

Continuous Delivery Consultancy & Training

Prospectus 2021-22

David Farley

Introduction

Continuous Delivery Ltd.

Continuous Delivery is a modern holistic approach to software development that is widely seen as representing the “state of the art”.

Continuous Delivery Ltd. works with organisations that aspire to create world-class software.

Continuous Delivery Ltd. offer a portfolio of services that can help improve the capabilities of any organisation. The services described in this prospectus are available ‘in person’ and on-line.

About Dave Farley

Dave Farley, is the managing director and founder of Continuous Delivery Ltd.

Dave is co-author of the best-selling [Continuous Delivery](#) book. His latest book [Modern Software Engineering](#) describes a coherent, foundational and durable approach to effective software development, for programmers, managers and technical leads, at all levels of experience. He is one of the authors of the [Reactive Manifesto](#) and a winner of the Duke Award for the open source [LMAX Disruptor](#) project.

Dave is a pioneer of Continuous Delivery, thought-leader and expert practitioner in CD, DevOps, TDD and software design, and has a long track record in creating high-performance teams, shaping organisations for success, and creating outstanding software.

Dave is committed to sharing his experience and techniques with software developers around the world, helping them to improve the design, quality and reliability of their software, by sharing his expertise through his consultancy, YouTube channel, and training courses.

Continuous Delivery on YouTube

Dave Farley has created numerous videos on CD, DevOps, TDD, and Software Engineering, that are available to view for FREE at <https://www.youtube.com/c/continuous-delivery>

CD Training and DevOps Courses

Our dedicated <https://courses.cd.training/> site, offers free short tutorials, comprehensive learning programmes, live courses and on-line self-paced study, designed and delivered by Dave Farley. Dave will also design bespoke courses to suit clients’ requirements.

Consultancy Services

Continuous Delivery & DevOps

Continuous Delivery Ltd offers a broad range of consultancy services with the aim to help organisations transition to, and improve their performance in, the field of Continuous Delivery and Software Engineering.

Team organisation, test strategy, system architecture, engineering practices, technical skills and many other things need to be considered to approach world-class performance in this space.

Our principal goal is to help you to reduce the time from having an idea, to getting valuable software that implements that idea into the hands of your users. Working to actively reduce cycle-time can require changes in a wide variety of areas within your organisation. Everything from the way in which your business is organised to the technology that you are using to build and test your software has an impact.

We offer services to analyse where you are in your process of adoption of Continuous Delivery: Providing expert advice on the pitfalls that are ahead, advice on next steps, consultancy support for the directions to take, and training to improve the technical, design and leadership skills needed to achieve your goals.

Our services are very wide-ranging in scope, and in their effect on your business. This prospectus can inevitably only provide an overview and some examples.

Please contact us to discuss your needs in more detail: info@continuous-delivery.co.uk

Dave's Approach

The services provided by Continuous Delivery Ltd are quite broad in scope, and so most engagements usually begin with an initial phone, or video-call, consultation with Dave Farley to discuss client requirements, goals and how CD Ltd can help. This may be followed by a written proposal and quotation.

Most engagements usually begin with an assessment, carried out through workshops with your team/s, in order to: identify where best to focus efforts to make the biggest impacts; what is needed to improve; and, what consultancy advice and training services CD Ltd may continue to provide to support you in achieving your goals.

Assessment & Analysis

The aim of these assessments is twofold: to begin the process of reflecting on the strengths and weaknesses in your current approach to software development; and, to identify areas where improvements will have the biggest impact. We may carry out a Value-Stream Analysis (and a Continuous Delivery Maturity Model, if you prefer). These assessment activities are primarily carried out as a series of workshops.

Workshops

Dave will undertake a series of interactive, multi-functional, workshops (including: Managers, Product Owners, Architects, Developers, Testers, Quality Assurance personnel and Operators) to discuss, and map, the current approach to software development from a broad perspective.

The goal of these workshops is to allow us to better understand your organisation, the nature of the software that it produces, its approach to software development, how teams are organised, the nature of the existing development process and what the problems are that you are trying to correct.

