



UniServe™ STEM – A Solution to Address Telecommunications Expense Management Challenges

ABSTRACT

With the ever-increasing use of mobile devices, the internet and corporate networks, large organizations find it difficult to handle and analyze considerable amount of billing data. In most cases, companies also hold multiple contracts with numerous TSPs in many different locations. This makes it more problematic to consolidate the data. In addition, billing information is often provided in different formats and full of errors. Understanding and managing these rising telecom expenses has become a big challenge to the organizations. Corporates have legacy systems in place to perform these tasks but they are not equipped enough to mitigate the issues and manage telecom expenses.

This white paper talks about a solution that allows organizations to remain in control of their telecom expenses, whilst being continually informed of future saving opportunities without ripping and replacing the existing IT systems.

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01 INTRODUCTION



Voice and data services are the most significant players of any business operation in this digital age of instant communication. Enterprises of any size typically use a wide array of telecommunications-related services ranging from toll-free numbers, e-mail, local & long-distance telephone services, wireless services, mobile, video and voice conference services with 3G/4G data connection, inter-office networks, routers, switches, wire line services and many more. All these different services combined add up to a significant portion of a business' cost of operation.

“Organizations can save 10% to 30% of telecom costs by using a telecom expense management system, ”

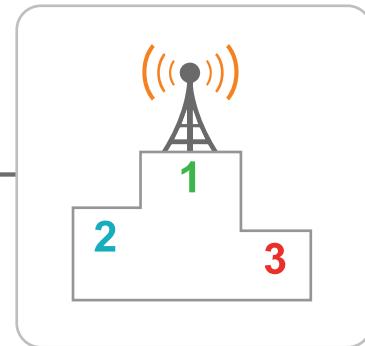
- Gartner

“According to research conducted by the Aberdeen Group, an average small to medium business spent about \$26 million a year while an average Fortune 500 company spent about \$116 million a year on telecommunications alone.”

IDC Research Group's study reveals, “Telecommunications costs are on average not only the second largest indirect expense, but also the third or fourth largest expense overall for a business.” Out of such staggering escalating costs nearly 7-12% were in error which amounts to an average of 2-3 million USD that can easily be saved every year.

In order to scrutinize telecom expenses, have better visibility and greater control over communication expenses and cost savings, organizations require a Telecom Expense Management (TEM) application.

02 TELECOM CHALLENGES OF AN ENTERPRISE



The biggest telecom challenge of an enterprise is getting all of their telecom related expenses across all business units, platforms and devices, around the world into one complete, consolidated view that gives total control to manage costs more effectively. Enterprises need resources, knowledge and automation to accomplish this goal. Some of the major telecom challenges of an enterprise have been highlighted in (Figure 1).

