



Continuous delivery

Release software on-demand, not on Red Alert

ThoughtWorks®

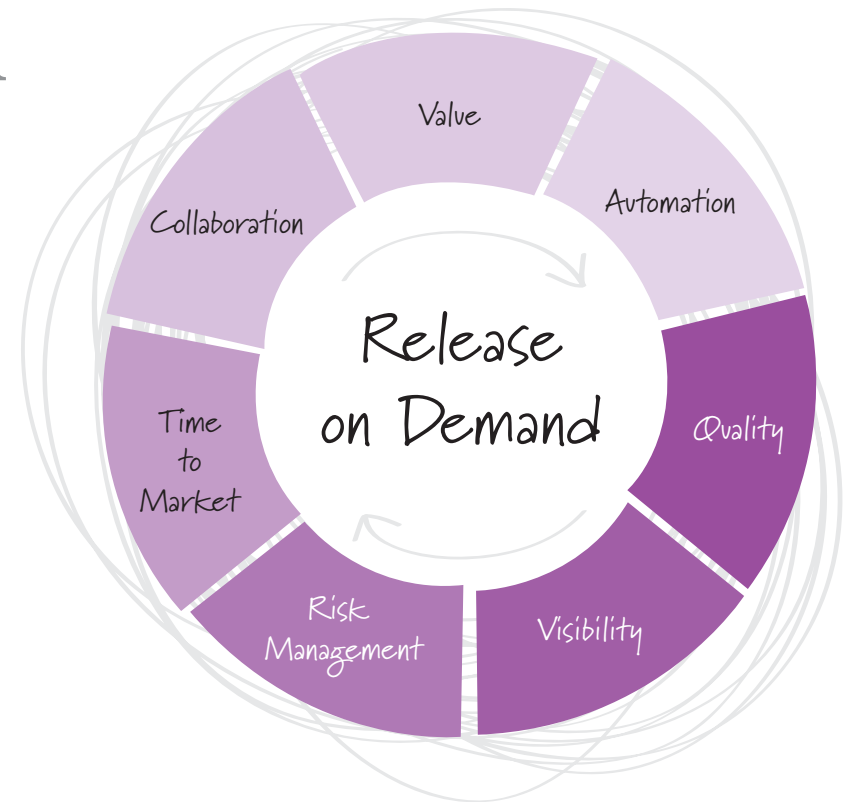


Have it all. Ahead of the competition

In a world where customers expect a mobile and connected 24x7 experience, businesses must adapt to a faster pace of change. The demand on IT is to become more responsive, releasing features and new, complete products faster, more often, yet with better quality and reliability than ever. With ThoughtWorks Continuous Delivery, we give you all that and more.

ThoughtWorks Continuous Delivery transforms manual, disconnected and error-prone processes to make enterprise software releases so fast and assured they are a non-event rather than a big event; so reliable, well-controlled and low risk that release timing can be placed in the hands of business stakeholders.

That's a strategic advantage for businesses that want to get ahead and stay ahead of the competition.



ThoughtWorks Continuous Delivery – Release reconsidered

Testing and releasing software is often one of the most painful and frustrating parts of large programs of work. Days can be lost wrestling with builds and deployments; constant anxiety and regular rollbacks are all too common. The business is frustrated when “development complete” code can’t be released and a market opportunity is missed.

A new perspective on software release.