It is normal for these sessions to be very interactive. We use these activities to listen, coach and encourage teams to gain new insights, inspire and motivate them to generate new ideas. This is not just about reporting back findings later: these are coaching sessions as well as exploratory.

The workshops will give your teams a broader and deeper understanding of Continuous Delivery practices and what it takes to establish them throughout the organisation: to highlight potential pitfalls and identify effective strategies for adoption.

We will help you to identify where best to focus efforts to make the biggest impacts, and identify what is needed to improve.

We then make recommendations on strategy and practices to address the weaknesses and enhance the strengths, and suggest where CD Ltd consultancy and training may help you to achieve these goals.

Keynote Talks

Dave Farley is a popular speaker on the international conference circuit, and is widely regarded as a thought-leader in the sphere of Continuous Delivery and Software Engineering. Dave also gives talks and presentations to internal company events, to kick-off a new project or programme, and to inspire discussion and adoption of new ideas.

These talks are a great way to engage the whole organisation, including senior executives and non-technical teams, in support of software development objectives;

introducing this wider group to the ideas and language of Continuous Delivery, and to get excited about the changes and future benefits.

There are a variety of topics available for such presentation, but the most generally applicable is "Rationale for Continuous Delivery".

Abstract

Many people working in software development spend their careers without seeing what good looks like. Our history is littered with inefficient processes creating poor quality output, too late to capitalise on the expected business value. How have we got to this state? How do we get past it? What does good really look like?

Continuous Delivery changes the economics of software development, find out how and why.

A Day with Dave Farley

Booking a day for your team to spend with Dave Farley can help build energy for a new project and help your team learn and improve together. The day may include: a presentation to your whole development organisation; a series of targeted workshops; exploring specific problems and possible solutions; and/or, get Dave's insight into organisation, architecture design and development approach.

Value-Stream Analysis

A core practice in the adoption of Continuous Delivery is to measure and improve (shortening) feedback cycles in the development process. The aim is to maximise the opportunities to learn, and improve. We use a Value-Stream-Analysis technique in our workshops to explore the current development process, from a variety of different perspectives.

This mapping exercise gives us a structure that allows us to explore the development approach in some detail and to agree a rough value for how it takes for each step in the process. We can estimate the duration of the whole process - from idea to working software in the hands of your users, and identify opportunities for optimisation. The discussion and learning from this analysis is often more important than the output.

Continuous Delivery Maturity Assessment

As one of a range of workshop activities, CD Ltd may use a CD Maturity Model - which is an assessment tool that some organisations find useful, to evaluate practices associated with software development as working for, or against, the adoption of Continuous Delivery, on a scale from "Regressive" through to "Expert".

Maturity models are somewhat simplistic and so don't represent a precise measure of effectiveness. However, the exploration process is often more important than the output, and they can provide a broad view on where you are in your journey toward better practice and provide some ideas on what to try next.

Automated Testing Strategy & Implementation

Automated testing is a cornerstone of Continuous Delivery. It is enormously valuable in helping to reduce cycle-time and improve quality, but there are many pitfalls along the way to its adoption. Dave Farley is an expert in the field of automated testing, and can bring this experience to bear to advise you on effective testing strategies, given the unique constraints of your organisation, technology and environment.

Dave is the creator of the concept of the Deployment Pipeline, and a long term exponent of Test Driven Development, Acceptance Test Driven Development, the use of Automated "Executable Specifications", an early contributor to the ideas of Behaviour Driven Development, and developed Performance Testing techniques used on some of the highest-performance systems in the world.

He can advise you on team organisation, system-design, test-strategy and technology and even work, hands-on, alongside your technologists to coach them and help them learn the skills of automated testing.

Micro-Service Architecture and Reactive Systems Design

One of the hallmarks of world-class, high-quality software is that it is efficient and modular - technically it is reactive and loose-coupled. There is a synergy between this style of software architecture and the process of Continuous Delivery. Together, they lead to systems that are high- performance, efficient and eminently testable and releasable.

