

STL Digital Billing and Revenue Management (dBRM)

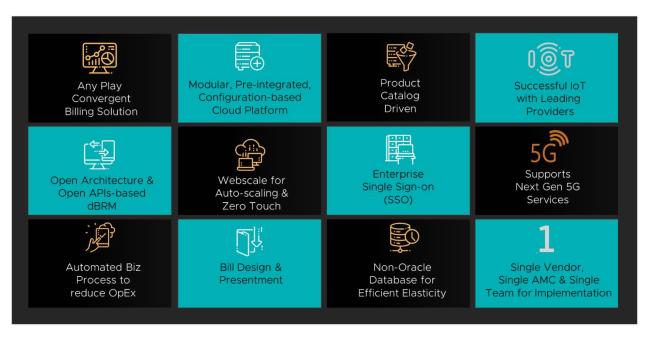
Revenue Accelerator in Multi-service & Multi-technology

STL dBRM is a carrier-grade, convergent Billing and Revenue Management solution that enables next generation data, voice and video services over wireline and wireless networks. A comprehensive Billing ecosystem – STL dBRM, is not just limited to real-time rating, convergent billing, invoicing, partner management and self-care. It is the mission-critical, best-of-suite monetization platform for any-play Retail, Enterprise and Partner billing. It not only helps accelerate revenues but also prevents revenue leakage drastically – thus giving back complete control to you over the twin business drivers.

Powered by DevOps, Analytics, Webscale, Network Software (DAWN), dBRM is a robust platform that fulfils wide spectrum of care and commerce needs for both Retail and Enterprise digital journeys. The Cloud-ready dBRM seamlessly combines its real-time capabilities with the flexibility, reliability and scalability necessary for CSPs to transform into a Digital Services Providers (DSPs). Whether launching new digital services, on-boarding new lines of business or looking to achieve agile operations with DevOps, dBRM helps CSPs accomplish with ease.

Through standards-based API, it easily interoperates with any third party system, independent of technology barriers. STL dBRM supports open standards and innovative technologies for billing and rating of a rich basket of services like 5G, Mobile, Broadband, VoIP, Wi-Fi, cable, wireless/wireline, LTE and more. Also, it is compliant with eTOM processes - TM Forum's Business Process Framework.

Highlights



Advantage dBRM

Support for microservices, easy ecosystem

end-to-end deployment tool covering

integration and automation tools, Simple and

development to live production environment

STL dBRM helps CSPs to accelerate on their path to becoming a digital service provider via digital billing innovation. It is a complete convergent solution with a unified view for prepaid, post-paid and single bill to customers for multiple services.

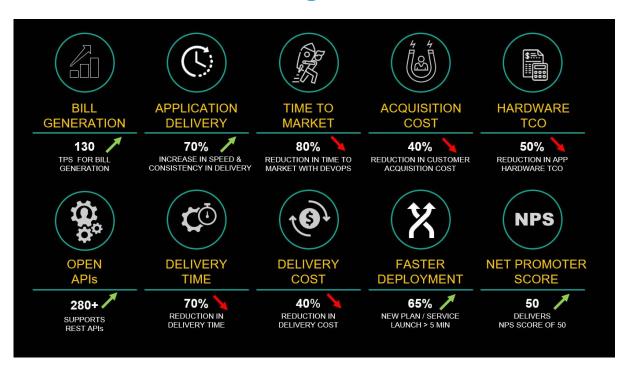
High Revenue, High Margins **Prevents Revenue Leakage** With dBRM, CSPs can launch new revenue The platform offers complete control over billing generating packages quickly. It enables and customer care with a central repository of operators to roll out complex bundled plans, customer and service level data that can be create fine market segmentation, attract and plugged into other modules, easy interface with retain high value customers. Also improves network elements, efficient content and channel Average Revenue per User (ARPU) and expands partner management, preventing billing errors share of wallet usage by cross-selling and upand revenue leakage. selling of services, cross-discounts and promotions. **Low Cost of Integration & Operation Single Subscriber View** The billing system delivers compelling cost of Enables operators to manage the entire ownership, cost efficient scalability and subscriber relationship management through a enhanced system availability. It also reduces single solution integrating customer care and operating expenses by automating system Billing. It is a unified platform that offers a single supervision and management through revenue bill to customers for multiple services over management, partner management, Open APIsmultiple networks. This leads to more informed based self-care and CRM, real-time revenue business decisions by faster, accurate and assurance and transaction management. accessible view of business metrics. **Enhanced Customer Experience Future Proof Solution** dBRM enables CSPs to easily manage day-to-Functioning on a J2EE-based, fully day operations that are very essential to create customizable, modular architecture, the platform a wow factor to enhance customer experience. It offers high scalability and flexibility with full provides an end-to-end, impact-oriented, systemic revamps as well as modular positive customer experiences via Dialoguereplacements. Open APIs ensure extremely short based order store, Reduced Cycle Time, Right and cost-effective deployments while retaining first time, Self-monitoring + service Activation flexibility to accommodate future next and notifications push via WhatsApp, SMS, generation services easily. Email. **Faster Time to Market** Dependable, Robust Technology DevOps-based delivery model fast forwards Delivers high performance, high stability idea-to-install and time-to-market new services. (99.999% uptime) and super scalability. Being an

