

Mingle and Go Enable thetrainline.com to Deliver High-impact Software Releases with 50% Improvement in Time-to-Market

A 350-person global delivery team uses ThoughtWorks Studios' Mingle and Go to cut time-to-market with superior collaboration, visibility, and automation



Executive Summary

thetrainline.com is the UK's leading independent retailer of online train tickets with over 8.4 million registered users. An average of 3.5 million users visit it every month to access over 293 million fare and journey combinations. Continual improvement to the user's web experience has been at the heart of their success. Staying a step ahead led thetrainline.com to embrace Agile and ThoughtWorks to help deliver rapid innovation with high responsiveness. Mingle—ThoughtWorks Studios' Agile project management solution—and Go—their Agile release management solution—enabled thetrainline.com to not only maximize return on investment (ROI) from Agile but also to optimally scale it to what has now become one of the largest known Agile projects with over 350 people worldwide. In less than 18 months, Mingle and Go helped the team to release new functionality, reliably, every six weeks. It did so by fostering actionable collaboration, providing real-time project visibility, and increasing responsiveness to change, no matter what the time zone.

The Customer

Since 1997, over 3 million travelers have made 14+ million transactions on thetrainline.com, making it one of the UK's leading travel websites. Additionally, thetrainline.com's ticket websites and call centers are used as a solution by 14 of the 18 franchised train-operating companies in the UK and account for the sale of approximately 18% of the UK's train tickets in terms of value. Such high traffic volumes make it critical for the web application to cost-effectively respond to rapid business changes while delivering high performance quality. This was getting to be an increasingly complex effort, especially with a distributed team of over 350 people spanning two countries. thetrainline.com partnered with Agile pioneers, ThoughtWorks, to replace its core processing and website platform with a low-maintenance, responsive, and robust solution. Decommissioning the old system was a huge and risky venture that was fraught with numerous legacy issues. thetrainline.com was looking towards Agile responsiveness to absorb rapid business changes effectively, while replacing existing functionality.

thetrainline.com – The UK's #1 independent retailer of train tickets online.



The Challenge

Replacing the front-end system for the high-traffic website meant that while existing functionality had to be improved upon, new functionality had to be absorbed rapidly, too. Agile projects demand that their teams expect change and respond rapidly to it. Agile expects no less from the tools used. Pseudo-Agile tools advocate high agility, but prescribe rigid processes that are inflexible to change, or just can't keep up with it thus diminishing the key ROI from Agile—responsiveness to change. “The team were using Jira for tracking and management. However Jira's inability to provide a central collaborative team-space, real-time reports, and customizable dashboards was hampering critical visibility, especially for such a massively distributed team,” says Duncan Freke, Chief Architect, thetrainline.com. “We faced issues when integrating and testing different components, and collating status reports. Most importantly, our customers did not have actionable insight into the project progress. We had a dedicated team of managers who exported data from our project tracker, and churned out status, cost, and effort utilization reports. However, by the time they reached the stakeholders, the information was out-of-date or irrelevant,” continues Duncan.