Dave Farley is one of the authors of the Reactive Manifesto and has been working in the field of large-scale, high-performance, distributed- systems for many years and brings a wealth of experience to the field. He can offer advice and design services in the implementation of reactive systems and micro-service architectures.

Organisation Structure & Leadership for Continuous Delivery

Continuous Delivery represents a paradigm-shift in approach to software development. As a result it challenges much conventional wisdom on what works best. The changes necessary to adopt this new, more effective approach to software development, do not stop at the boundaries of a technical team. Continuous

Delivery Ltd can help you to manage the impact on working practices across your organisation.

Dave Farley has played senior management roles, led teams, and consulted with organisations - big and small, in a wide range of industry sectors, helping with the adoption of these practices in regulated industries and in technically demanding problem domains.

Dave can offer consultancy advice and training to help non-technical people understand what Continuous Delivery is, why it matters to them, and how they can help in its adoption. He can advise on team governance, structure, leadership and offer help in strategies to make the wide-spread culture-change that is necessary for a successful outcome.

Continuous Delivery For Vendors

Continuous Delivery has been widely adopted by tool vendors as a unifying approach to software development that has helped them to more clearly position their products and the value that they bring to their customers. Dave Farley is a world authority on this subject and can offer a depth of practical understanding, and strategic advice, that is unique.

We can offer advice on, or critique of, product offerings. We work to maintain a broad view of the Continuous Delivery space and so can often identify complementary or competing technologies or suggest approaches to the use of your products that will enhance their value as part of a Continuous Delivery pipeline.

As consultant, speaker, blogger and YouTuber in this space, Dave is in a unique position to offer advice and guidance on the direction of your product offerings.

Continuous Delivery & DevOps Training

We offer a range of comprehensive training programmes, and/or a menu of modules that can be tailored to the team or organisation's needs. Training is available in person, or as on-line, self-paced study.

Below is a representative selection of the courses and modules available. Please check out our CD.Training School <https://courses.cd.training/> for more on-line courses

Contact us if you would like more information about live training, bespoke courses, or group bookings at a discount: info@continuous-delivery.co.uk

Continuous Delivery: Better Software Faster

A foundational course that is now available completely on-line, comprising videos, worksheets, checklists and information sheets, that Dave Farley has designed to be completed in a day, or absorbed in bite-size pieces around work priorities, and practised over the following weeks to develop these skills and embed the techniques.

This course is ideal for organisations that are looking to transform their SW development process, and will enable teams to:

- *Understand the elements of Continuous Delivery from first principles, and develop a Continuous Delivery Mindset.*
- *Learn and apply the seven essential techniques to and be able to implement practical Continuous Delivery models in their work*
- *Be able to assess their Continuous Delivery capability, make progress and identify next steps.*
- *Be able to build an efficient Deployment Pipeline that can turn ideas, more quickly, into great software for customers*
- *Continue to use guides and checklists to continuously improve.*

Advanced Deployment Pipeline Techniques - 2 days

The Deployment Pipeline is a central concept in Continuous Delivery. It represents an effective, controlled channel through which all changes destined for production pass.

A defining objective in CD is to work so that our software is always in a "releasable state". By applying high levels of automation to our development process, in the

form of a Deployment Pipeline, we pass all changes to our production systems through this channel and evaluate them prior to release.

This means that the pipeline quickly becomes a strategic resource. As our use of this important tool grows, the performance of the pipeline, in terms of the rapidity with which it can give valuable feedback on the quality of your work, becomes a central concern.

This course explores:

- *Effective models for deployment pipelines.*
- *How the scope of your pipeline(s) impacts on team structure, and vice versa.*
- *How do you optimise your deployment pipeline(s) to give fast feedback?*
- *How do you protect this strategic “channel to production”?*

Leading Continuous Delivery - 2 days

Continuous Delivery changes how organisations work and how they think about change. This can challenge many aspects of traditional thinking about leadership for most organisations. This course addresses these technical, cultural and organisational challenges from the leaders’ perspective.

We look at effective team structures and organisational patterns, and examine the role of leadership in empowered, autonomous teams and offers advice on managing the technical practices, organising work and developing a collaborative learning team culture.

