

Triton Consulting

DevOps for Data

Introduction

Businesses have always been under pressure to deliver new services, new products, new channels to market. Keeping ahead of the competition, meeting customer's expectations and exploiting new business opportunities has never been more critical to success than it is today.

Most business change brings associated Information Technology requirements and new developments, but can IT departments deliver alongside the business when it's wanted, with a solution that meets the business and customer needs? That's the aim of DevOps.

DevOps principles offer a proven way to improve both the agility of IT development teams and the quality of the delivered application, but in the past the emphasis has been largely on the application code. DevOps for Data addresses the equally important challenge of delivering the associated database changes needed to underpin new application development in an agile, rapid and low risk way.



DevOps is an approach to culture, automation, and platform design intended to deliver increased business value and responsiveness through rapid, high-quality service delivery.” - **Red Hat**

DevOps for Data

Getting the data element of DevOps right is key to the success of any new development and to the overall business benefits:



Shortens IT change and delivery timescales

The business and IT can deliver change in a more agile and timely fashion, changing delivery timescales from months into weeks or days.



Better utilises resources

Existing staff skills are concentrated on higher-value tasks, while automation handles the mundane. Systems that currently sit idle on expensive hardware are virtualised and active only when required. Costs can be controlled or reduced across the enterprise.



Delivers a more reliable solution

The approach adopted by DevOps means the solution is more likely to be of high quality and right first time.



Modernises data and facilitates AI

Allows databases of any vintage or platform to participate in modern architectural and development projects with toolsets familiar to the next generation of developers and data scientists. Take advantage of the latest data innovations without replacing your existing data infrastructure.

Triton's DevOps for Data Consultancy

A successful implementation of DevOps principles will often underpin a business's drive for more rapid change with IT able to deliver alongside the business at speed; with greater quality; and acceptance of the end customer.

Triton's proven approach and experienced consulting team can ensure the data requirements are met. Triton can be engaged in any of three independent phases:

Phase	Description	Deliverables	Timescales
DevOps for Data Maturity Evaluation	An evaluation of your current application development and operational processes for managing data, objectively comparing against industry best practice and highlighting opportunities for improvement.	Maturity Evaluation Report, grading key aspects of your environment and highlighting opportunities to improve agility and/or application quality through better data management.	3-5 days
DevOps for Data Planning Services	Development of a realistic plan for implementing DevOps tools, processes and culture change for data management, working interactively with the owners and practitioners of the current services, and with any existing DevOps initiatives.	A realistic DevOps for Data implementation plan, fully integrated with any existing DevOps initiatives.	5-10 days
DevOps for Data Implementation Services	Expert services to assist with the actual implementation of DevOps for Data practices, tools and processes. Work will be conducted in close cooperation with Client's staff, ensuring efficient skills transfer as part of the engagement.	An enhanced set of tools, processes and skills for managing data throughout the application life cycle, with quantifiable improvements in application quality and/or delivery agility.	Varies depending on work required.

Triton's DevOps for Data Services will significantly reduce the risk associated with the introduction of this new approach to agile application development.

Our Client experience

Clients today are starting to address the challenge presented in implementing Dev Ops processes and practices. The engagement here describes the early stage of the journey started by one of the UK's retail banks.

A large financial institution wished to implement DevOps practices for their mainframe platform to increase the speed and quality of development. A "velocity mismatch" between application and database change was negating many of the potential benefits of the institution's DevOps initiative. Triton Consulting were asked to design, develop and deploy a solution that would automate the deployment of DB2 schema changes, without compromising the quality or stability of the production environment.

Given that BMC's Change Manager was already known and trusted by the DBAs, it was decided to base the automated deployment around the proven capabilities of this product. Triton implemented a robust methodology, honed to the extent that the entire end-to-end process would run reliably as a set of batch jobs.

As IBM's UrbanCode Deploy (UCD) product was already widely used as the standard way of deploying code, it was a natural choice to also adopt it to orchestrate the Change Manager batch jobs. This allowed DB2 schema changes to be easily deployed alongside code changes, while UCD's GUI interface made the deployment process more accessible to non-mainframe developers.

The automation has transformed the client's approach to deploying DB2 schema changes. Developers and engineers can now use a modern GUI to specify changes to their DB2 data model, with quality checks ensuring that only "clean" DDL is available on the mainframe for deployment. Schema changes can be requested simply by dragging a Jira ticket to a new column, and deployments that require both code and database changes can be easily coordinated within a single request. Skilled DBAs no longer need to manually re-type changes and mindlessly deploy them to environment after environment, and can spend their valuable time on higher-value activities such as tuning and problem diagnosis.

Above all, the classic promise of [DevOps](#) has been realised: development cycle times have been significantly reduced while the quality and reliability of each deployment has improved. The customer has repeated this approach for several other aspects of their mainframe environment, including DB2 REST Services and CICS application definitions.

[Download the case study](#)

About Triton

Triton Consulting are experts in Hybrid Data Management and Digital Transformation. The company's team of consultants represent some of the most highly experienced and qualified in the industry, and are able to advise on a full range of information management solutions from IBM and the major cloud vendors. Triton are internationally recognised for their expertise and can boast three IBM Gold Consultants and seven IBM Champions for Data and AI, with consultants certified on AWS, Azure, GCP and IBM cloud platforms.

Triton Consulting has been providing consultancy services for over 25 years. As well as expert consultancy in all areas of information management, Triton Consulting also cover a wider spectrum of high level consultancy including senior project management, technical planning, technical architecture, performance tuning and systems programming.

Find out more about Triton
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