access-agnostic platform built on multi-tiered

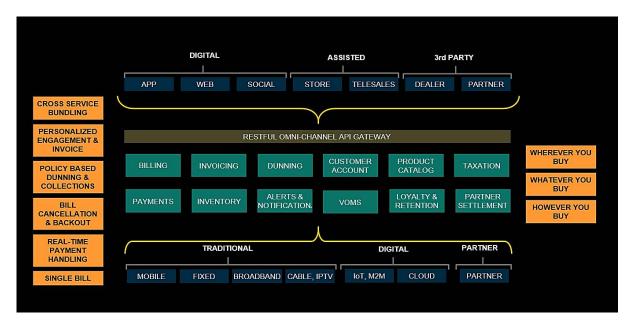
super easy and reliable.

architecture, integration with leading equipment vendors and standard-based interfaces becomes

STL dBRM KPIs: Measuring the Benefits



dBRM Functional Architecture



Product Lifecycle Management

- Robust product catalogue management
- Enables providers of rapid deployment of variety of plans, bundling enterprise tariffs and defining and managing of service level agreements on variety of parameters thus reducing time to market

- Built on strong foundations of J2EE and supports open standards for easy integration with other systems such as Order Management Systems, Provisioning Systems, and SLA Monitoring Systems.
- Launch bundled offerings in the market, increase ARPUs and seamlessly address the new age digital customer needs

Inventory Management

- Create and manage logical inventory of all types of hardware such as SIM cards, CPEs like handsets, modems, prepaid cards and recharge cards (vouchers), etc.
- Inventory Lifecycle Management- Tracking & Blacklisting of inventory/numbers, Status change
- Inventory Order & Warehouse Management; Dynamic pairing & un-pairing support

Billing Management

- Integrates Retail, Corporate and Partner billing on a single platform
- Supports invoices for prepaid and postpaid customers
- Allows different types of invoices such as Sales invoice, Regular Invoice, On-demand invoice, Invoice for Advance Collection, and Bill Aggregation
- Split bill between billing accounts (Employee and Employer) based on various business rules

Bill Formatting

- dBRM provides Bill formatting utilities, which can be used to generate final formatted bills as per operator need.
- Bill formatters take the raw output data produced by the Billing Engine. These invoices
 are sent to the bill printing company, who takes care of generating the final copy of the
 generating invoice.
- Finally printed bills are shared with customers

Dunning

- Provides complete Dunning lifecycle such as Dunning Request (Pre-screening Entity),
 Dunning Unit, Dunning Actions, Future Actions, Reversal Actions along with tracking and audit
- Invoice-level and Account-level dunning types along with dunning notifications are available
- Supports third party integration such as Payment, Billing, CAM with Dunning
- Dunning bulk operations can be done on full spectrum of dunning actions
- Automated engine for dunning Unit Collector Services, various Queue Services and unsnooze etc.

Payments & Collection

- Single payment against multiple invoices
- Multiple modes of payment collection like cash, cheque, coupon, credit/debit card, direct debit, demand draft etc.