We begin by covering the philosophical and structural underpinnings of the Continuous Delivery approach: What is Continuous Delivery? What is its relationship with DevOps? (Continuous Delivery is the broader concept). Why does it work? What are the benefits of working this way?

Continuous Delivery (CD) is a broader topic than many people expect. CD is a holistic approach to software development and as such touches on every aspect of your software development endeavour.

Technical Performance

What are effective measures of technical performance? What are the most important technical practices that a leader needs to be aware of? How do we lead teams to change working practices, allowing them to develop and benefit from good technical performance?

Cultural Performance

How do we develop and encourage a learning culture within our organisations? What does “Good Cultural Performance” mean and why is it important. As a leader, or manager, what tools are at my disposal to modify culture?

Organisational Performance

How do we organise teams, allocate work, manage collaboration, minimise dependencies? How do we scale this to large organisations and teams?

As part of this course we offer a framework to support more effective, evidence-based decision-making, and a model for measuring the performance of teams and organisations that allows you to more effectively guide the improvement of your teams and practices. This is generally applicable and can benefit in the exploration of any new process, tool, organisational practice or technology.

Bespoke Training Programmes:

CD Ltd offers a range of modules that can be 'mix-and-matched' into a flexible, bespoke training programme designed to meet your needs.

Anatomy of the Deployment Pipeline

A central idea in CD is that of the deployment pipeline, an automated route to production for all changes to production systems. This module provides a detailed exploration of the concept of the "Deployment Pipeline". Exploring each stage and the principles, practices, technology and general approach in some detail.

Acceptance Testing

Acceptance testing in CD helps the team focus on the value that stories deliver to users. This module describes the qualities of effective Acceptance tests, provides an approach to designing tests as "Executable Specifications" for the behaviour of a system that are robust in the face of changes to the system-under-test. This is a technical module at the level of software design with a few simple code examples.

CD In Production

CD is a holistic process, it doesn't stop when the code is deployed into production. This module explores approaches to working incrementally in production, the role of DevOps, how to manage experiments in-production and discusses ideas like Feature- Toggles, A/B Testing and Canary Releasing.

Effective Teams

Team organisation and team discipline play a vital role in the effectiveness of a development process. This module discusses the properties of effective teams. We explore team-size, team organisation and responsibilities; The impact of team structure on software architecture; Pair programming; and, other strategies for promoting collaborative working.

Performance Testing

What do we mean by “Performance”? What are sensible measures? This module covers: Effective strategies for developing and maintaining complex performance test suites; Performance in very high-performance scenarios; Large-scale scenario-based testing; Managing Performance Test Data; Component-level performance testing; and, Completing in sensible time.

Test Driven Development (TDD)

TDD is a cornerstone of CD and the production of high quality software. It is the only mechanism, beyond the experience and conscience of an individual developer, that provides a pressure for more effective, modular, loosely-coupled, design. This module uses some of the materials from my “hands-on” TDD course to describe effective strategies for TDD.

Team Structure and Software Architecture

Conway’s Law tells us that we are doomed to recreate the structure of our teams in the architecture of our software. CD tells us that we need small, collaborative teams. So what sorts of architectures spring from teams that adopt CD? What is the relationship between CD and MicroServices? How do we coordinate work across and between teams? What are the implications on that for our design choices? We also discuss the engineering trade-offs between loose-coupled autonomous teams and more centralised monolithic systems in the context of CD.

Testing Legacy Code

One definition of Legacy Code is “Code without tests”. Legacy Code looks very different to code that was developed from the beginning with automated testing as part of its development approach. Inevitably such code is less-testable. This module describes a sensible, pragmatic approach to working with Legacy code.

Experiments In Production

Continuous Delivery enables experimental organisations. This module explores this idea, looking briefly at the mechanisms, but principally at how to become more experimental as a business. How do you identify useful experiments? How do you measure the impact of your ideas?

Infrastructure as Code

What are the challenges and approaches to effectively recreating your infrastructure from code. Could you deploy the version of code that was running in production 12 months ago into a test environment? This module will describe approach and techniques that allow for that level of configuration and dependency management.