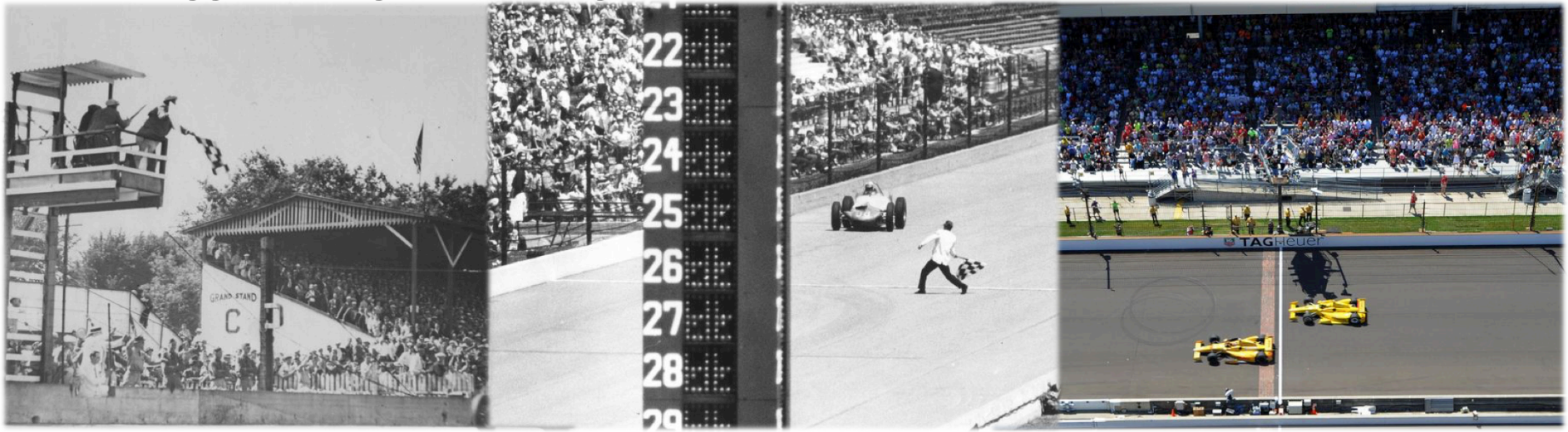
Dispersing Race Information

- Flaggers, Flag Stands, Light Switches to Mission Control



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Access to Actionable Intelligence