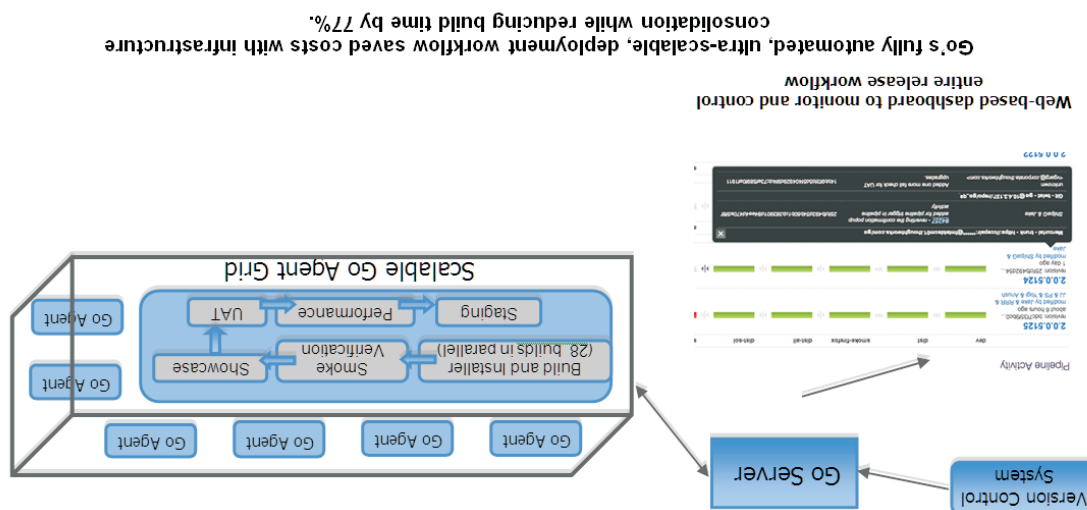
We were struggling with lack of visibility, collaboration, and automation with previous project management and CI tools. Mingle and Go helped address them by providing us with essential collaboration mechanisms, critical real-time visibility, and optimal automation capabilities for every aspect of the delivery lifecycle..

David Jack
CIO
thetrainline.com

Additionally, release anxiety was fuelled by complex integrations and dependencies in a code base that was being developed by over 350 people in two time zones. While CruiseControl.Net (CC.NET) helped with basic continuous integration, it fell short when handling the complexities of rapid release management. Builds were time-consuming, broke too often, and were difficult to debug. The team tried to split builds in an effort to speed up build feedback time. However, manually deploying builds to multiple environments with different configurations and maintaining multiple instances of CC.NET was nothing short of a nightmare. “Dependency management was cumbersome. Different components of the system, for instance, the journey detail, and the ticket payment gateway did not have synchronized builds and weren't in tandem. Thus, the ticket would be invalid. In addition, feedback on build failures was extremely slow.” says Duncan.

How did we help?

Mingle's collaborative approach to project management with real-time customizable reports and dashboards convinced thetrainline.com to try it. In less than a quarter, Mingle drastically enhanced visibility with customized role-based dashboards, real-time reports, and virtual story walls. Executive stakeholders, business analysts (BAs) and quality analysts (QAs), developers, and project managers (PMs) have real-time access to accurate information tailored to their needs. Program managers benefit from rolled-up reports spanning multiple projects that provide program-level status, and progress, at one glance. Most importantly, Mingle's simple but powerful interface, with the drag-n-drop virtual story wall, enables the huge, distributed team to do the impossible—collaborate effectively and easily.



However, holistic adoption of both Agile management and engineering best practices, such as comprehensive testing and continuous deployment are required for responsive and rapid software delivery. Go's novel concept of pipelines that allow you to model and automate your entire deployment process—from build through to testing to releases—was vital to achieving this. The team evolved a single, fully automated deployment solution that runs 28 builds in parallel. This drastically reduced the feedback time to just 20 minutes—down from 90 minutes. Moreover, Go's scalable cloud architecture enabled robust scaling with optimized infrastructure consolidation, which led to huge cost savings.

