



Delphix for Telecommunications

002

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The Telecommunications (“telecom”) industry provides the foundation for global e-commerce and connectivity by providing the backbone for data, voice, video and internet and cloud services.

A unified data strategy is critical for telecom IT teams to handle customer and internal demands for data privacy, accelerated development and release of new capabilities, data analytics to better understand customer needs, and transformation of order to activation and billing applications. By embracing a comprehensive data strategy, telecom providers can effectively secure, manage, and distribute data for transformational change across the organization.

The background of the slide features a complex architectural or engineering drawing. It includes various geometric shapes such as circles, arcs, and straight lines. There are numerous small labels scattered throughout, including 'R1', 'H', '1a', '1b', 'AA', 'BB', 'C/D', 'd', 'K2', 'L', 'F1', 'U2', 'K4', 'C3', 'B-B', '6', '5-5', 'D', and 'B3'. Some areas are shaded with fine lines, and there are dashed lines indicating specific paths or boundaries.

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Telecom Industry Trends and Challenges

Faster Networks

Disruptive technologies are constantly redefining the telecom industry driving continuous evolution from 2G/3G/4G to now 5G networks. These bigger and faster networks carry the promise of higher revenues through new data, video and internet services. By measuring customer data and analytics such as call patterns, data usage metrics etc., telecom providers can drive targeted expansion in locations with higher utilization and rapidly grow their customer base.

Industry Consolidation

Mergers and acquisition levels in the sector are a popular means of achieving a “quad play” offering (mobile, fixed line, cable, internet) or penetrating high growth emerging markets. The related upsell strategy raises the importance of access to data and business intelligence to proactively address customer problems, minimize attrition and improve upsell marketing efforts.

Telecom Partnership Ecosystem

Telecom providers are looking to partners to more rapidly build, execute, and monetize on market-creating consumer solutions, such as mHealth and mPayments. A successful partner ecosystem requires fast and secure data exchange to enable development and testing of integrated solutions.

Regulatory Compliance

Carriers have adopted a strategy of realizing economies of scale and the average telecom provider has millions of customers resulting in generating large amounts of sensitive data. Regulations such as GDPR, CCPA, and LGPD enforce strict data privacy and security requirements on sensitive customer data. The telecom sector also faces growing regulatory pressure to securely store the data call detail records (CDRs) and internet session activity for multiple years. Failure to do so may result in significant legal ramifications and monetary losses.

Telecom companies need a data platform to address the revenue opportunity of massive network upgrades, integration of acquired companies, demand for secure data access and regulatory compliance.

Delphix DevOps Data Platform for Telecom

The Delphix DevOps Data Platform enables fast, automated, and secure management of data, eliminating delays across the data-fulfillment lifecycle, from request to consumption. Telecom companies need fast, compliant, and lightweight data to address the revenue opportunities from massive network upgrades, integration of acquired companies, demand for secure data access and regulatory compliance.

Delphix provides an API-first data platform that spans the multi-cloud and supports everything from cloud-native apps to legacy mainframes. Delphix automates a range of critical, complex data operations—including compliance with privacy regulations and delivering data into development, testing, QA, analytics, and AI/ML environments. With Delphix, telecom companies can manage data distribution and access with the speed, simplicity, and level of security required to drive digital transformation.

Sample Data Sources

SAP ERP



mPayments
Partner Application



Charging and
Billing Systems



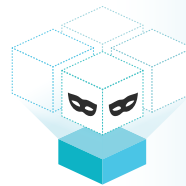
Forecast
Management System



Customer
Support Systems



Mobile Applications



D E L P H I X

Data Environments



DBA

Merge, clean, and validate data from acquisitions



Development & QA Team

Integrate mPayments Application into Mobile Service Offering



IT Operations

Migrate business-critical applications to AWS



Customer Retention Team

Predict mobile customer churn



Loyalty Program Management

Develop tailored loyalty services and podcasts



Development & QA Team

Update and maintain microservices for customer self-service portal

Telecom Use Cases and Delphix Benefits

Accelerate Application Development

Telecom providers are leveraging DevOps and Microservices for faster application development and release of new capabilities to customers. The Delphix DevOps Data Platform accelerates mission-critical application development projects and enables transformation of customer experiences, such as faster order-to-activation, personalized apps, and more accurate customer billing.

Benefits of Delphix for Rapid Development and Release:

- » Faster provisioning of data from weeks, days to minutes
- » High quality production-like data, shift left testing to eliminate data-related defects
- » API controls to refresh, rewind, bookmark, version, restore, branch etc.

Data Privacy and Compliance

Compliance regulations for VoIP, Video, payment data, demographic data etc. require telecom providers to store large volumes of data for long periods of time. With regulations like GDPR, CCPA, and LGPD, telecom providers also need to ensure privacy protection for sensitive customer data. Delphix masking enables and simplifies data privacy and regulatory compliance.

