FAST LANE
DEVOPS
Transformation Guide

Assess

Coach

Train

Fast Lane

TRANSFORMATION THROUGH LEARNING

Transformation comes from many small improvements, some highly visible and dramatic, while others may be harder to see. But it doesn't happen overnight, and it can be a complicated process. When the steps of that process are correctly arranged, and progress is measured and celebrated, that is when capabilities grow and benefits mount.

We guide your transformation with Assessing, Coaching, and Training your teams on new practices and tools.

Our experts will use a series of questions and tools to evaluate your practices in order to paint a picture of your organization that provides visibility into your greatest constraints and helps to prioritize the most immediate obstacles and pain points. The more constraints you address, the more transformative your cumulative capabilities become.

DEVOPS ADOPTION & CULTURE
CI/CD & PIPELINE AUTOMATION
CONTAINERS/ARCHITECTURE
TESTING & QUALITY
DATA ANALYTICS & MEASUREMENT
DATA ENGINEERING
INTEGRATING SECURITY

ASSESS **COACH** **TRAIN**

The ACT Model stands for Assess, Coach, and Train. Each step is critical to help you get the most out of your transformation. Our focus during each step is your business outcomes. We tailor programs around what success means to you to help achieve your goals whether that is all three of the steps, or only one.

Through the ACT model, we use organizational assessments to quickly recognize gaps in the system, communication failures, and technology limitations that might keep your organization from reaching its full potential. After an initial assessment, our subject matter experts and training advisors work with you to create a training program that is best suited to the needs of your organization.

Once your training program is complete, or throughout the program based on your needs, our expert coaches guide you through your enterprise transformation. Our coaches are veteran practitioners ready to share their practical, hands-on experience. They work onsite or virtually to guide your teams, provide feedback, and foster enterprise-wide, continuous improvement and innovation. Our goal is to help transform your company into a collaborative and highly functional organization, embrace change in culture, and adopt new practices and tools.

WHAT IS THE ACT™ MODEL?

The ACT model uses organizational assessments to provide a custom training program, and coach your teams to success.

DEVOPS ADOPTION & CULTURE

The cultural and technical concepts of DevOps have expanded into a well-developed toolbox of principles, processes, and skills that transform the work of anyone who relies on technology. Despite growing support for these transformations, big disconnects remain in how leadership, enterprise management, and teams understand DevOps. If your organization does not have the right mindset or culture to foster DevOps, you will not succeed. The focus areas below provide expert guidance on widespread adoption, and the shared cultural understanding that is critical for successful DevOps implementation.

Cultural evolution, reduced fear, and better-aligned incentives are the DNA of system-wide improvement to:

- Create a baseline of vocabulary and concepts for various teams and roles
- Create an understanding of how value flows through the organization
- Ensure leaders know what to expect and what to support
- Address the human factors needed for success with DevOps practices
- Break down siloes and encourage dialogue across roles and teams

Focus Areas

DevOps
DevOps Foundations
DevOps Implementation Boot Camp (ICP-FDO)
DevOps for Executives
Implementing Site Reliability Engineering

Lean
Design Thinking Boot Camp
Lean Product Management & Development
Enterprise UX & UI Design Boot Camp
Lean IT Management

Agility
Agile Boot Camp: ICP Fundamentals Certification
Agile-Driven DevOps Workshop
Enterprise UX & UI Design Boot Camp

CI/CD & PIPELINE AUTOMATION

In today's workforce, the same trends that revolutionized manufacturing in the 20th century are transforming enterprise technology. For technology products and services, a combination of connectivity, automation, and reusable assets increase delivery speed and consistent quality, translating to competitive advantage. Our assessments and coaching, combined with the workshops below, teach practices and tools necessary for success with enterprise CI/CD pipelines.

CI/CD pipelines foster system-wide improvement that:

- Help avoid long feature branches and integration phases
- Help build reusable assets for integration, testing, and deployment
- Coordinate distributed teams and large code bases
- Protect against and reduces technical debt
- Shrink batch sizes of work for faster, lower risk delivery

Focus Areas

Version Control
Git & Github
BitBucket for Version Control

Dependency Management
JFrog Artifactory

Continuous Integration/Continuous Delivery
Continuous Integration Workshop
Continuous Delivery Workshop
Jenkins User Boot Camp
Continuous Integration with TeamCity

Configuration Management
Ansible Configuration Management Boot Camp
Chef Essentials Workshop
Chef Intermediate Topics
Introduction to Using Puppet

CONTAINERS & ARCHITECTURE

CI/CD comes into play when adopting containers and modernizing architecture. Whether your organization is making a commitment to microservices, or simply needing to update legacy systems for security and speed, our experts will determine the best combination of assessment, coaching, and/or the workshops below to help you do it. Your organization's systems underpin and enable all the other technology practices presented in the guide.

DECOUPLE TIGHT DEPENDENCIES, REFACTOR MONOLITHS, AND BUILD ANTIFRAGILE SYSTEMS

Better engineering with containers and services enables you to:

- Allow different backend technologies to interoperate at the service layer
- Promote refactoring of legacy architecture and services
- Migrate and/or improve cloud infrastructure and services
- Loosen tightly coupled dependencies
- Allow orchestration of small services and automation

FOCUS AREAS:

Containers
Docker Containerization Boot Camp
Introduction to Kubernetes

Architecture
Microservices Engineering Boot Camp
Fundamentals of Secure Application Development
Serverless Achitecture Boot Camp
Designing RESTful Web Services

Cloud Engineering
DevOps Engineering on AWS
Google Cloud Platform Boot Camp
Team Foundation Server and Visual Studio Boot Camp
Introduction to web Application Security

TESTING & QUALITY FIRST

Delivering valuable products into the hands of users or customers increasingly depends on integrating the functions of QA and testing much closer to the origin of products and code – without separating them into a functional department. These suggested focus areas will help you adopt tools for automating testing, maintain test-in-dev and repositories of test code with Agile practices, and make common automated tests available across teams using distributed version control.

