Blacklight SOLUTIONS

LIGHTHOUSE

Case Study: Impact Telecom Early Warning System

About Impact Telecom

⇒ Impact Telecom is a leader in the telecommunications market, with a complex network that encompasses nationwide IP, interconnection facilities, fiber interconnects and switching operations.

⇒ This network routes new calls upwards of 1,000 times per second and carries a load of half a million calls during any given five-minute period. The company's revenue is tied to the quality and stability of calls, as well as how quickly connections are made.

⇒ To optimize network efficiency, Impact Telecom has built a data management system that downloads and tracks every call in the system every five minutes – 90 million calls per day. This data is analyzed to determine the price and quality of routes selected, report performance indicators, identify network issues and set pricing strategies.

> "
> *Our business is to complete calls. The efficiency and quality of our call routing directly impacts the company's revenue base.*
>
> *– David Shifley, SVP Information Technology*
> "

impact telecom

Blacklight
SOLUTIONS

Impact Telecom – Business Needs

With the growing complexity and volume of data that Impact Telecom processes every day, the company needed solutions for several business problems:

⇒ Real-time identification of network issues and visibility into performance trends over time.

⇒ Advance warning of environmental impacts to network performance to mitigate customer impact.

⇒ Analytics on call-routing data to optimize pricing strategy and maximize revenue realization.

⇒ Scaling of data processing and management processes to keep pace with operational needs.

Impact Telecom – Business Needs

> " *The network needs to process large amounts of data quickly and consistently in order to meet growing performance demands. In addition, we need to be able to surface analytics on call routing and quality as the basis for our pricing strategy. Our system must process millions of routing decisions per hour, and network outages or poor call quality can have a significant customer impact.*
>
> *– David Shifley, SVP Information Technology* "

Impact Telecom – Current System Configuration

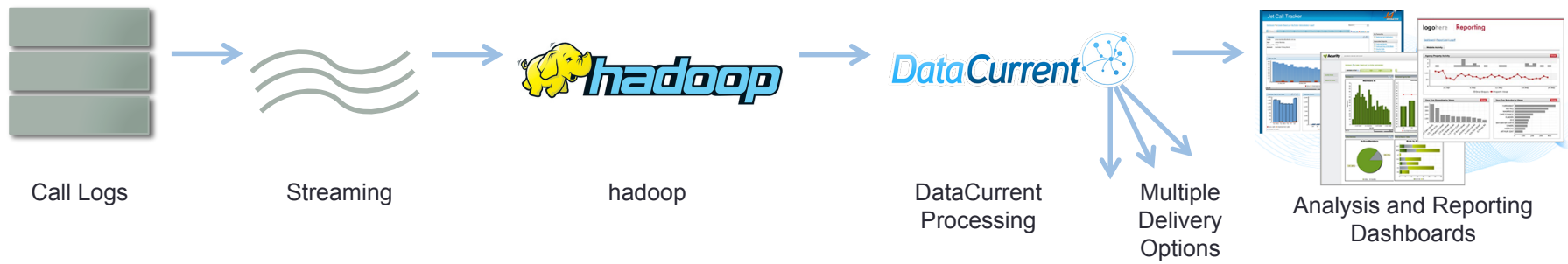Call Logs   Business Rules Application   Database   Intranet Portal
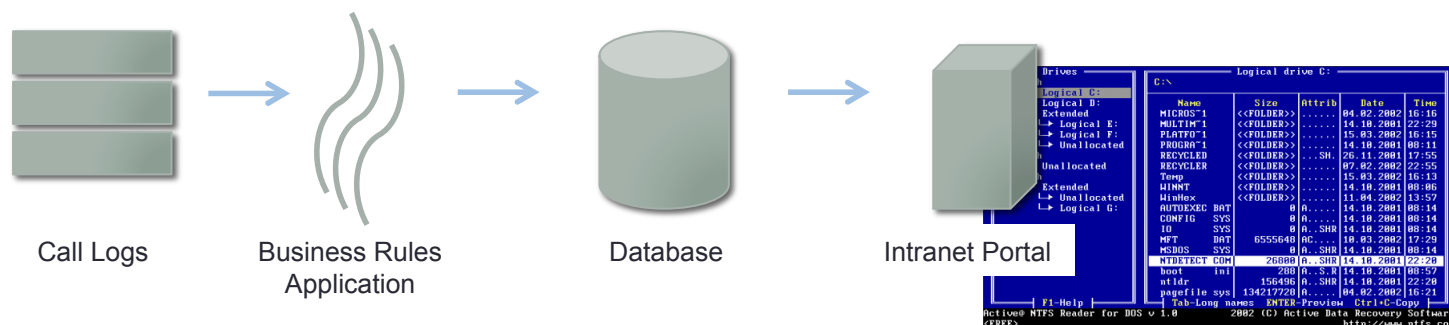
PAIN POINTS

