

Our DevOps Culture in Action: A Case Study of DevOps Standardization at Predica



Daniel Krzyczkowski

Principal Software Engineer

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Key points:

- How to align a company's culture with DevOps principles?
- What is "Predica Agile" Framework and why we decided to implement it?
- Why it's worth to build a dedicated team responsible for managing DevOps best practices?

In my last two articles I described DevOps and introduced Azure DevOps, Microsoft's platform designed to help maintain DevOps best practices. In this last article I go over how we at Predica follow these practices and benefit from them. If you want to learn more about how DevOps works for us, then read on!

If you missed my previous blog posts about DevOps, I encourage you to check them out:

- [What is DevOps and why it is crucial for the organization's success](#)
- [Azure DevOps as a Central Hub for Managing DevOps Best Practices](#)

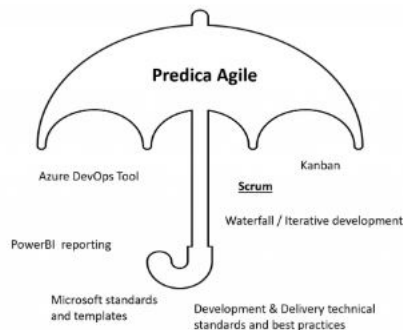
Predica culture

Before I get into DevOps, I want to touch on our **culture**. **Ownership, persistence and transparency** are our **core values**. These are the values that each of our Project Owners lives by. In fact, the role of a Project Owner at Predica has two main responsibilities: to collaborate with development teams and maintain a high degree of service **quality**, and to remove any obstacles that stand in the way of delivery. The role plays an essential part of a DevOps-driven service model.

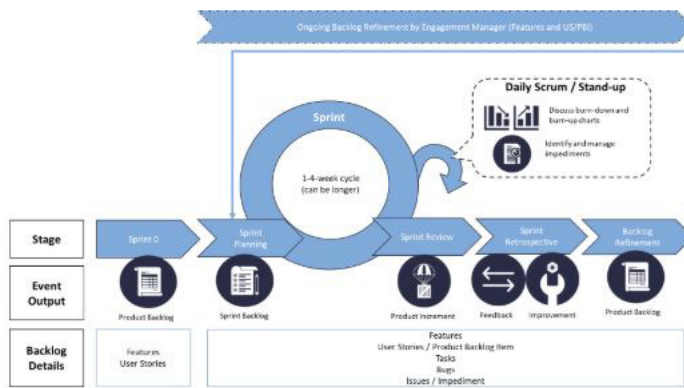
The "Predica Agile" Framework

"Predica Agile" is our in-house **framework** that ensures a **standardized and efficient approach** to managing projects. It also helps us to achieve the following:

- a standardized approach to service delivery, in the form of best practices, which are continually being shared and developed. (More detail on this in the Predica DevOps Center of Excellence section, further in the article)
- reporting and project KPIs are aligned with our approach. This, in turn, helps us to quickly compare, assess and communicate project status. (For this, we use Power BI along with the Azure DevOps backlog.)
- employees are able to flow between projects and dedicated engineer/team with little ramp-up and disruption:



We utilize the Product Backlog and have our delivery team work in sprints. This way, our development team has a clear plan for what to do each week and Project Owners can easily track their progress:



Predica DevOps Center of Excellence

What is DevOps Center of Excellence at Predica?

Our DevOps Center of Excellence is a dedicated team responsible for **managing DevOps best practices across our organization**. We publish our processes, standards and best practices on a Wiki page in Azure DevOps project. There, we gather information on the following:

- Process
- Extensions
- Backlog definition
- Dashboards and Metrics
- Wiki
- Version Control
- Branching strategy
- Branch policies
- Build pipelines
- Release pipelines

The above sections contain various standardization details. For instance, in “branching policies” you can find the following:

- *Direct merge to master – forbidden*
- *Linked work items for each branch*
- *At least one reviewer*
- *Reset code reviewer votes when there are new changes*
- *Description what was changed*

Each part of our **standardization** has its own description related to **DevOps practices**.

Azure DevOps from a Project Owner’s perspective

Project Owners are responsible for both tracking progress and managing the customer. Once we collect requirements, a **Project Owner** creates a **Product Backlog**. This is where we keep all requirements and features for any given solution. After that, she or he coordinates the sprint planning process, where we prioritize the features that we will deliver in the upcoming sprint.

universe Team

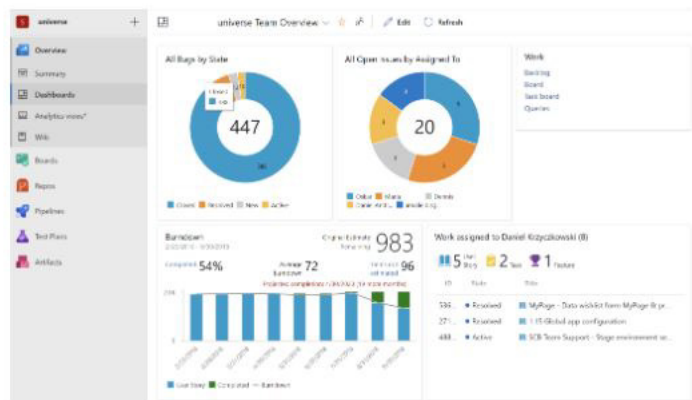
Backlog Analytics Feature Timeline Epic Roadmap + New Work Item View as Board

