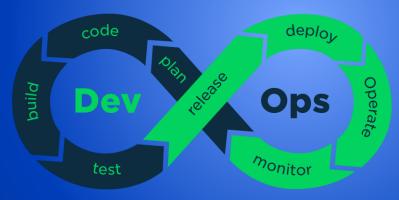
# Bolstering Automation





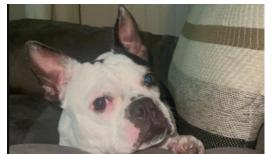


Dr. David Votaw - Automation Wizard

#### **Presenters Bio – Dr. David Votaw**

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- Software developer for 17 years C# and Visual Studio are my weapons
- Doctorate of Computer Science (DCS) in Information Assurance
  - DevOps was my main driver for research <u>Dissertation Link</u>
- I enjoy road trips, camping, movies, heavy metal, and video games... and my dog



 "There is no cheat code or quick ticket that can be bought, DevOps is hard, and only the prepared will reach their goals." – David Votaw



# **Topics**

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- Level-Setter
- Culture
- Pitfalls
- Agile
- DevOps Readiness
- Resources
- Automate Everything
- Pipeline
- Questions
- Links

All images are stock and referenced on the last slide

#### **Level-Setter**

- DevOps is not a buzzword or something to take lightly
  - You cannot just say, yeah we have DevOps, so that is about as successful as those who say, yeah
    we are agile...
- A great deal of time is necessary for teams to be enabled to take advantage of DevOps.
- Dedicated resources are a requirement for success
  - Do not fall into the "many hats syndrome"







#### **Culture**

- Old-school meets new-school
  - Do not be Falsely Reporting Agile (FRAgile), only the Agilely strong can survive
  - There is no place for waterfall, it has served its purpose, and that ship has sailed.
- Failure is okay!
  - You will stumble and you will fall, and that is okay!
- Production is just a word









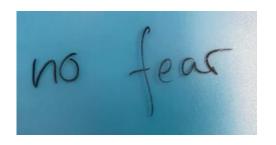




#### **Pitfalls**

- Fear rules us all
  - Make mistakes, learn from failure, prepare for the worst
- Put metrics in place later
  - Cannot have old metrics in Agile
    - Leadership cannot expect road maps and milestones that is waterfall!
    - No magical metrics, if you cannot harvest this today in a manual fashion, how will you get them with automation?
- Change is okay
  - Change is hard work
  - Effort will need to be spent
  - Change is not cheap







# **Agile**

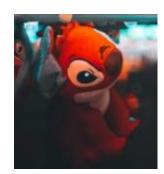
- Get trained and educated on the processes
  - Require Agile 100 and Agile 101 courses for everyone
  - From all stakeholders from inception through deletion



- Certified Scrum Masters
- Certified Product Owners
- Certified Scaled Agile Framework members (SAFe) for multiple teams



- Planning
- Kickoffs
- Demos
- Closeouts
- Retrospectives



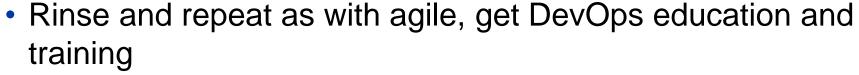






# **DevOps Readiness**

- As suggested on the last slide, Agile is important
  - What is your DevOps readiness based on your agile maturity?
  - There are many agile surveys to get you started
  - Once you conquer agile, then and then only, is your DevOps journey unlocked.



- Seek certifications
- Seek guidance from experts from within or externally
- Get help, you are not alone











### Resources

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#### Dedicated resources

- Time
- Money
- People
- Innovation
- Exploration
- Collaboration
- Research
- Integration
- Learning new things
- Pioneering