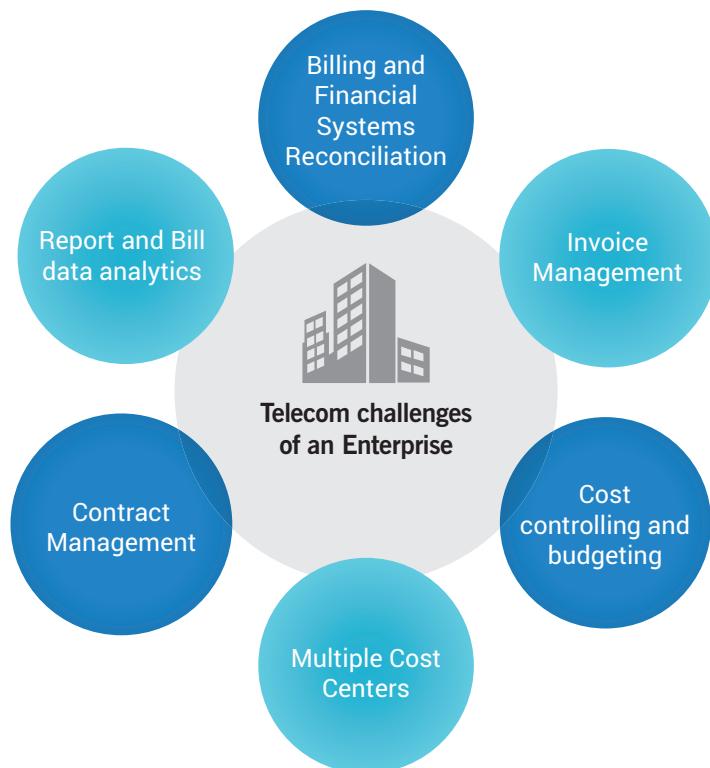


Figure 1. Enterprise Telecom Challenges

2.1. Multiple Cost Centers

In order to improve agility in operations and offer better customer service, enterprises today have offices in different locations. These offices also have departments and sub-departments with cost centers to manage expenses which require different services for communication and data transmission (Figure 2).

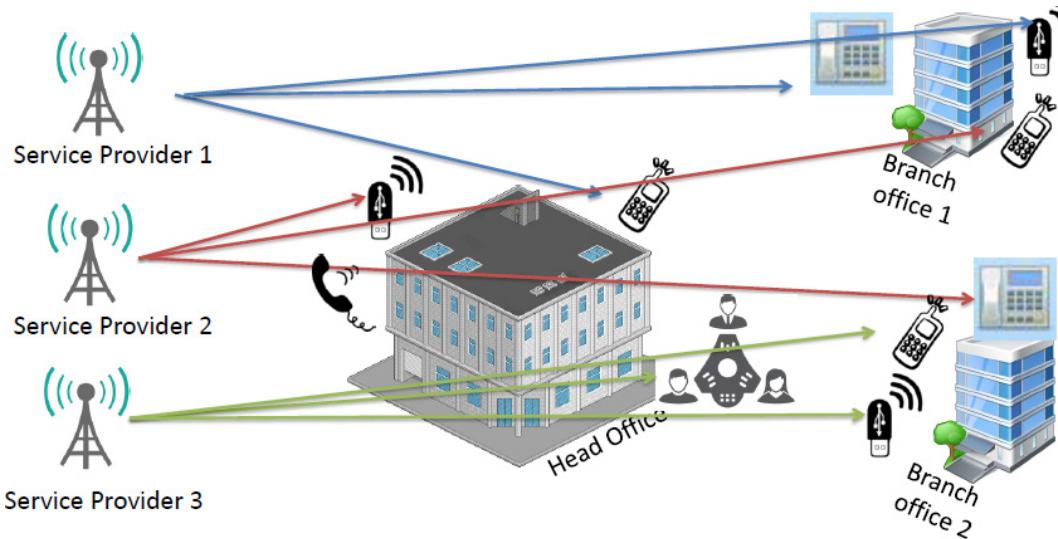


Figure 2. Multiple Cost Centers

TSPs are unable to cater to such demands as their back-end billing systems do not allow for multiple level hierarchy creation or bill generation. And they are also not capable to extract, collate and format the expenses for all cost centers as it requires a robust application to automate the entire process.

2.2. Invoice Management

Many large enterprises do not have proper understanding of their telecommunications expenditure. This is somewhat due to the fact that they receive hundreds, sometimes thousands of invoices monthly for the telecom assets and services consumed. Organizations require an exact and up-to-date inventory of telecom assets and services. But it is a challenge because there are thousands of corporate rate plans. So, it is quite obvious that the invoices can be tens to hundreds of pages long depending on the type of asset or service. Processing validating, auditing, and approving of all the invoices is an extremely cumbersome task. Inefficient processing can lead to late payment penalties and uncontrolled service disconnects.

2.3. Contract Management

Enterprises enter into contract (SLA) with TSPs for multiple products and services which need to be renewed, and terms and conditions to be revised. Often, these activities are done by manual intervention and any error or slip-up results in huge losses to the enterprise. An intelligent contract management system enables enterprises to monitor contract compliance and suggest areas of cost reduction. In addition, it allows easy access to relevant contracts from a centralized system and also helps to manage all their contracts better with timely reminders.