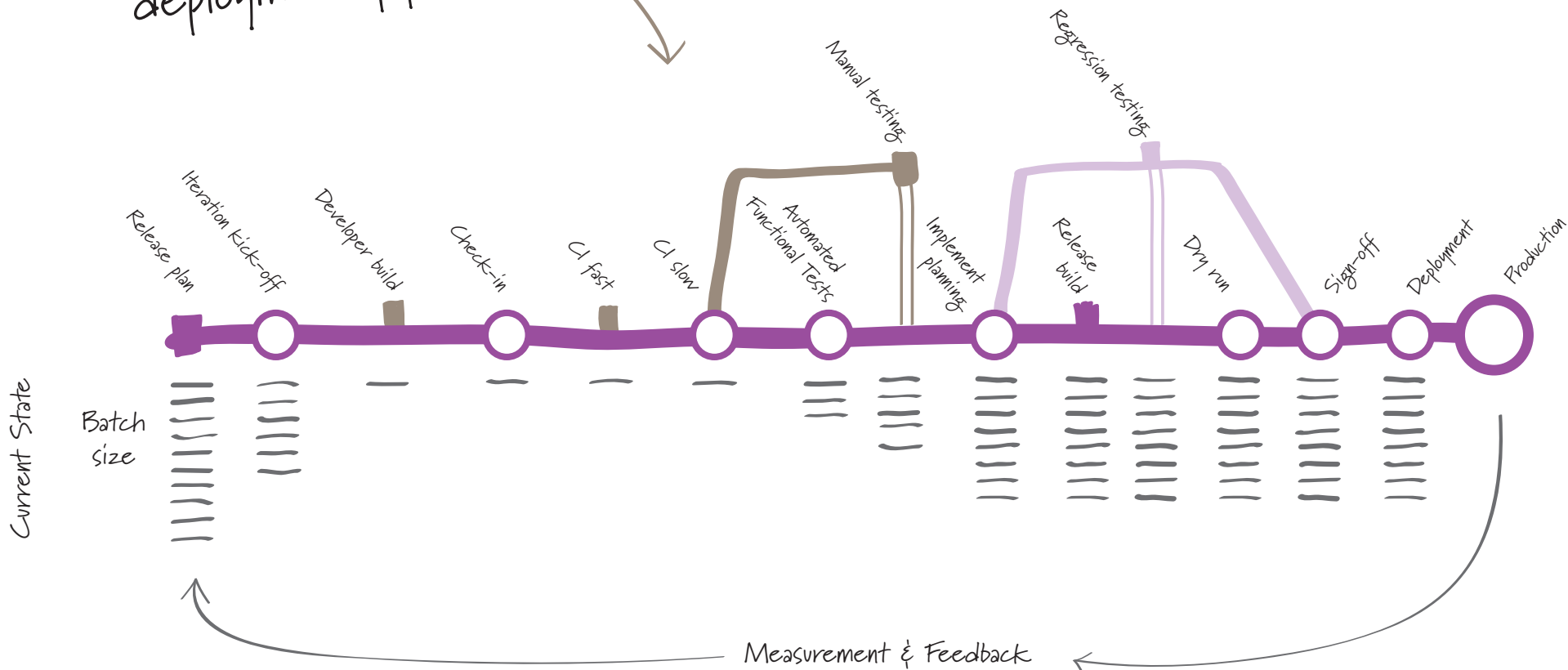
Software is core to business operations, and needs to be managed to match the requirements of the business. ThoughtWorks Continuous Delivery is not just about radically improving software build and release processes; it’s a new vision of how systems should be delivered into production: making delivery so responsive, fast and reliable that the “deployment pipeline” is a true business asset.

ThoughtWorks Continuous Delivery looks at all deployment pipeline elements - code integration, environment configuration, testing, performance analysis, security vetting, compliance checks, database migrations, staging, and final release – in an integrated manner, so that all fixes and features can make their way from development to release in a near-continuous flow. At any point, you have an accurate view of the production readiness of your system: what’s tested, approved and ready to go; and what’s at any other stage. Releasing what’s ready to go is as straightforward and automated as pressing a button.



let's visualise this

Map your deployment pipeline



are you ready to change?

It's a big change, with concrete benefits.

