



Life Sciences Annual Report 2018: Pharma's DevOps Factor for Digital Transformation

Healthcare & Life Sciences IT Services (ITS)

Annual Report – March 2018: Complimentary Abstract / Table of Contents

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- Benchmarking | Pricing, delivery model, skill portfolio
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- Locations | Cost, skills, sustainability, portfolio – plus a tracking tool
- Tracking services | Service providers, locations, risk
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Background and methodology of the research

Background of the research

With high time-to-market, increase in drug safety breaches and the industry lagging in overall technology adoption, the pharmaceutical sector is crying out for a solution.

DevOps as a methodology seems to check all the boxes. Having successfully been implemented in the software industry to respond to fluctuating demands, provide better customer experience and reduce time-to-market, we describe out how the concept might be extended to pharmaceuticals to tackle the challenges which the industry inherently faces.

In this annual report, we explore DevOps and analyze the pharmaceutical value chain to come up with use cases across each element. We focus on:

- The ideology of DevOps
- The current state of the pharma industry
- DevOps use cases across the pharma value chain
- Evaluating use cases for amenability and business impact

The scope and methodology of this report includes:

- Industry: Pharmaceuticals
- Geography: Global
- Methodology: Analysis of the pharmaceutical industry and technology trends. Evaluations are based on analysis done from Everest Group's proprietary databases.

Overview and abbreviated summary of key messages

This report takes a look at the concept of DevOps and how it can be extended from its software engineering origins to the pharmaceutical industry. It puts forward a number of DevOps use cases across the pharmaceutical value chain and evaluates each to decide which are most suited for implementation if progressive business impact is to be realized. It also lays out a three-stage future implementation roadmap for pharmaceutical enterprises.

Some of the findings in this report, among others, are:

Key enabler of digital transformation

- DevOps has evolved from a software engineering approach to a more general principle of working that is being adopted across industries as an enabler of digital transformation
- Technology aspects such as automation and cloud computing coupled with softer aspects such as organizational structure and culture drive DevOps enablement across industries

Current state of adoption

- Despite its several benefits, organizations are facing challenges related to culture, talent, and technology while devising strategies for DevOps adoption
- Service providers can help enterprises in their DevOps journey by devising roadmap, aiding with change management and providing the necessary technology support

Opportunities in pharma

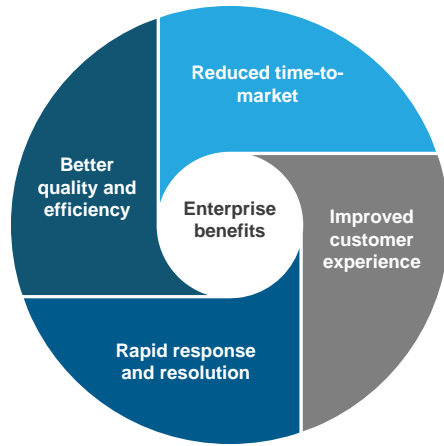
- With pharma firms looking to crunch drug development cycles and minimize drug safety breaches, the time seems ripe to make DevOps the next big bet
- Collaboration between the teams, information sharing via interoperable systems, and agile planning processes can accelerate the adoption of DevOps across the value chain

Future roadmap

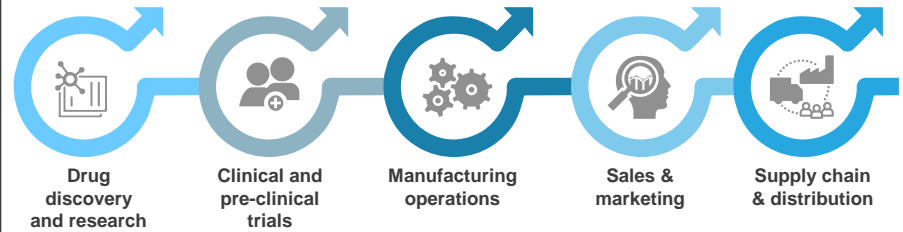
- With endless possibilities of approaching DevOps, enterprises need to prioritize investments based on the expected business impact and ease of implementation
- With the industry being heavily regulated and relatively slow to adopt technology, there is a need for careful experimentation and feasibility analysis before implementing DevOps across the enterprise

This study offers four distinct chapters providing a deep dive into adopting DevOps practices at pharmaceutical firms; below are four charts to illustrate the depth of the report