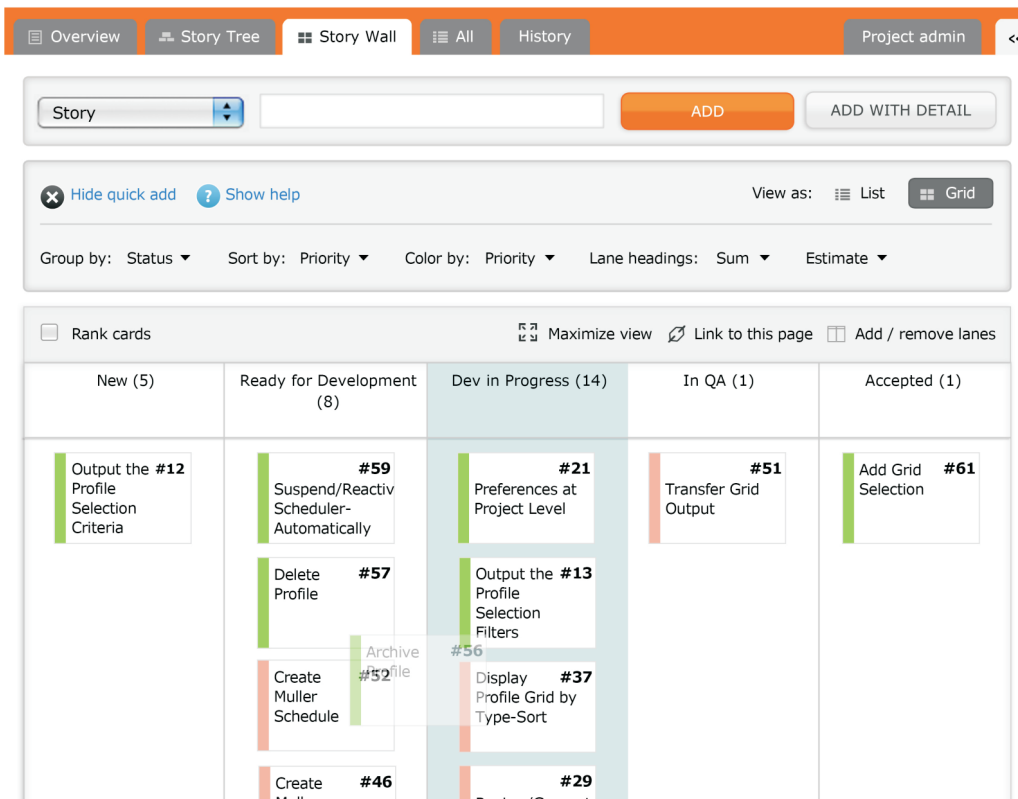
Go helps us to release new functionality rapidly, and reliably. With Go, we can design and automate our entire deployment process. In addition, push-button deployments in parallel to multiple environments helps speed up our release time.

Duncan Freke
Chief Architect
thetrainline.com

Agility from Inception to Release

Mingle and Go have empowered thetrainline.com to deliver high-quality business value, while adding new functionality rapidly, and cost-effectively. Right from requirements gathering to analysis, testing, and release, agility to change is ingrained in the solution. In addition, as the solutions are adaptive, they entailed lower adoption effort. The team and project were thus intrinsically equipped to respond to change.

Mingle serves as the distributed teams' central nervous system providing vital visibility in real-time to the entire distributed team. The key has been Mingle's usability-rich interface that facilitates actionable collaboration. Mingle is woven into all aspects of delivery management. Everybody on the team can visually work with stories, defects and backlog, customize dashboards, change status, and trigger transitions with drag-n-drop ease. As the entire team uses one common solution for project management, planning, tracking, defect management, reporting, and collaboration, information in Mingle is always accurate, and true-to-life. This thorough visibility is especially valuable for an organization that has multiple, inter-dependent projects, and programs. Project management and program management self-sustain as offshoots of this vibrant collaboration.



Virtual Story Wall: Accurate real-time visibility for the 350+ member distributed team

Go has extended the ease of use and collaboration to the last mile. It has drastically simplified and quickened the release process, with optimal automation and a reduced build feedback time, which also facilitates reliable releases. Go has enabled server consolidation, while seamlessly scaling to 165 agents that run 55+ builds per day and release thoroughly tested functionality every six weeks. Go's simple, real-time deployment dashboard provides the entire team with a one-glance view of the detailed deployment status with full traceability.

Mission-critical metrics, customer dashboards, status, and cost reports that are available 24x7, auto-updated with real-time information, have been central to our business. Mingle has provided our distributed team, and management with complete visibility of the program.