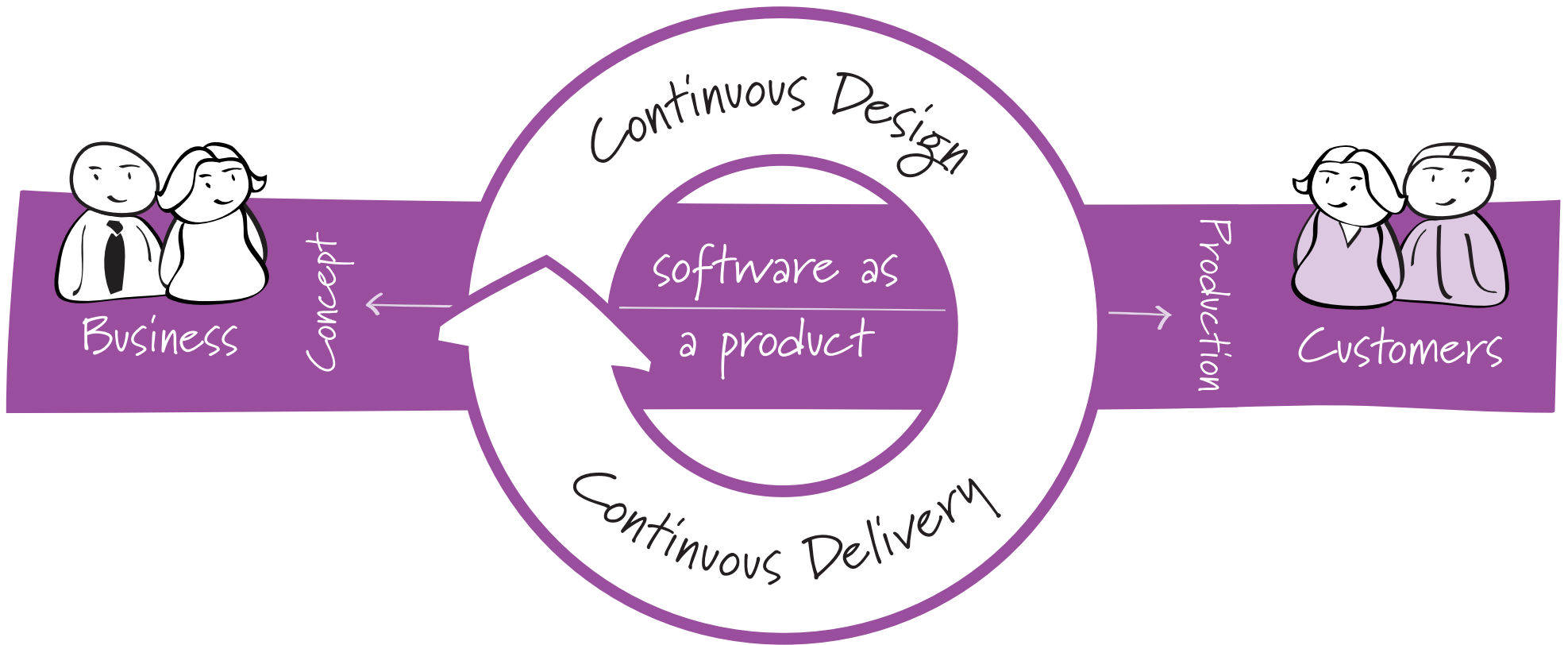
The benefits of ThoughtWorks Continuous Delivery start with significant operational, cost and reliability improvements.

These include:

- ✦ **Greater value delivery from IT.** Remove waste, risk and bottlenecks in the process to deliver changes faster and safer.
- ✦ **Improved release quality.** Reduce rollbacks and defects.
- ✦ **Increased automation** speeds the whole process and reduces costs, while improving quality.
- ✦ **Better visibility** brings greater accountability and control. At all times you can trace where each individual feature is in the deployment pipeline, and its status, meaning no surprises and no need to guess if a feature is release-ready.
- ✦ **More collaboration.** Test, support, development and operations work with each other as one delivery team, using one process.
- ✦ **Predictable** and faster turnaround for business requests.
- ✦ **Improved Risk Management.** Releases to production are reliable, routine “non-events”. This improves confidence, and avoids potentially embarrassing customer impacts.

With these improvements in the IT delivery process, the business gains new tools in product marketing and customer intelligence:

- ✦ **Competitive advantage.** The ability to launch new concepts to your customers faster than competitors is an ideal offensive or defensive capability. Make competitors react to your moves.
- ✦ **Greater responsiveness.** The ability to push releases to customers on demand places you first to market when new opportunities arise.
- ✦ **Build the right thing.** ThoughtWorks Continuous Delivery lets you explore new ideas and market test them quickly with significantly less effort and cost.
- ✦ **Continuous connection to customers.** Your customers are already adapted to a connected world. ThoughtWorks Continuous Delivery let's you show your customers you hear them. Expand the connection to your customers, and expand your brand - an essential tenet of the Lean Start-up movement.