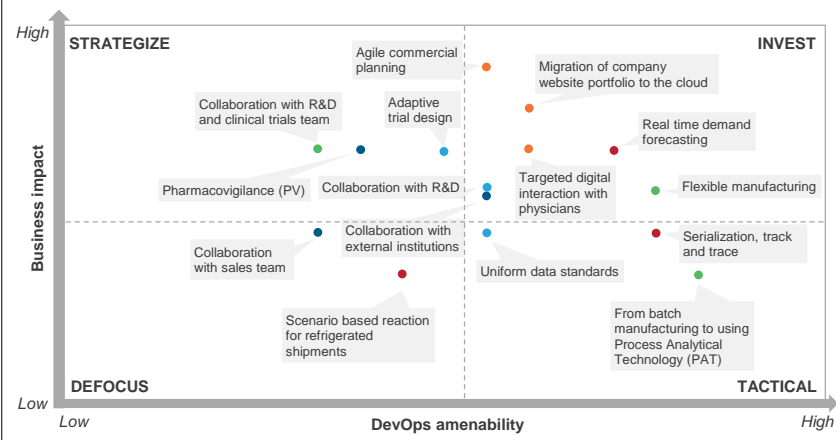
Enterprise benefits to adopting DevOps



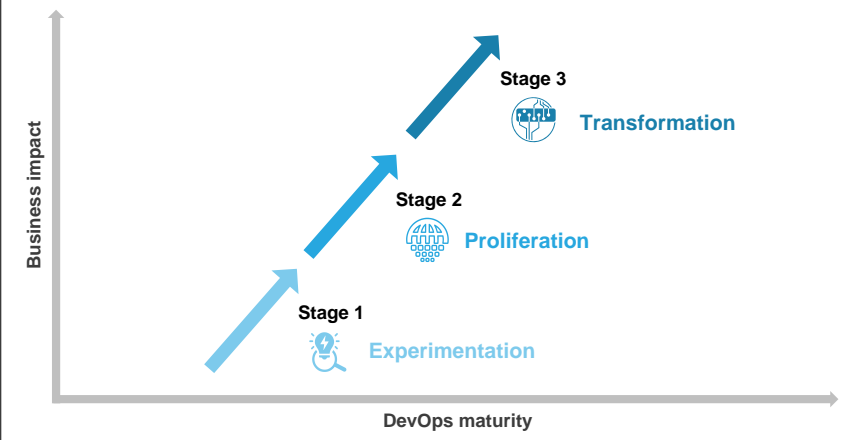
DevOps use cases across the pharmaceutical value chain



Evaluating use cases for amenability and business impact



Implementation roadmap for pharmaceutical enterprises



Research calendar – Healthcare & Life Sciences IT Services (ITS)

Published
 Planned
 Current release

Flagship HLS ITS reports

Release date

Life Sciences Clinical and R&D IT Services – Service Provider Landscape with PEAK Matrix™ Assessment 2017	July 2017
Life Sciences Clinical Trials – PEAK Matrix™ Assessment for Products 2017	September 2017
Healthcare Provider Annual Report 2017: Will the Real Value-Based Care (VBC) Please Stand Up?	October 2017
Healthcare Payer IT Services – Service Provider Landscape with PEAK Matrix™ Assessment 2017	October 2017
Healthcare Consulting – Service Provider Landscape with Services PEAK Matrix™ Assessment 2017	November 2017
Healthcare Provider IT Services – Service Provider Landscape with Services PEAK Matrix™ Assessment 2017	November 2017
Life Sciences Annual Report 2018: Pharma’s DevOps Factor for Digital Transformation	March 2018
Life Sciences Digital Services in North America – Service Provider Landscape with PEAK Matrix™ Assessment 2018	April 2018

Thematic HLS ITS reports

Rising Cost of Healthcare in the United States	August 2017
Exploring the Middle East Healthcare Opportunity	August 2017
The Curious Case of Infosys and Vishal Sikka	August 2017
Healthcare IT Security Services – Market Trends	September 2017
The Rise of Medicare Advantage	October 2017
Life Sciences Report Card 2017 – Enterprise Initiatives and Service Provider Performance	March 2018
Healthcare Report Card 2017 – Enterprise Initiatives and Service Provider Performance	March 2018

Note: For a list of all of our HLS ITS reports, please visit the [Healthcare & Life Sciences IT Services \(ITS\)](#) on our reports portal

Additional HLS IT services research references

The following documents are recommended for additional insight into the topic covered in this report. The recommended documents either provide additional details or complementary content that may be of interest

1. **Life Sciences Report Card 2017 – Enterprise Initiatives and Service Provider Performance** ([EGR-2018-20-R-2558](#)); March 2018. The life sciences market experienced significant turbulence in 2017 as a result of a variety of factors, including escalating costs, widespread regulatory amendments, changing business models, and the evolution of the patient-centric paradigm. These factors drove the market toward never-before explored frontiers such as evidence-based medicine and pay-for-performance. In 2018, pay-for-performance and evidence-based medicine drivers will gain momentum. On top of that, we will see an increased need for a supply chain overhaul to support the complex logistics requirement for personalized medicine and support the regulatory push from authorities for transparency. This report talks about key themes that dominated the life sciences market in 2017. It lists the top 15 life sciences service providers based on four life sciences PEAK Matrix™ BP and IT services evaluations done in 2017, and gives a brief description of 2018 market outlook
2. **Hot Life Sciences Startups: Friends, Foes, and Frenemies in the Innovation Ecosystem** ([EGR-2017-12-R-2124](#)); March 2017. In this report, starting with a long list of over 150 candidates, we analyze 20 hot life sciences startups across three investment areas – drug discovery / product development, clinical and pre-clinical trials, and sales and marketing
3. **Life Sciences IT Application Services – Service Provider Landscape with PEAK Matrix™ Assessment 2017** ([EGR-2017-12-R-2180](#)); May 2017. This report covers life sciences IT application services market trends, the landscape of service providers for life sciences IT application services, assessment of the service providers on a number of capability-related dimensions, and implications for life sciences IT application buyers and service providers

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