2.4. Report and Bill Data Analytics

In order to monitor mobility expenses, enterprises require an intelligent contract analysis system – a system that not only generates the required reports but also combines the ability to evaluate carrier plans for optimal adjustment. With powerful cost analysis from bill data, enterprises can have better understanding of the expenses and perform fine-tuning.

2.5. Billing and Financial Systems Reconciliation

Billing challenges are followed by payment challenges for the organizations. Many Debit and Credit notes that are raised for an enterprise during dispute resolution or under or over billing scenarios get lost or misplaced as most often these are manual activities or there is no proper authentic process to take care of such scenarios. This leads to huge reconciliation problems for the accounting and financial systems. Payments are often made against services delivered, but due to the lack of a single view or portal of the number of services consumed and their charges poses a problem for TSPs to realize payments on time. Enterprises often demand a detailed view of services consumed which TSPs are unable to provide in a timely manner.

2.6. Cost Controlling and Budgeting

Telecommunications and network services have turned out to be a significant, top line operating expense for most enterprises. It is the primary aim of all the enterprises to control these expenses and set budget for all the services they consume.

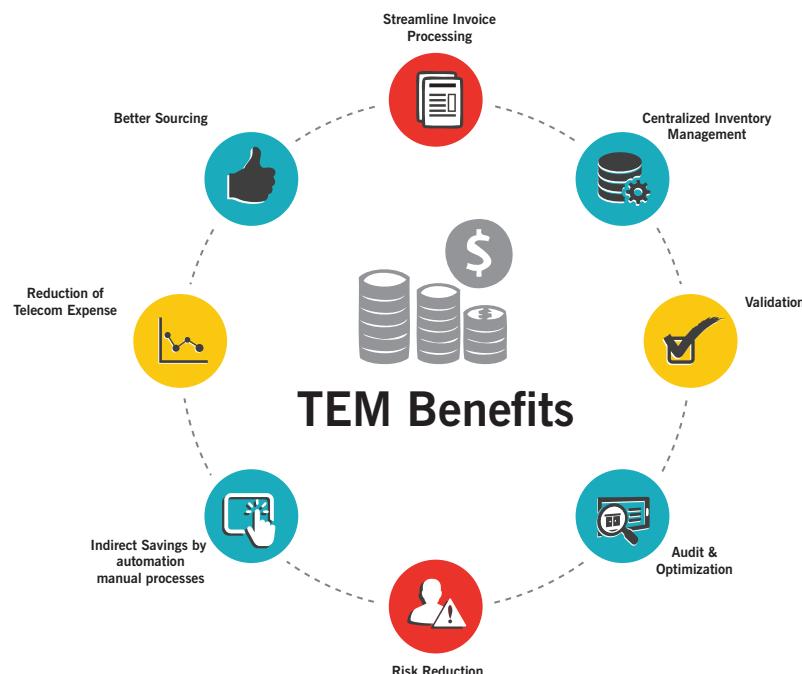


Figure 3. TEM Benefits

Telecom challenges of an organization also include the following:

- Growing complexity of communications service plans
- Large volume and complexity of communications bills
- Pervasive adoption of mobile devices
- Globalization of business
- Increasing corporate risk and regulation.

03 WHAT ENTERPRISES REQUIRE



Aberdeen Group research statistics show that communications spend of an enterprise is 3% of its revenue and companies are managing ONLY 60% of these expenses. The statistics also highlight that enterprises are losing somewhere between \$500K to \$50M each year due to lack of proper telecommunication expense management.

Gartner defines TEM as encompassing the processes conducted by IT, procurement and finance departments to acquire and support corporate communications services, both fixed and mobile. Put another way, TEM is the build-out of services or the acquisition of third-party services, to manage the supply chain for telecommunications.

A Telecommunication Expense Management application enables enterprises to

- Reduce expenses
- Increase productivity
- Optimize service agreements
- Improve control and visibility
- Strengthen risk and policy management.

