DevOps in a Legacy Application – Is the New Reality

April 27, 2018
This is our story!

- Background
- Creating a safety net from scratch
- Strengthening the safety net
- Setting up Fast feedback
- Improving monitoring
- Road Further Ahead
A flashback into a decade before

Background

• Setting up Fast feedback
• Improving monitoring

Creating a safety net from scratch

Strengthening the safety net

Road Further Ahead
A Tale of a Complex Application...

Portfolio Management
- Portfolio Allocation
- Investment Decisions
- High performance Algorithmic Trading
- Integration with Stock Exchanges & Broker systems

Investor Services
- Investor Onboarding
- KYC / AML
- Transactions Booking
- Investment Plan Management

Accounting & Compliance
- Trade Reconciliation
- NAV and Fee Calc
- General Ledger
- Fee Collection
- Expense Reporting
- Regulatory Compliance

Reports & Analytics
- Investor Reports
- Portfolio Performance
- Research ratings & Risk Analytics
- Market Sentiment Analysis
Our Great Grandfather State...

- Develop
- Automated Build
- Manual Deployment

- Manual Code Merge
- Manual Testing
- Who Cares?
Creating a safety net from scratch

Background

Setting up Fast feedback

Improving monitoring

Strengthening the safety net

Road Further Ahead
Little drops of water make the mighty ocean?

- Unit tests
- Continuous Integration
- Code Coverage
- Automated Tests
Strengthening the safety net

- Background
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- Road Further Ahead
Does it take two hands to Clap?

- Quality Dashboard
- Automated Deployment
- Functional Test Coverage
- Distributed Test Execution
- Doneness of a story include Automated Tests & Quality Gates
Progress Measured

- Lines Of Code
- Junit Coverage
- Functional Testing Coverage
Setting up Fast feedback

- Creating a safety net from scratch
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- Road Further Ahead
Fail Fast, Fail Often?

Smoke Tests

Performance Tests

Build Promotion

Package Distribution

Automated Regression Analysis
Improving monitoring

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Eyes have only one Language…

- Log Analytics
- Metrics Dashboard
- Health Checks
- Application Monitoring
- Performance Monitoring
- Automated Incident Management
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Improving monitoring

Further Ahead

Setting up Fast feedback

Creating a safety net from scratch

Strengthening the safety net

Improving monitoring

Road Further Ahead
Q & A?

THANKS!
References:

https://www.dynatrace.com/platform/
https://www.elastic.co/elk-stack
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