CASE STUDY

Leading Wireless Provider Boosts Competitiveness with Plutora

Business Objective

Increase efficiency of software delivery to improve time-to-market.

Challenges

Siloed visibility, manual and informal change management processes, and environment conflicts were holding up efficiency and predictability.

Benefits

Increased release velocity, coordinated application delivery, reduced risk, and optimized utilization of environments, time and personnel.

Results

2.5x Increase in total number of major and minor releases.

2.3x Increase in number of changes delivered per release in 2017.

40% Less time spent collaborating with single source of truth.

zero Failed releases.

2x Increase in test environment bookings with less staff.

Customer

The wireless division of a telecommunications company in the US that offers wireless products and services and has industry-leading 4G and 5G wireless technology. There are 10,000 people in IT and 8,000 of them work on applications and releases.

Region
United States

Industry
Telecommunications

Products
Plutora Release
Plutora Environments
Plutora Deploy

The Promise of the Digital World

In 2015, the telecom company invested $11 billion to meet the surging demand for wireless data and video, and to get the network ready for 5G technology. Alongside, competition was heating up. The company was laser-focused on getting ahead of the curve to "deliver the promise of the digital world." For the Release and Delivery Management Services (RDMS) team at the company's wireless division, that meant revving up the release engine to handle the torrent of business demands.

The RDMS team is responsible for coordinating all releases. They scope release train engineering, ensure readiness and availability of environments, mitigate Mean Time To Repair (MTTRs), provide uniform understanding of testing efforts, manage risk through predictive analytics, and show due diligence to ensure compliance in testing and sign-offs. They knew they were in crunch time to up release frequency and cut time-to-market. But that was no easy feat given the challenges.

Challenges in Software Delivery

Releases were hard to coordinate in the two months that the RDMS team had for each release. Hundreds of people were updating dozens of spreadsheets and SharePoint sites to share release schedules and coordinate environment bookings across projects and dependencies. IT teams would waste time following up on every detail of test environment availability, and when communication fell through the cracks, their projects would run into contention.

Each deployment to production was a risky endeavor -- a 10-hour affair that involved significant collaboration because of heavily-coupled systems. Hundreds of steps in deployments were being managed and coordinated manually and there was no centralized planning or real-time progress tracking. "We knew we had to simplify the high-level sequence to reduce risk," said the IT manager who leads the RDMS team.

He also wanted to make sure there was clear understanding around sufficiency of test levels by introducing test coverage information into the release process. There were around 2,000 testers without a formal process to get details around test coverage and defects. An audit finding sanctioning the release team to stop releases that didn't have rational criteria added to his team's list of concerns.

The RDMS team had to tackle the cultural side of things as well. Back then, the culture at the wireless provider was primal. People would send each other lots of personal emails to follow up on coordination. This was clearly error-prone and not scalable.

"Plutora helped establish a centralized, authoritative source for managing workflows and integrating data."

Enterprise Release Manager at the wireless provider

Key Highlights

- 10 releases a year:
  8 planned and 2 fixes
- 200 projects per release
- 150 applications to integrate
- 2,400 environments: each enterprise release has 150 logical environments

People

Around 10,000 people in IT with 80% working on project-related items. A subset of these, 800 people, were directly involved in releases.

A typical project would have 7 applications and around 40 people:
- Business champion or sponsor
- Client Account Managers
- Program managers or analysts
- Developers
- Environment managers
- Testers

Processes

Processes were inconsistent. Managing releases involved daily checkpoint calls with each project team. Information was tracked in spreadsheets and SharePoint sites. Teams exchanged a significant number of emails in addition to having verbal discussions. There was tremendous amount of follow-up on basic things.

Technology

Past – spreadsheets, SharePoint, slides, and email.

Present – Plutora and ServiceNow.