We can make it happen

The move to ThoughtWorks Continuous Delivery and all the business benefits that it brings means changing processes, culture, technology and the organization. It is not a single step. It's a journey—one that will require a strong vision, and an adaptive approach to implementation.

We established ourselves as pioneers in build and release automation with our release a decade ago of the first continuous integration tool, CruiseControl. We're well known for our contributions to test-driven development and automated testing; for example the open source functional test framework Selenium.

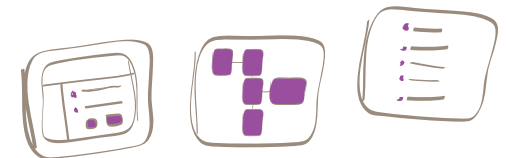
More recently, we created Go™, a complete Agile Release Management platform that grants central management and visibility to all parts of the delivery process, enabling orchestrated, push-button deployments with complete traceability from deployment back to requirements.



Agile Release Management

We continue to build our knowledge and skills, founded upon two decades of success in some of the toughest software environments imaginable.

We have the expertise and experience within the enterprise to help you make the journey. We assess your needs, identify gaps and determine the best course of action, based on your specific goals and starting point. Then we help with tools, process and organizational change to implement the vision using an adaptive approach.



show me 

Implement

- * Put recommendations in play
- * Use a short horizon
- * Deliver value every time

(re) Assess

- * Scope, Objectives & current state

Plan

- * Long-range stages
- * Short-term priorities
- * Roadmap

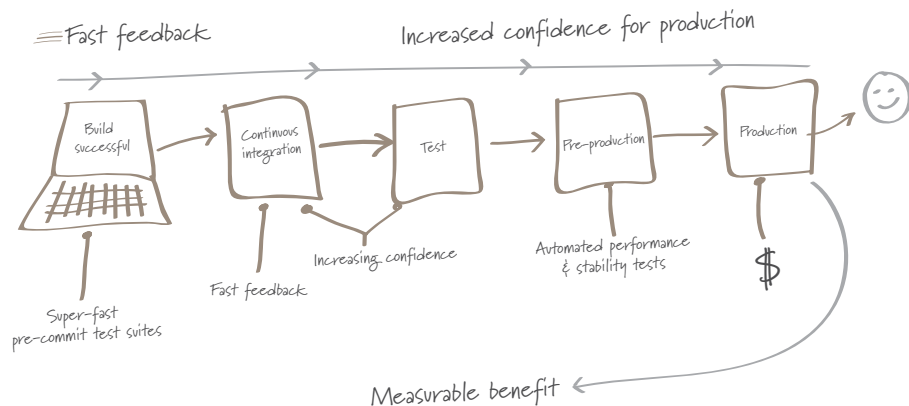
Envision

- * path to production
- * Automation
- * Virtualisation & Cloud
- * Governance
- * Metrics & Dashboard
- * DevOps

Changes we can help you achieve:

- ✦ Automation of code, database and configuration deployment to achieve a repeatable, reliable process free from manual variation.
- ✦ Consistent approaches to configuration and deployment in all environments, ensuring there are no surprises waiting.
- ✦ Continuous Integration to flush out integration issues early.
- ✦ Effective automated testing to provide fast feedback – unit, functional, and performance tests.
- ✦ Development and operations working as one delivery team, with operations having a seat at the table throughout the process to ensure operational needs are met.
- ✦ Implementing continuous delivery for large and distributed teams.
- ✦ Automation of infrastructure and configuration management, along with use of cloud virtualization to reduce the pain and cost of managing a multitude of environments.

Big, visible dashboards and alert systems to give teams rapid feedback on the state of the deployment pipeline.



We wrote the book on it.

Continuous Delivery, co-written by ThoughtWorks Principal Jez Humble, sets out the principles and practices that enable rapid, incremental delivery of high quality, valuable new functionality. Through build, deployment, and test automation, and improved collaboration between developers, testers and operations, delivery teams can get changes released in hours—sometimes even minutes—even in large projects with complex code bases.