04 UniServe™ STEM THE SOLUTION

UniServe™

UniServe™ STEM is a unified B2B customer experience platform that gives greater control and customized access to enterprise customers for Invoice presentment, reporting and analysis along with the ability to create custom hierarchies. By transforming the digital experience, it empowers enterprises, without completely replacing their legacy systems and help to address all the telecommunications expense management challenges.

UniServe™ STEM enables enterprises to view their billing information, discover spending patterns, manage their budgets effectively, and request new services – all from a user-friendly, self-service online portal. Enterprise end-users benefit from a consolidated view of expenses across diverse lines of business (LOB), with the power to segment and analyze by geography and departments (Figure 4).

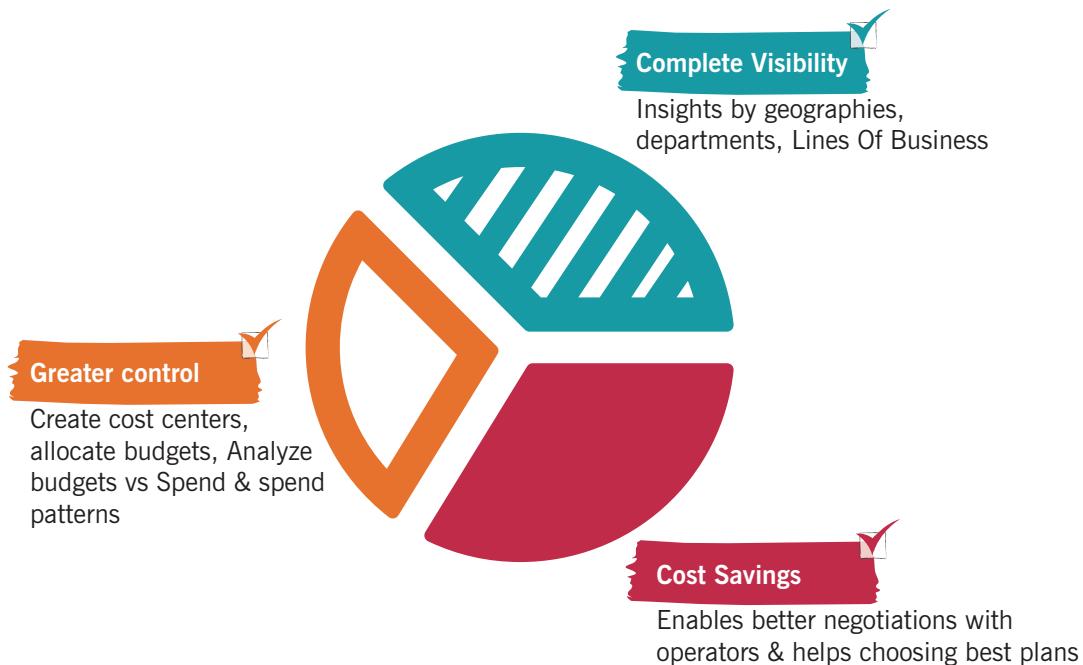


Figure 4. UniServe™ STEM

4.1. UniServe™ STEM – a Unique Engagement Approach

UniServe™ STEM is loaded with capabilities to manage the most important phases of communications lifecycle such as inventory management, auditing, invoice processing, optimization, cost allocation, contract management, mobile expense management, and the analytics associated with all these activities. The application boasts a unified platform that improves efficiency and reduces costs (Figure 5).