David Jack
CIO
thetrainline.com

The Results

Nothing tells a success story better than numbers:

- Mingle and Go enabled release of tested functionality every six weeks
- It increased test coverage by 30%
- It decreased build feedback time by 77%

Customers	Better ROI Faster releases Real-time status	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Real-time Visibility</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Actionable Collaboration</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Agile Responsiveness</div> </div>
CIO	Faster time-to-market Infrastructure consolidation Successful scaling of distributed Agile	
PMs	Efficient program management Agile project planning and tracking OOTB support for Agile project metrics	
Devs	Fast, quality feedback on code commits Virtual drag-n-drop story wall source code browsing	
QAs	Visual quality management Story and bug email alerts and feeds Self-service builds to test environments	
Ops	Reduced maintenance overhead Traceability management Release workflow management	
BAs	Requirements gathering with Wiki Backlog management Planning and tracking support	

Mingle and Go benefit across the team and across every aspect of the delivery lifecycle

Mingle and Go's flexibility and usability were essential to scaling the solutions rapidly. "We do not have to spend hours studying how Mingle and Go work. Neither do they force us to conform to one process. We can change it on-the-fly as our team and project evolves," says Duncan.

Thetrainline.com now has a stable, scalable system that provides the rich user functionality it wanted to offer. However, roll-out of the new system to other train operating companies is continuing. In addition, the platform will be extended to portals for businesses, travel management companies, and call centers. With further improvements to program management and reporting capabilities, modeling environments and reusable workflows for enterprise-level release management, ThoughtWorks' Mingle and Go take Agile optimization a step ahead. To enable you to stay a mile ahead.

Responding rapidly to frequent change can be challenging with distributed Agile. Mingle and Go are intrinsically Agile, and thus enable us to optimally manage change, and release faster. Additionally, they help accelerate adoption of Agile best practices.

David Jack
CIO
thetrainline.com



About ThoughtWorks Studios

ThoughtWorks Studios is a global leader in Agile software development tools, and its products can be found in development organizations seeking sustainable Agile adoption. The company's Adaptive Application Lifecycle Management (ALM) solution provides a platform for managing all aspects of software development, from requirements definition and project management to test automation, quality assurance, and release management. Adaptive ALM comprises the integration of three products: Mingle (Agile project management), Twist (Agile testing), and Go (Agile release management). Each tool is available as part of a complete lifecycle solution or as a standalone product. Backed by more than 17 years of experience in Agile delivery, ThoughtWorks Studios is the product division of ThoughtWorks Inc., a pioneer in Agile development. ThoughtWorks Studios has over 400 customers in more than 20 countries, including 3M, Honeywell, BBC, eBay, Barclays, Vodafone, McGraw-Hill, and Rackspace. The company headquarters is located in San Francisco and Bangalore, with offices in London and select cities in Europe, Asia, and Australia. For more information, visit www.thoughtworks-studios.com.



Mingle, an Agile management and collaboration tool, provides a common workspace for all team members and an automated system of record for all projects. Mingle can adapt any existing workflow process and easily manages daily development activities. Offering true-to-life visibility in the entire development process for all stakeholders, Mingle helps development teams become more open and collaborative.



Go is a solution for Agile release management, which enables businesses to release software on demand. Go improves collaboration between developers, testers, and operations and provides fast feedback on the production readiness of your software. Using Go, teams can model the delivery process, perform push-button deployments, and trace from deployments back to version control.



Twist, an automated Agile testing solution, provides English-like constructs, making the testing process more productive for all team members. As applications grow in complexity, Twist helps to more easily maintain complex test suites. These suites keep pace with application development and are held as long-living assets.

Mingle Benefits

Easy-to-Use Interface

Mingle's user interface recreates the card wall experience in an online environment. This shared space available to all team members provides visibility into the movement of work, from development through to deployment.

Improved Collaboration

With Mingle, development teams can work directly with business stakeholders throughout a project, from recording feature requirements in a story card to showing overall development progress. Managing their projects in Mingle allows team to show consistent and predictable product progress to business stakeholders.

Engineering Best Practices

Mingle reduces tedious tasks such as manually determining project status, which provides more time for each teams to focus on software delivery rather than the software tool. With this emphasis on production, teams more easily adopt engineering best practices.

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