- Four Senses and Elbow Grease, to Information Overload

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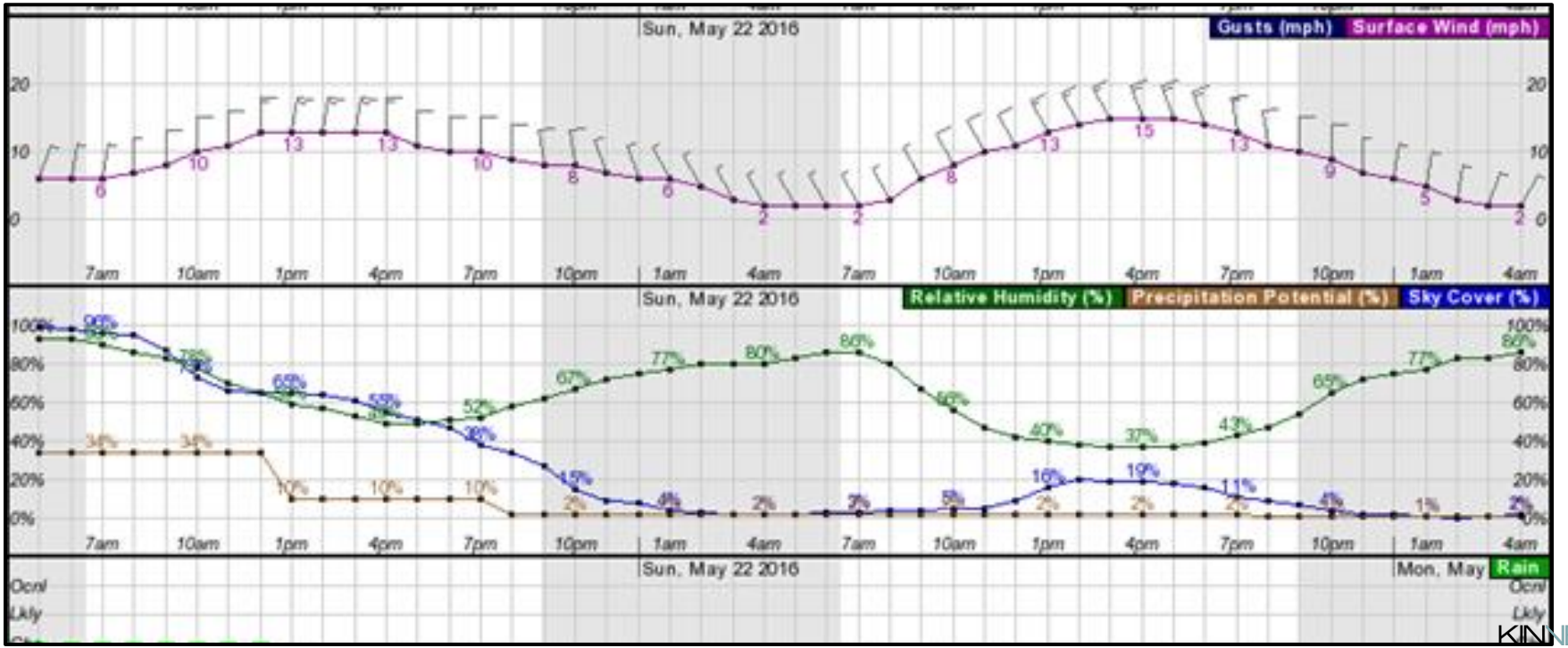
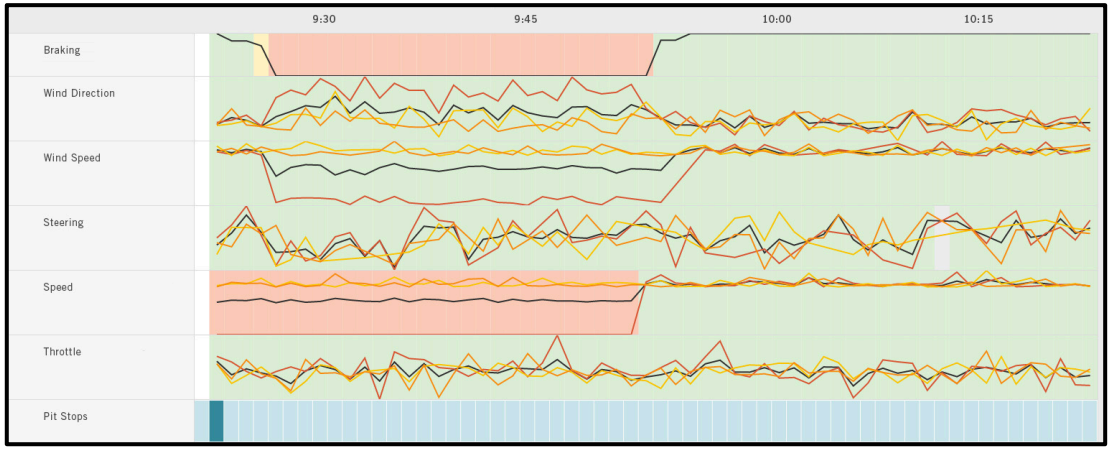
Race Teams Use Complex Spreadsheets, Too



So, Why Splunk An IndyCar?

- Painlessly correlate data from disparate sources
- Leverage a “Single Pane of Glass”
- Next-level correlations



Working With Non-IT Domain Experts

- Help them see value and potential
- Play. Test. Try things out
- Prioritize highest business value
- Leadership team support is key
- How do stakeholders overcome the IT language barrier?