Benefits of Delphix for Data Privacy and Compliance:

- » Identify sensitive data to understand and mitigate risk
- » Mask data and maintain referential integrity to address data privacy and regulatory compliance requirements
- » Govern the flow/distribution of data from a single point of control

Streamline M&A

Mergers and acquisitions are crucial for telecom companies to capitalize on new growth opportunities, extend product portfolios, and enter new markets, but consolidating IT infrastructure and merging data are often the biggest hurdles to success. Delphix helps to streamline mergers and acquisitions by giving IT teams flexible data environments to rapidly merge, cleanse, test, and validate data from joining entities.

Benefits of Delphix for Streamlining M&A:

- » Create lightweight, virtual data copies in minutes, without impacting production systems
- » Merge and cleanse data within virtual copies with the ability to instantly refresh or rewind data
- » Accelerate application testing via API data control for QA teams

Expand Revenue Generating Offerings with Partners

Telecom providers need to quickly and securely share data with partners to add innovative and differentiated services, such as mPayments, mHealth apps, and media content. Delphix data virtualization and masking accelerate secure data sharing and integration of partner services and applications.

Benefits of Delphix for Partner Collaboration:

- » Provide partners with virtualized data copies of the latest production state
- » Securely mask personally identifiable customer information in virtualized data
- » Easily test end-to-end partner integrations using secure data environments

Data Analytics and Business Intelligence

Telecom providers need to analyze both structured and unstructured data to get deeper insights into customer behavior, usage patterns, device data, location data, etc. Delphix provides the ability to feed data into modern data pipelines, connect directly to machine learning workbenches for model training and development, and funnel data into ML-enabled applications and services.

Benefits of Delphix for Data Analytics and Business Intelligence:

- » Seamless connectivity to machine learning services
- » Masking of sensitive data for non-production access, 3rd party analysis etc.
- » API controls, such as bookmarking training state, for ML models



Amazon Web Services allows teams to quickly spin up and tear down infrastructure at unprecedented speeds. But without a sound methodology to also deliver secure, high-quality data to that infrastructure—and at a similar, accelerated pace—the telecom company would be unable to maximize the cloud-related benefit of rapid time to market.

Customer Case Studies

A top 5 US Telecom company has leveraged Delphix to accelerate time to market, increase cloud security resulting in increased customer trust, expanded user base and significantly reduced legal and capital expenditure. Here are key benefits delivered:

- » Automatically mask sensitive data values such as names, email addresses, and payment information before moving that secure data to AWS.
- » Eliminate data-related defects in production by allowing QA teams to test with full, fresh data copies instead of synthetic or subsetting data.
- » Decrease storage costs in AWS by leveraging virtual instead of physical data copies.

Fastweb, one of the leading telecom operators in Italy, with over 2.12 million customers, provides internet, telephone/mobile, and digital television offerings as well as cloud computing, security, and unified communications services. To support business growth, Fastweb embarked on a modernization program to increase agility, optimize infrastructure, and support DevOps and continuous delivery initiatives. The new program demanded shorter development cycles, rapid access to data, and flexible development environments. Fastweb turned to Delphix to enhance customers' digital experience through continuous delivery.

Here are key benefits delivered:

- » Reduced time to provision an environment from over a week to one or two hours
- » Improved test data quality, enabling project teams to find more bugs earlier
- » Refresh data daily vs monthly via API automation, nearly eliminating data errors
- » CapEx savings avoiding costs for 150TB of production data storage and reduced non-production storage requirements by 80%

Delphix has enabled true continuous delivery, making us more competitive, improving the quality of our services, and helping us drive business growth.

Marco Guadagnini, Operations Infrastructure Manager, Fastweb



Summary

The telecom industry has the unique opportunity to drive innovation that touches millions of people globally. Fast and secure access to data is critical to deliver superior, differentiated customer experiences while operating at a massive scale. With the Delphix DevOps Data Platform, telecom companies can deliver higher customer satisfaction, address telecom industry challenges, increase business ROI and reduce costs.

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D E L P H I X

Delphix is the industry leading data company for DevOps.

Data is critical for testing application releases, modernization, cloud adoption, and AI/ML programs. We provide an automated DevOps data platform for all enterprise applications. Delphix masks data for privacy compliance, secures data from ransomware, and delivers efficient, virtualized data for CI/CD.

Our platform includes essential DevOps APIs for data provisioning, refresh, rewind, integration, and version control. Leading companies, including UKG, Choice Hotels, J.B. Hunt, and Fannie Mae, use Delphix to accelerate digital transformation. For more information, visit www.delphix.com or follow us on [LinkedIn](#), [Twitter](#), and [Facebook](#).

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000241