⇒ It could take 24 hours to identify and address environmental impacts to the network, leading to lags in updating pricing and routing.

⇒ System processing outages could take a full day to resolve, leaving the business in the dark on network performance.

⇒ Limited analysis and reporting capabilities to surface performance insights.

⇒ System would be more efficient with the application of advanced decisioning technology based on analysis of historical data.

Blacklight Solutions' Approach

⇒ As an applied analytics solutions company, we help our clients solve business problems by making their data work for them.

⇒ With decades of experience in software development, our team has built solutions for high-performance data issues that generate millions of dollars annually in realized revenue and new business gains for our clients.

⇒ Our consultants work side-by-side with our clients to identify business problems and implement the right data management solution.

⇒ Blacklight Solutions can leverage our own technology that glues data processing tools together to provide seamless integration and meaningful analytics.

Solution – How it Works

Call Logs   Streaming   hadoop   DataCurrent Processing   Multiple Delivery Options   Analysis and Reporting Dashboards

⇒ We introduced modern data management tools and built a framework to categorize and store all of the incoming data quickly and efficiently.

⇒ We connected this data source to our data analytics software, DataCurrent, to search for system failures and identify performance indicators.

⇒ We then overlaid a business intelligence reporting tool to quickly and easily visualize the data analytics.

⇒ To increase efficiency, we implemented Lighthouse Early Warning System that will trigger real-time push intelligence notifications when there are network issues.

Blacklight SOLUTIONS

Business Impact

⇒ Impact Telecom made 10,000+ system configuration updates based on the new analytics capabilities to improve network efficiency.

⇒ Data processing improvements enabled the company to optimize routing strategies and increase revenue realization

⇒ Lighthouse Early Warning System recognizes changes in system performance and provides real-time alerts when there are issues.

⇒ The company can now easily track and report on measures such as post-dial delay, route termination and call quality.

⇒ Analysis and reporting on performance at a regional level was made possible for the first time.

Blacklight
SOLUTIONS

Business Impact

" _The Early Warning System Blacklight Solutions implemented has made a significant impact on our network management processes. We are now able to use more sophisticated, real-time decisioning, and have greater insight and reporting on performance measures. The push notifications ensure that the right people on the team are notified and can rapidly address any issues._

– David Shifley, SVP Information Technology "

Blacklight Solutions – Who We Are

⇒ Founded in 2009, Blacklight Solutions has deep experience building and deploying applied analytics products to solve business problems.

⇒ We work with clients across more than 15 verticals, including advertising, healthcare, telecommunications and financial services.

⇒ Our leadership has more than 60 years of experience in software development.

⇒ Blacklight Solutions' clients realize millions of dollars annually in protected or new revenue.

⇒ Our offerings include:

- Embedded Analytics for client product applications
- Intelligent Early Warning Systems with push notifications
- Scaling and integration of data management operations
- Predictive analytics modeling, forecasting and visualization
- Real-time service delivery pricing and process optimization
- Licensing, billing and compliance tracking and reporting
- Marketing mix impact, advertising transaction tracking and user analytics

Blacklight
SOLUTIONS

Contact Us

Blacklight SOLUTIONS

CONTACT US

Email: info@blacklightsolutions.com

Phone: 512.795.0855

Web: www.blacklightsolutions.com

Twitter: @blacklightllc