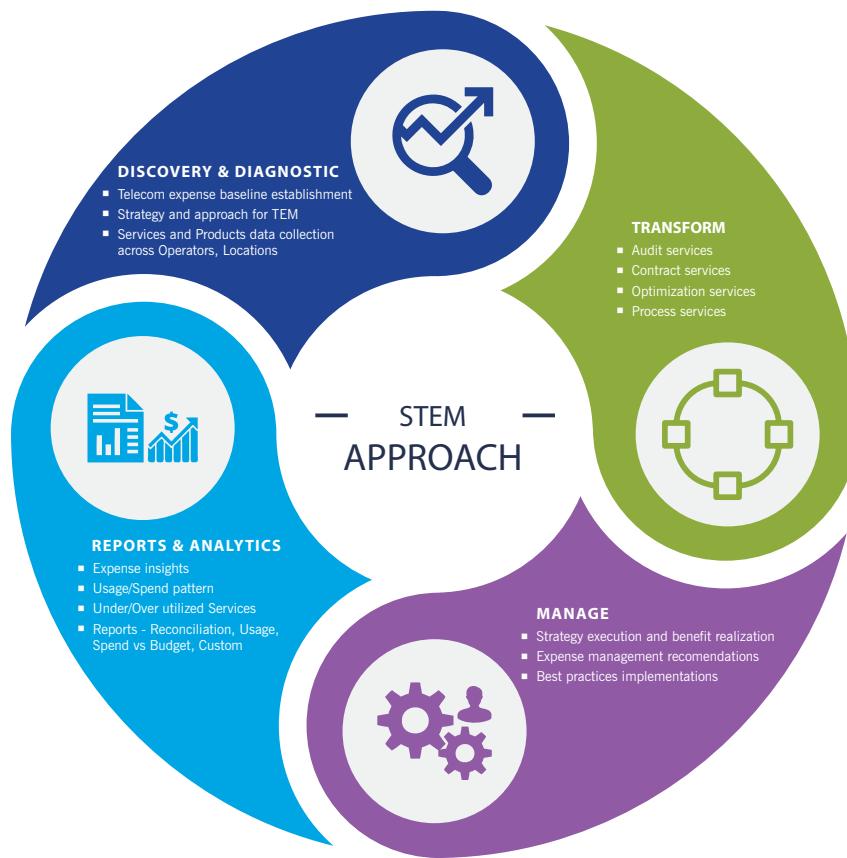


Figure 5. STEM Approach

4.2. UniServe™ STEM – Key Functionalities

With UniServe™ STEM, enterprises can reduce telecom expenses by up to 20 percent by implementing controls, standardizing across the enterprise, reducing complexity, and automating processes. The application lowers the burden on in-house resources for managing multiple telecommunications services, vendors, contracts, orders, and invoices. Enterprises can also align their telecom investments better with business opportunities through increased visibility of assets and capacity trends. UniServe™ STEM also boasts features to establish predictable telecom expenditures for enterprise business lines (Figure 6).