DevOps and ThoughtWorks Continuous Delivery.

For most organizations, existing tensions between Development and Operations will be addressed as part of the roadmap to ThoughtWorks Continuous Delivery. DevOps brings about necessary changes to support fast and safe delivery into production: culture shift, process improvements and organization alignments among others. But DevOps isn't the end -- it's a means to an end.

The bottom line.

ThoughtWorks Continuous Delivery Consulting is a highly focused engagement with clear outcomes and results that start showing benefits within weeks. Our advice is forthright, and grounded in experience with hundreds of software delivery projects.

We can help you turn a tax on all your software projects into an asset that makes the business more competitive, responsive and better able to connect with customers. At the same time, we help you improve release quality, remediate compliance gaps, reduce go-live trauma, and improve return on IT investment.

ThoughtWorks Continuous Delivery in action

A global retailer engaged ThoughtWorks to overhaul their software deployment pipeline. Within weeks significant reliability improvements began, and within just a matter of months, releases were predictable and frequent, enabling the business to achieve a key strategic goal.

Changes

The transformation began with the introduction of Continuous Integration, and with leveraging automation for both testing and environment configuration. We modularized multiple large, monolithic, builds that sometimes took days to complete – or to uncover problems - into five smaller builds that follow a logical, pre-determined order. These smaller stages - Commit, Assemble, Package, Deployment, and Regression – have meant faster, less risky, builds. Technical staff are better able to divide responsibilities for maintaining successful builds, increasing ownership across the IT organization. Root cause of failure is easier to pinpoint, correct, and prevent.

Scripts now automate environment and configuration management to speed these complicated and lengthy processes, remove errors, and ensure consistency. Virtualization is a key component of ongoing improvements, allowing any application to be dynamically provisioned, configured, and available for testing based on the specific code modules being changed.

In addition to infrastructure and code integration, testing is now automated to a much higher degree than had been the case; and infrastructure – not just code – is part of the testing. Virtualization allows building and testing of components to be parallelized to a great extent. The pipeline has also become ever more intelligent, with tooling, for example, that when a stage successfully completes, communicates to other stages. That may trigger further testing, or cut short needless testing if a problem is raised.

Every night, an automatic deploy process kicks off for all applications. Regression test suites are triggered and the results are distributed and displayed on dashboards available to not only IT but to business representatives. And because the infrastructure itself is part of the test suites, the client is assured that a successful deployment test means the code can be delivered into production with no errors, no conflicts – no surprises. Everyone knows what's deployable, and what's not.

Outcomes

Within a few months of the start of the engagement, the client was able to begin realizing benefits. They were able to launch a new brand online in a timeframe that would have been impossible to achieve before. In a few more months, they were able to cut their release cycle from yearly to monthly with increased quality; production rollbacks, once typical have become a rare exception.

The business now has confidence they can get changes released with a drastically shorter lead-time. Overall value from IT has increased as timeframes have decreased. Going forward, advanced dynamic virtualization techniques will further cut the testing cycle time by another 50 percent or more, bringing them close to true continuous delivery capability.

World-class in Agile and Lean

ThoughtWorks is a global IT consultancy trusted by many of the world's leading businesses with their most complex and critical systems. We deliver consulting grounded in delivery expertise, build custom applications and help all manner of organizations improve IT efficiency.

Martin Fowler, ThoughtWorks' Chief Scientist, co-authored the Agile Manifesto. Our people continually adopt, adapt, innovate and share best practices worldwide based on frontline Agile and Lean experience in globally successful businesses and projects.

Our size and presence in the Americas, Europe, Asia and Australia allow us to provide big company services with small company interaction. We are large enough to make a significant impact, but small enough to dedicate executive attention to each of our clients and craft individually tailored solutions for them. Our consultants are experienced, creative and talented specialists who split their time between advisory and delivery work to ensure they are always connected to reality and remain at the forefront of their field.

To find out how your organization could benefit from ThoughtWorks Continuous Delivery, please get in touch.

ThoughtWorks®

thoughtworks.com