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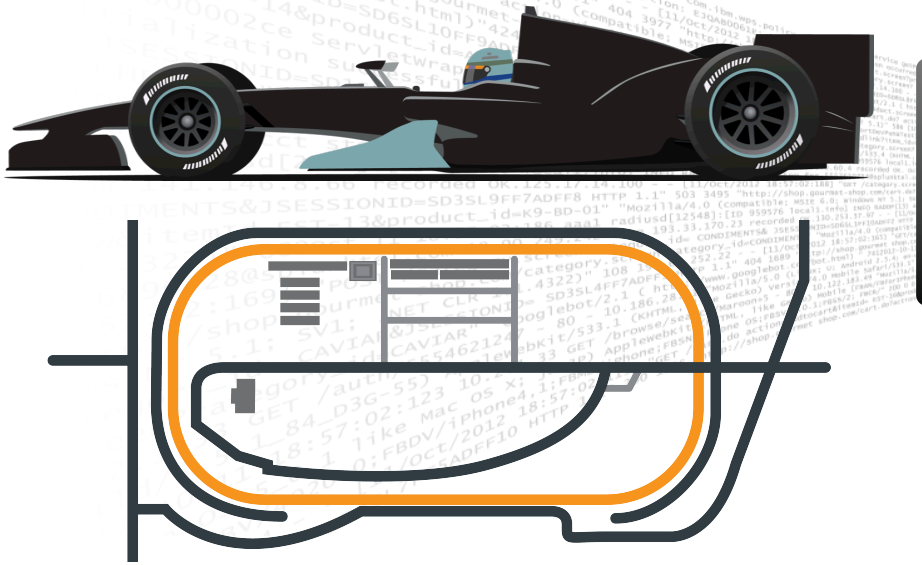
How Splunk Works On An IndyCar

Collect, index, and correlate machine data…to create intel in real-time.



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- Take In Historical Data
- Compare to Current
- Predictions based on time slices
- Machine Learning – find what matters
- What to look at – right now!

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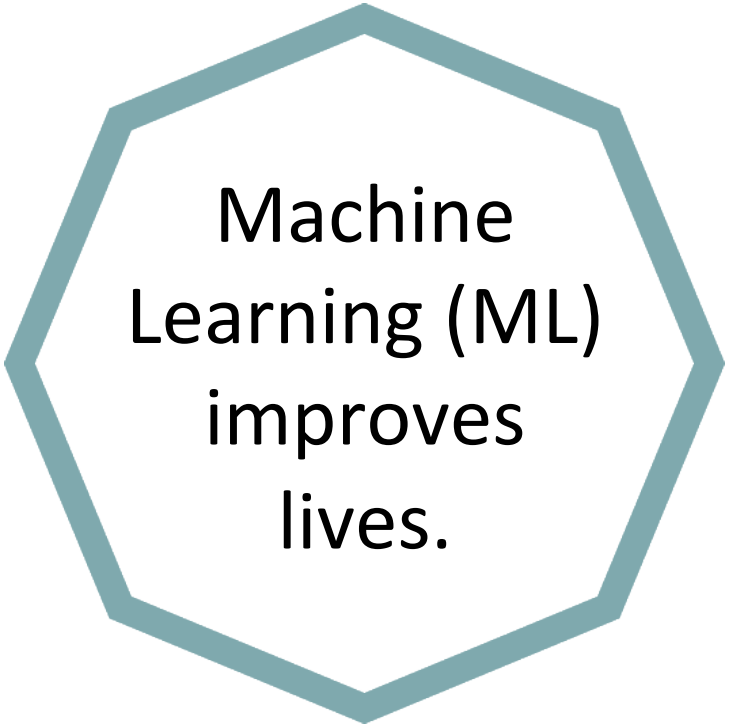
Introduce Machine Learning (ML) Into IoT



…But, not so fast!

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Machine Learning Insights

- Machine Learning App Overview
- If you put in every weather metric available, can you predict the weather?
- Can you do it with a regression model that makes sense?