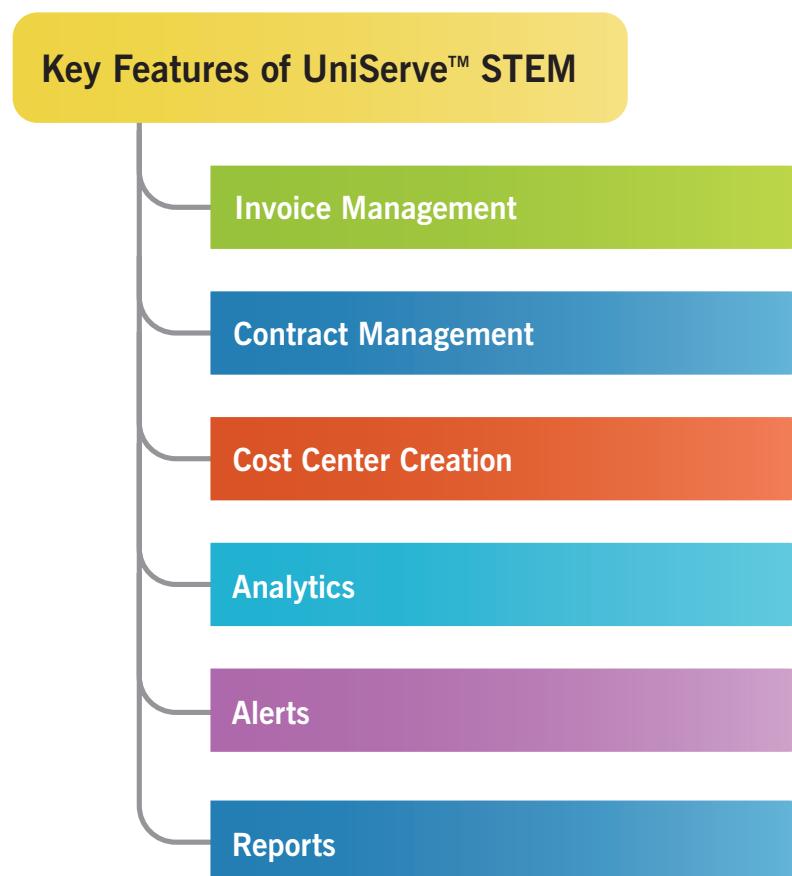


Figure 6. Key Features of UniServe™ STEM

4.2.1. Bill Consolidation by Intelligent Data Management (IDM)

With UniServe™ STEM enterprises can enjoy much better visibility and control over its telecom expenses across operators, locations and departments. Based on UniServe™ platform, the application can easily synchronize with all the existing billing and legacy applications and render the best output. Intelligent Data Management module of UniServe™ processes the usage data (customer contract, payment due details, etc) on behalf of the Enterprise from all the TSPs (including Soft copies, Excel Sheet, CSV, etc.) and generates XML files as single point of truth (Figure 7).

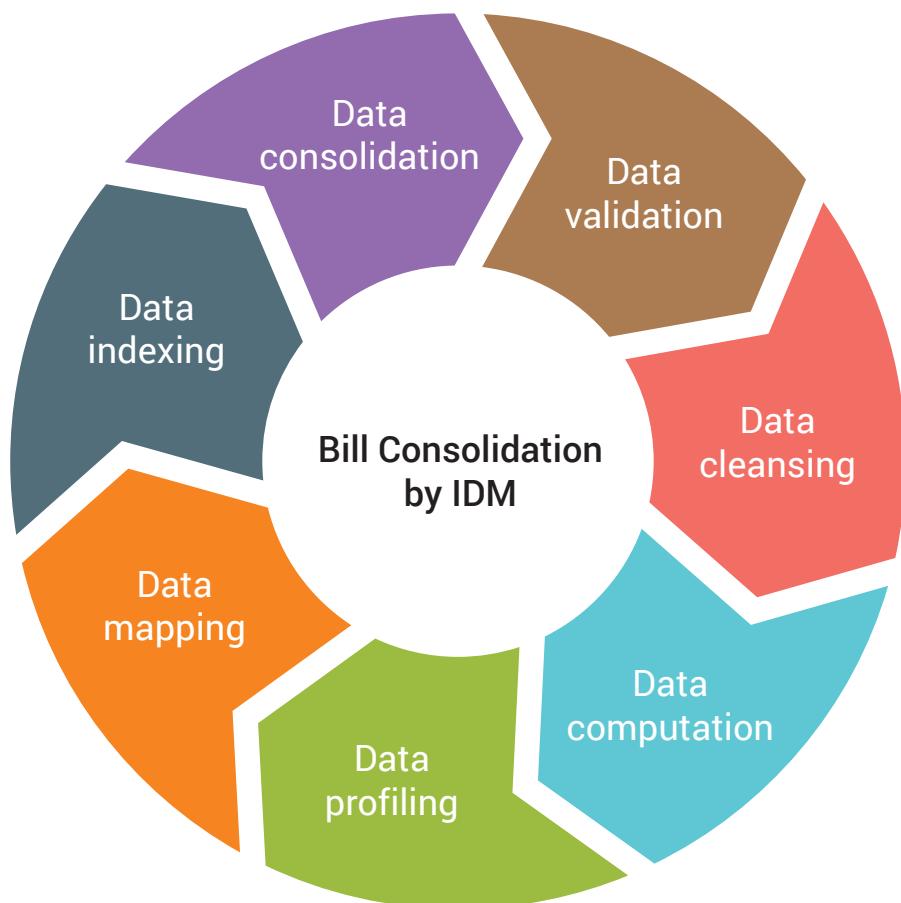


Figure 7. IDM

4.2.2. Robust Data Handling Capabilities

UniServe™ STEM boasts robust data handling capabilities (Figure 8).

