DevOps at Connected Technologies(CT)

Siva Sivalingam
Toyota Motor North America
Senior Manager, Connected Technologies

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What do we do?

CT is part of Toyota Motors North America

We Provide awesome customer experience for connected and mobility services

Channels: Head Unit, Mobile Native, Portals for self serve, Dealer, Agents, Wearables, Chatbots, Voicebots, etc.

DevOps objective

- Setup of infrastructure, environments and CI/CD pipelines
- Enable Development Teams to self-support automated build, test and deployment of code to test and production environments
- Support teams by coaching/training on tools, infrastructure and environments

Current State

- Large and complex Eco system
- Regional differences creates redundancy
- Several generations of Telematics hardware platform
- Many critical systems running in dedicated DC infra
- Extremely long release cycles
- Public cloud platform adoption challenges

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Challenges

- Current Supplier engagement model
- Current Value stream has lot of muda (‘waste’)
- Fragmented ownership of the value stream
- Legacy Ops creates silos and restrict access

How to Fix?

- Change the culture: You don’t own me, I don’t own you!
- Have multiple feature scrum teams(FT) building features
- Have a horizontal cross functional team(HXF) helping FTs
- Co-create infra, pipeline and config as code
- Culture is key, but tools can help too!
- Create workflow templates and publish to all teams

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What are we achieving?

1. Building quality into the product
2. Reduce manual effort
3. Quick feedback cycle
4. Deploy process doesn’t change, reduces errors
5. Quick, frequent, incremental delivery as many as needed

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How?

- Adopt to true agile, strong agile coaching
- Redo Supplier contracts to adhere to agile delivery
- Test features developed with real users at dealerships & pilot customers
- There is no such thing as a Devops team!

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How?

Dedicated HXF team

Responsibility over scaling, architecture and maintenance of physical or virtual hardware on which the application sits

Responsibility over tools and services used to deploy software onto this infrastructure.

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Success

- Engaging with dealer body
- LB and UB services built for rapid delivery
- Teams embracing the culture
- Pipeline ready and is releasing code several times a day
- Working with partners and affiliates to expand the model

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Thank You!

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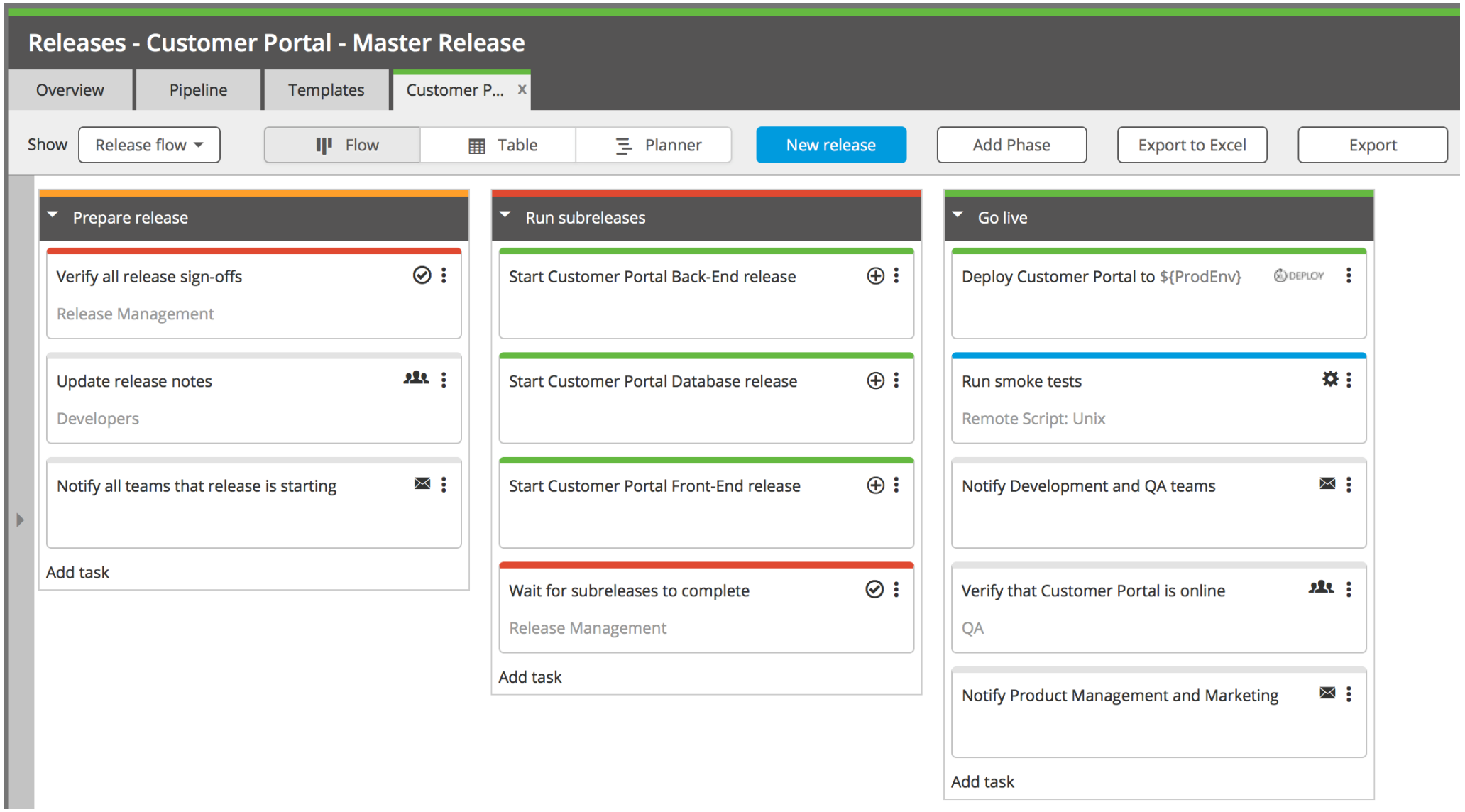
APPENDIX

Release Management



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