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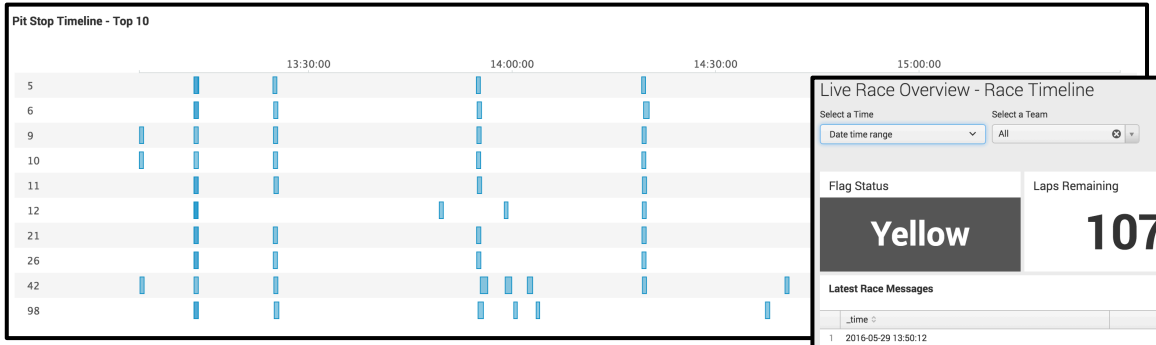
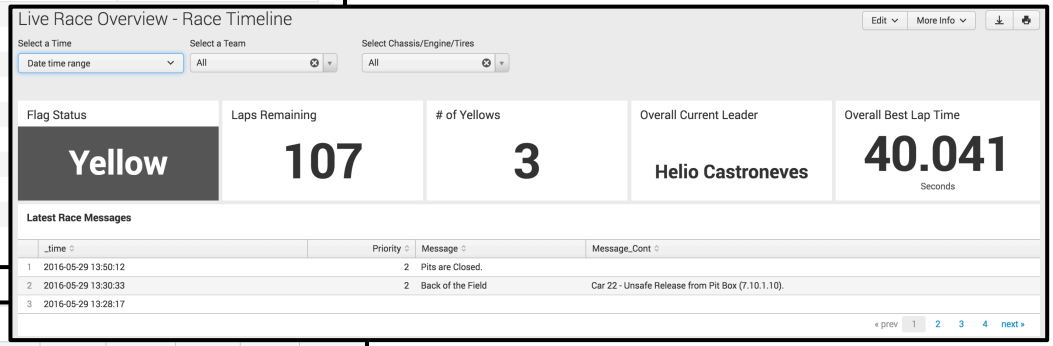
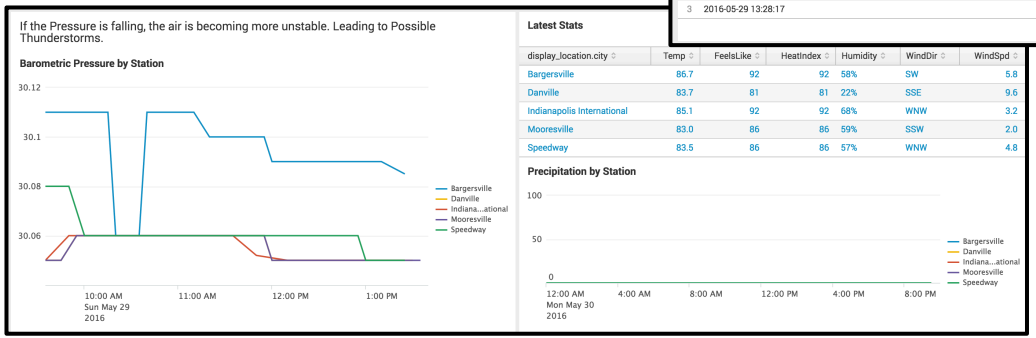
Race Day Insights

The Race Move FAST! Teams need to know what the goals are.







What Are We Going To Look At Next Season?

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THANK YOU

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