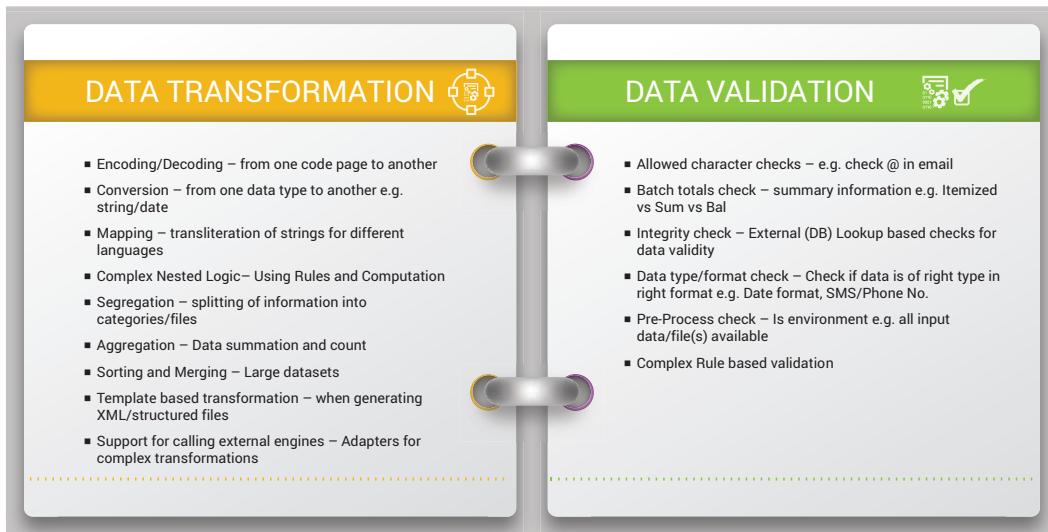


Figure 8. Robust Data Handling Capabilities

4.2.3. Inventory and Asset Management

A business needs to have a detailed inventory of the number of telecom products and services it is using such as how many are being used, and what they are being charged for those resources. Understanding the details of various lines, the features and functions of all the products and services as well as tracking usage can be complex but is necessary to ensure that the company is being charged only for the correct number and correct usage of products and services. In most cases, when a company grows and evolves, old services remain active even though the product or service no longer is being used.

UniServe™ STEM allows enterprises to gain greater visibility across all their telecom and mobility assets. This means businesses can always have a tab on what assets they own at any given moment in time. STEM captures details down to the feature level and automatically aligns it with cost center and geographic locations. There are custom fields that allow inventory data to be enhanced.

Having an efficient inventory and asset management application in place, enterprises can forecast future expenses and reuse existing assets more effectively.

4.2.4. Split Billing

UniServe™ STEM includes split billing feature that enables enterprises to have business and private calls separately billed. Users can categorize and manage their calls or transactions as personal or official into separate buckets through 'Address Book' functionality. In addition, users are also allowed to add, delete, modify these records with the option to save and version the same. Further, they can create conditions or rules to categorize personal versus official calls such as calls made on weekends or day offs and calls made after COB.

Personal versus official reports are automatically generated based on this user configuration within the address book. The individual called numbers are replaced with the names of the users or provided as a separate column next to the number for better identification.

Categorized transactions can be processed through a workflow for relevant users to approve or reject. Email and SMS alerts are configured for sending notifications and reminders to alert users of pending workflow jobs along with SLAs and escalation matrix at each node.

With this, businesses can limit consumption of certain services - protecting them from excessive spending. Split billing can also help simplify tax issues associated with the personal use of company phones.