BUILDING QUALITY IN

FOCUS AREAS:

Quality Assurance
Test-Driven Development Workshop
Fundamentals of Secure Application Development
Fundamentals of Test Data Management
Agile Testing (ICP-TST)
Acceptance Test-Driven Development/
Behavior Driven Development Workshop

Test Automation
Test Automation Boot Camp
Automating Tests with Cucumber
Selenium Test Automation Boot Camp

Quality improvement and better test coverage foster system-wide improvement that will:

- Automate safeguards, change management, and deployment gates
- Increase test coverage and improve test results
- Permit design cycles for testing to keep step with application life cycles
- Build quality in at the source when products and services are created
- Encourage collaboration between quality champions and the rest of the organization

DATA ANALYTICS & MEASUREMENT

Turning data into understanding and value isn't just for statisticians, data miners, and engineers. Everyone from marketers to accountants needs the ability to adeptly analyze data.

Better analytics empower your people to:

- Build feedback and learning into business processes
- Add an intelligence layer to your applications
- Invest in better decisions right from the start
- Understand and act on lessons from machine data
- Use machine data to predict outcomes and prevent disasters

FOCUS AREAS:

Analytics
Introduction to Data Analysis
Data Analysis Boot Camp
Introduction to R

Visualizaiton
Tableau Boot Camp
Microsoft Power BI Boot Camp
Splunk Boot Camp

Machine Data & Artificial Intelligence
Machine Learning & Predictive Analytics Boot Camp
Artificial Intelligence Implementation Boot Camp
Using TensorFlow for Intelligent Applications
Splunk Boot Camp

Seeing, understanding, deciding. Data analysis influences every position in the enterprise. Better analytics and machine intelligence empower people in all levels of your enterprise to use business intelligence, data analytics, and data visualization.

DATA ENGINEERING

DEVELOPING SOLUTIONS FROM YOUR INFORMATION AND INFRASTRUCTURE

Your teams must have the technical skills and strategic enablement to organize, analyze, and interpret your many sources of big data and information. Our workshops and expert assessments provide your teams skills they need to discover insights required for analyzing critical factors such as risk, performance, quality, forecasting, estimating, simulation, business process improvement, and much more.

Better Data infrastructure improves system optimization by:

- Integrating data assets throughout applications and services
- Leveraging tools to manage big data and data streams
- Using better-designed architectures for speed and utilization of data
- Encouraging higher integrity and organization of data for better performance at the service layer
- Enabling adoption of more robust, modernized database infrastructure

FOCUS AREAS:

Big Data
Introduction to Big Data
Big Data Boot Camp
Apache Spark Big Data
Mongo DB Development Boot Camp

Enterprise Data
Data Life Cycle Management
MongoDB Development Boot Camp
Blockchain Development Boot Camp
SQL Workshops

Now more than ever, Information Security is top priority. Your customers expect their data to be secure and protected from vulnerabilities.

Our workshops teach highly effective security best practices and standards for your existing processes, technology assets, and management. Workshops, assessments and coaching engagements focus on security strategy and policy, certification, and application security.

BUILDING SECURITY IN: FROM POLICY TO DEVOPS

Security improvement is critical to system-wide improvement and allows you to:

- Build security in at the source
- Invest in lowering risk when it's fastest an cheapest
- Nurture a "security first" mindset among developers and product owners
- Mitigate the most common technology vulnerabilities and risks
- Map governance and policy to engineering practices

FOCUS AREAS:

Application Security
DevSecOps Boot Camp
Fundamentals of Secure Application Development
Splunk Boot Camp
Introduction to Web Application Security

Policy, Governance, Risk, & Compliance
Practical CyberSecurity Boot Camp
Incident Preparedness & Response
Information Security Governance

Certifications
CISM Exam Boot Camp
CISA Exam Boot Camp
The Offcial CISSP Certification Prep
CSSLP Certification Prep Course

DEVOPS ASSESSMENT

Assess your DevOps Practice, Leave with an Action Plan

Introducing an outside expert's perspective into your technology practices can be dramatic and eye-opening event.

Our experts thoroughly assess your DevOps practice to help you discover, visualize, and navigate your road to DevOps maturity.

We assess these core areas of your technology practice:

DEVELOPMENT
IT OPERATIONS QUALITY/
TESTING SECURITY
DATA PRACTICES
ARCHITECTURE

1 ASSESS

The DevOps assessment begins with an 85-question survey that analyzes your core strengths and challenges based on your responses.

2 ONSITE

Our experts take your teams' survey results onsite and conduct a series of interviews to learn more about the inner workings of your organization.

3 ACTION PLAN

After the onsite visit, you will have a detailed action plan enabling you to immediately implement and increase speed and agility for your organization.

Using the information we collect from assessing your practices, we provide specific guidance for improvement based on a real-time picture of your organization.

CULTURAL HEALTH

TECHNOLOGY SYSTEMS

WORK IN PROCESS

PLANNING PRACTICES

SECURITY VS. RISK

COLLABORATION

EMPLOYEE EMPOWERMENT

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