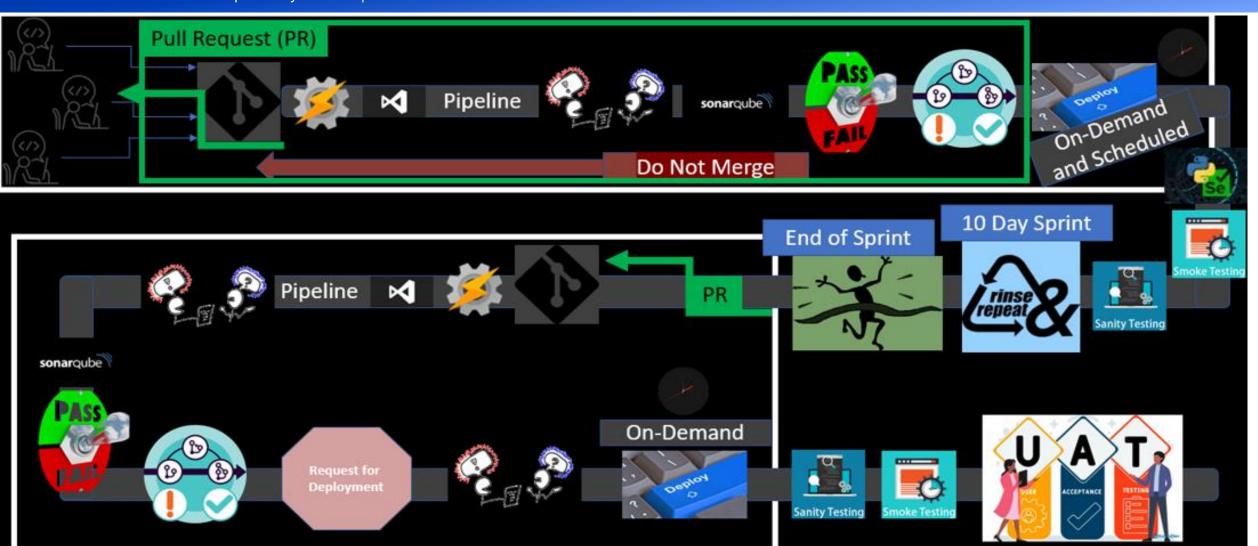
## **Automate Everything!!**

- Now, with all that said and done, focus on DevOps, then and then only!
  - Code is **ABLE** 
    - Compile-<u>ABLE</u> Microsoft Build (MSBuild)
    - Build-<u>ABLE</u> Business Modeler Integrated Development Environment (BMIDE)
    - Generate-<u>ABLE</u>—Code and output are generated
    - Package-<u>ABLE</u> Teamcenter package is created
    - Scan-<u>ABLE</u>— The code is scanned with SonarQube (SQ), CPP Check
    - Merge-<u>ABLE</u> Pre-merging of branches
    - Artifact-<u>ABLE</u> Stored in AZDO/TFS/Nexus
    - Deploy-<u>ABLE</u> TEM deploy dryrun, Deployment Center (DC) -diagnostics

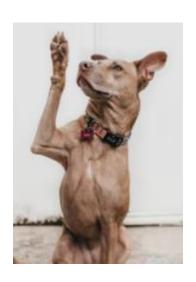




# Pipeline – Let it flow!



# **Questions**



#### Links

- Burning cash <a href="https://unsplash.com/photos/bIOLCO2K4M0">https://unsplash.com/photos/bIOLCO2K4M0</a>
- Clocks <a href="https://unsplash.com/photos/FIHdnPO6dlw">https://unsplash.com/photos/FIHdnPO6dlw</a>
- Cookie <a href="https://unsplash.com/photos/z8kriatLFdA">https://unsplash.com/photos/z8kriatLFdA</a>
- Cup of water <a href="https://unsplash.com/photos/aFbow3dw8QA">https://unsplash.com/photos/aFbow3dw8QA</a>
- DevOps <a href="https://devopedia.org/devops">https://devopedia.org/devops</a>
- Evolution <a href="https://unsplash.com/photos/xJY-7gtC38o">https://unsplash.com/photos/xJY-7gtC38o</a>
- Fear <a href="https://unsplash.com/photos/NJ7\_RKmfsXw">https://unsplash.com/photos/NJ7\_RKmfsXw</a>
- Horse <a href="https://unsplash.com/photos/EXuKQaf3Ei8">https://unsplash.com/photos/EXuKQaf3Ei8</a>
- Learn from failure <a href="https://unsplash.com/photos/ehKaEaZ5VuU">https://unsplash.com/photos/ehKaEaZ5VuU</a>
- Love to learn <a href="https://unsplash.com/photos/WE\_Kv\_ZB110">https://unsplash.com/photos/WE\_Kv\_ZB110</a>
- Many hats <a href="https://unsplash.com/photos/vU2MmvDCmUo">https://unsplash.com/photos/vU2MmvDCmUo</a>
- Matrix code <a href="https://unsplash.com/photos/tiSE\_paTt0A">https://unsplash.com/photos/tiSE\_paTt0A</a>
- Own your error <a href="https://unsplash.com/photos/XWar9MbNGUY">https://unsplash.com/photos/XWar9MbNGUY</a>
- Pipeline drawn and designed by David Votaw
- Puzzle piece <a href="https://unsplash.com/photos/DnXqvmS0eXM">https://unsplash.com/photos/DnXqvmS0eXM</a>
- Single hat <a href="https://unsplash.com/photos/zVycYmcblDY">https://unsplash.com/photos/zVycYmcblDY</a>
- Skull <a href="https://unsplash.com/photos/1PtM6b85sdw">https://unsplash.com/photos/1PtM6b85sdw</a>
- Slip https://unsplash.com/photos/pzJgANvTaa8
- Stitch <a href="https://unsplash.com/photos/xEbwEg6rKh4">https://unsplash.com/photos/xEbwEg6rKh4</a>
- Questions <a href="https://unsplash.com/photos/AoggGAqrLpU">https://unsplash.com/photos/AoggGAqrLpU</a>
- Yoda https://unsplash.com/photos/f50UNtxoeil