- Supports generation of credit & debit notes
- Online payment integration
- Supports partial & advance payment, payment reversal, Refund and Transfer Deposits
- Bulk payment upload

Open APIs for Self-Care & CRM

- dBRM has more than 280 REST APIs
- These APIs used by external systems like CRM, self-care and so on
- Easier to integrate REST with present sites without refactoring website infrastructure.
- These APIs provide Catalogue, Customer, Payment, Bill, Adjustment and many more details

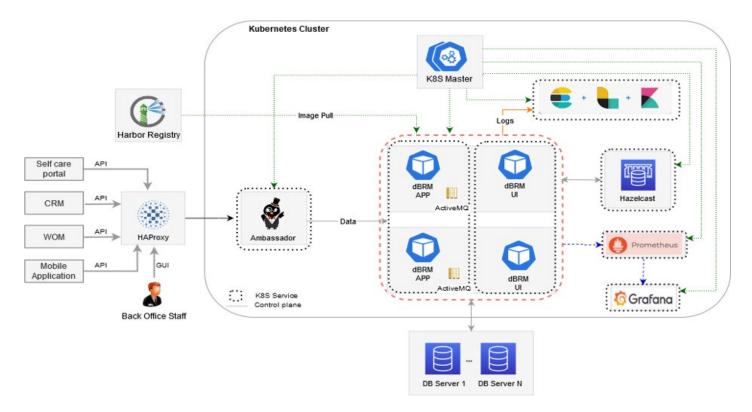
Analytics-driven Personalisation

- Intellza (STLs Analytics Platform) generates insights across the business value chain benefiting both subscribers and partners.
- Loyalty and Retention module along with Recommendation engine provide personalized engagement to customers across touchpoints with analytics driven campaigns.
- Segment users and recommend next best actions based on advanced data analysis.

Services and Billing Systems Mapping

Service Product Catalogue	Charge Items	Billing Type & Charge Pattern
 Internet leased line MPLS Ethernet IPLC /NPLC Content Delivery Network 	 Charge Types: Fixed & Usage Fixed: Based on bandwidth Usage: volume & time 	 Prepaid billing (Advanced billing - monthly bimonthly, half yearly Annually) Percentile based billing average billing (real-time billing based on CDRs), Postpaid billing (monthly, bimonthly, Bill in arrears)
 Cloud-based DDos Unified threat management devices Intrusion detection & prevention system Managed firewalls 	 Charge types Fixed & usage Fixed: Based on bandwidth, boxes or units Usage: Based on volume, Routes, application usage 	 Prepaid billing (Advanced billing - monthly bimonthly, half yearly Annually) Postpaid billing (monthly, bimonthly, half yearly in arrears)
Co-locationManaged hosting	 Charge types Fixed Fixed: Based on bandwidth, Rackspace, size volume of traffic, etc. 	 Prepaid billing (Advanced billing - monthly bimonthly, half yearly Annually) Postpaid billing (monthly, bimonthly, half yearly in arrears)

dBRM Technical Architecture



Built on microservices architecture, dBRM gives unparalleled agility to CSPs on the journey of becoming Digital Services Providers (DSPs). It is a web-scale platform that provides a "containerized ecosystem" edge built on cloud best practices. With fully-modular architecture of dBRM, CSPs have the option to choose only relevant components. This enables CSPs to address their immediate problems pointedly without having to go through long transformation.

Why STL?

- Solid track record of 15+ years in offering high quality, cost effective, future ready solutions.
- Experience working with 70+ operators with over 40+ dBRM/dBSS implementations
- 25+ successful OCS implementations across LTE, 2G/3G, IMS, Wireline/ ADSL, IPTV, Wi-Fi, WiMAX, CDMA, PSTN
- Multiple Broadband and LTE solution deployments in production across the globe
- Proven repetitive business with Tier-1 customers across SAARC, EMEA & SEA regions
- Transformation experience in Data Migration from legacy systems for Tier-1 providers
- Open Architecture ensures extremely short and cost-effective deployments while retaining flexibility to accommodate next generation services easily.
- Delivers large-scale Digital Transformation projects, Change Management & Phased Migration approach with Parallel Run Strategy enabling operator to roll out converged services before complete migration is done

Start the Digital Reinvention Now

The Cloud-ready dBRM seamlessly combines its real-time capabilities with the flexibility, reliability and scalability necessary for CSPs to transform into a DSP. Whether launching new digital services, on-boarding new lines of business or looking to achieve agile operations with DevOps, dBRM helps CSPs to accelerate on their path to becoming a digital service provider.

- Monetize any service, any market and any device, and offer innovative service bundles and apply real-time incentives across all lines of business
- Get never-seen-before agility in marketing and sales. Empower the team to motivate the customers towards more valuable service usage and spending by intelligent pricing offers and services in ways that are compelling to the end customer
- Faster, leaner and agile operations through web-scale BSS/OSS stack, supporting NFV standards for private cloud deployment, giving CSPs a choice to select what best suit them



for more details visit www.stl.tech