	BEFORE PLUTORA		AFTER PLUTORA
Releases per year	10	→	24
Projects per year	2,000	→	4,800
Changes per year	3,500	→	8,000
People in a shared team	17	→	12

At the telecom company, a release is an integrated set of deliverables or changes. Each release has 200 projects where a project is an application. Each change is a unique release. Its wireless division uses Plutora for the application management view. As the IT Manager puts it, "We release software, not projects."

The RDMS team knew how critical it was to enable collaboration on well-known information as well as timely and effective communication that would help identify and escalate resource gaps. One thing was clear: they needed a tool that would serve as a single source of truth for all releases by gluing together information from IT Service Management, Project and Portfolio Management, and Application Lifecycle Management toolchains to iron out challenges in the company's enterprise release management.

Solving change management from idea to production was paramount for the wireless provider. The IT manager wanted to streamline the process and make sure information was communicated seamlessly across stakeholders. He started looking for solutions and learned about Plutora. During the initial meetings and demos, he realized Plutora was the perfect solution that stacked up against the demanding release landscape at the wireless provider. Right away, the company kick-started a plan for incremental implementation of the Plutora platform.

Streamlined Deployment Management

The RDMS team chose to first implement Plutora Deploy since deployment is a repeatable process. Plutora Deploy serves as a virtual command center -- a one-stop shop for hundreds of people in IT to understand dependencies and coordinate deployments. Plutora Deploy also provides a highly presentable way to share information with other stakeholders.

Plutora Deploy gives the wireless provider a single place for deployment plans and associated tasks that can be easily replicated for each release. It allows deployment managers to delegate those tasks and track progress in real-time. It integrates with ServiceNow for task assignments and status reporting. Plutora Deploy supports deployment automation for individual steps and their interactive execution. It also helps the RDMS team ensure governance and compliance.

Summary of Benefits

- Single source of truth
- Consistent, scalable process
- Reduced risk of failure
- Less disruption and rework
- Optimized use of resources
- Seamless coordination
- Fast time to value
- Better, quicker decision-making

"There's no way my team could have managed the rapid increase in release velocity without a solution to manage it all."

Senior IT Manager at the wireless provider

Control Over Test Environments

Next, the wireless provider set up Plutora Environments to manage pre-production logical application environments and their dependencies around deployment plans and releases. Plutora Environments gives the wireless provider one place to support the intake of booking requests, change requests, and allocation of environments. It helps detect conflicts, analyze impact, and set up notifications for stakeholders.

Plutora Environments has eliminated collisions and made it easy to track changes. Since the wireless provider started using Plutora, it has improved efficiency and more than doubled the number of changes in the last year alone. "The acceleration curve looks like a steep rock," said the IT manager.

One Place to Manage Releases Across the Enterprise

The wireless provider implemented Plutora Release in two stages. First, it arranged for release impacts or changes to be managed on Plutora, which were previously being managed through multiple mechanisms. Once the process of integrating all the sources into Plutora to track changes in the release trains was complete, the IT manager asked the teams to start using Plutora as their primary tool.

Plutora Release has helped establish a centralized, authoritative source for managing workflows and integrating data. Business partners use Plutora to understand the status of each change they need to sign off on.

Next, the wireless provider implemented gates, criteria, notifications engine, and checklists to understand release progress. The RDMS team took up around 60 activities - referred to as accountabilities at the wireless provider - for each release and set them up by function. Plutora Release provides a clear audit trail for due diligence, without leaving any gaps in accountability.

The Release Dashboard provides rich insights and reports to teams and management, giving them a precise view of where they stand in the release train. Before Plutora standardized and consolidated notifications, figuring out statuses involved a lot of manual work and communication through phone calls, meetings, and emails.

"People are more engaged now," said the IT manager. "We've improved efficiency by 30 percent because of a single source of truth for over a hundred application teams."

What's next?

The wireless provider is planning to onboard change and defect information onto Plutora Test. "Next year, we'll ask teams to start using Plutora Test as their primary test management center," said the IT manager.

The wireless provider is working with Plutora to enhance Plutora Deploy as a full command center. Plutora is also enhancing data management to enable non-practitioners to use the tool easily.