Filter by keyword Feature (+1) Assigned to Active (+2) Tags

Filtering 1000 out of 1643 items. Filter the next 643 items

Order	Work Item Type	Title	State	Effo
4	Feature	1. Global Functions	New	
	User Story	1.4. Share with	New	
	User Story	1.5. Accept and add Shared Card	New	
	User Story	1.7. Global target card filter	New	
	User Story	1.8. Branding switcher	On Hold	
5	Feature	2. Setup Account	New	
6	Feature	3. Settings	New	
	User Story	3.7 Footer	New	
7	Feature	4. My Profile	New	

Each project has a dashboard configured to display project statistics:



Azure DevOps from the Development Team perspective

Our development team uses [Azure DevOps](#) to report work progress on assigned tasks. I mentioned in my previous article that Azure DevOps contains repositories for source code. Once we develop a new feature, the Development Team member creates pull requests so that other members can review the changes and provide feedback.

10674 **active** Add integration with Azure AD B2C and CRM

Daniel Krzycki 2 features/azure_ad_b2c_integration into 2 master Approve

Overview Files Updates Commits Conflicts

Description

Integration with Azure AD B2C added as new login to the portal is done using AD B2C custom policies

Customer who wants to access the portal has to be registered as a contact in the CRM first. If such contact is not available in the CRM, information is displayed to contact support.

During the login process objectID property of the user in the AD B2C is sent to the Azure Function so it can update contact with this objectID in the CRM

During the registration process, it is not possible to retrieve objectID property in the Azure AD B2C. That is why additional step is done during the login process. Property objectID is sent to the Azure Function and then it is updated in the CRM for the specific contact. Once it's done user is signed in.

During the registration process user email and phone is sent to the Azure Function so it can check whether contact with such email and phone exists in the CRM

Only users who are already registered as contacts in CRM can register using AD B2C and access web portal. Azure Functions is verifying whether contacts with email and phone sent from the AD B2C exist in the CRM. If yes there is an update made so contacts can be grouped and have parent contact.

Actions

Approved

- 3 of 1 reviews approved
- All comments resolved
- Does it build? waiting to merge

Work Items

- #10674 Resolving issue with CData con...
- #10674 Implement automatic update of ...
- #10674 Implement Azure Functions to ...

Reviewers

Add review

Labels

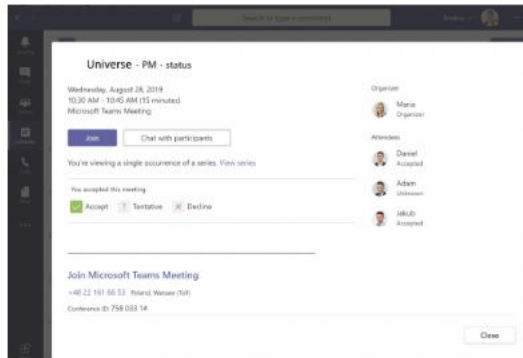
Add label

Besides code reviews, Development Team also use Azure DevOps Pipelines to automate application builds and releases. This way, our test teams always have a fresh build to work with.

TEAM COLLABORATION USING AZURE DEVOPS

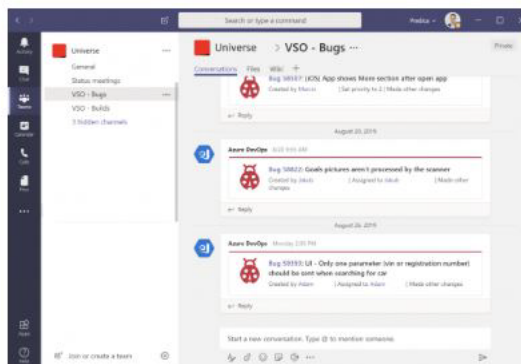
Our main collaboration and communication tool used by both Project Owners and development teams is Microsoft Teams. Let's go over a few best practices that we have adopted at Predica with respect to both DevOps and Microsoft Teams:

STATUS MEETINGS



We organize our status meetings in Microsoft Teams. During each meeting the development team shares what they have completed, what they are working on, and current obstacles. We can also display the current sprint directly from Azure DevOps for everyone to see and discuss.

ADDITIONAL INFORMATION ABOUT PROJECT HEALTH



We can display project stats in both Azure DevOps, as well as Microsoft Teams. We leverage an **integration with Microsoft Teams** to access **project health** data right within the app. There are several channels with project data: we have a build channel that shows build statuses with dates, and a bugs channel that lists reported issues/defects.

As you can see, there are a lot of great features in the Azure DevOps to help maintain DevOps best practices. We touched on just a few of them: **team collaboration**, deployment automation and version control. Our DevOps Center of Excellence promotes best practices and standards, and every member has a chance to contribute to it. In summary, **DevOps** is the combination of **cultural philosophies, practices, and tools**. And that's exactly how we apply it here, at Predica!

Key takeaways:

1. In order to fully benefit from DevOps, organizations must align their work culture with its best practices.
2. To manage Product Backlog and plan sprints, you can use Azure DevOps.
3. Additionally, team communication and collaboration can be streamlined using Microsoft Teams.