4.2.5. Bill Reporting and Analytics

Telecom expense data is complex and companies need to work hard to make sense of the data from billing systems, customer service applications, and thousands of products and services. Apart from maintaining details of the basic subscriber metrics like new connections, disconnections, and reconnections, it is quite challenging for the enterprises to track migration between plans, devices, and locations. At the summary level, the numbers may be correct, but the underlying details are either difficult to produce or not accurate. It's no wonder that different departments end up with different numbers representing the same thing.

UniServe™ STEM offers an array of reports to help analyze calls, control budgets and reduce accounting overhead. Reports are broadly categorized as Standard Reports, Top X, Management Reports, Trend Analysis Reports, File Exports, Bill Analysis, Historical Reports, and Custom Reports (Figure 9).

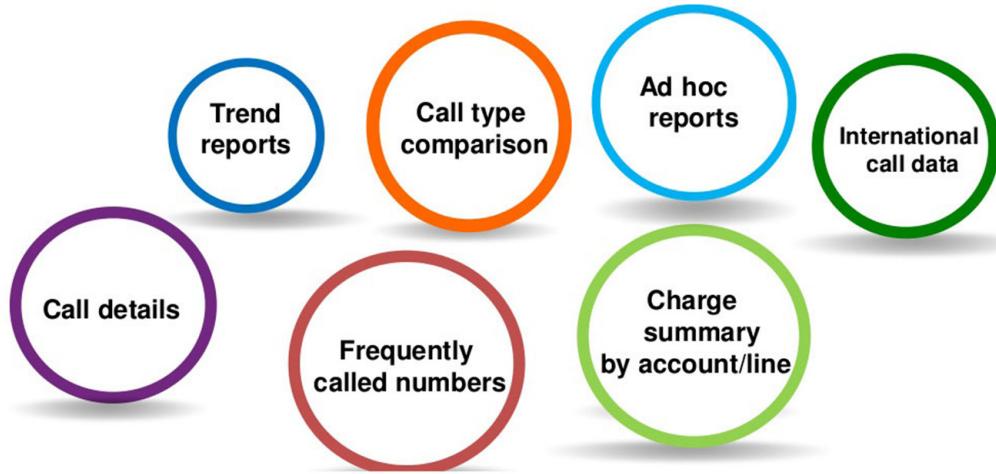


Figure 9. Bill Reporting and Analytics

Reports are categorized in the form of buckets and published to relevant users/ actors such as Service Users, End Users, Business Managers, Business Administrators, CSRs, CSR Administrators, Telecom Service Account Managers, Content Editors, System Administrators, and Analytics Managers.

With this application, businesses can better manage their telecoms budget. There is simple and intuitive analysis of the bills (drill-down, filters, groups, etc.) as well as internal breakdown of telecom spending, based on the cost-center structure. With bill reporting and analytics, enterprises can evaluate carrier Plans for optimal adjustment and monitor telecom expenses.

4.2.6. Cost Budget and Spend Management

Telecom expenses are one of the top five operational expenses for most organizations worldwide, and without a budget and spend management it is not easy to deal with these expenses efficiently. UniServe™ STEM boasts of cost control and tracking mechanism which enable enterprises to allocate budget at any level in the hierarchy.

With UniServe™ STEM enterprises can assign budgets in a billing account (in billing hierarchy) or a group (in business hierarchy) (Figure 10).



Figure 10. Cost Budget and Spend Management

Detailed insight with spend versus budget analysis across months to analyze charges incurred against budget allocation as well as a summary view of the charges against individual cost centers and connections can also be viewed in the interfaces. The Alerts engine allows relevant users to configure notifications or alerts by email with deep-links to notify whenever budget is exceeded. The recipients can be pre-defined users, user groups or roles.

4.2.7. Bill Hierarchy Management

With the billing hierarchy management feature, enterprises can structure accounts for billing. By leveraging this option, enterprises can easily have an overall spending picture. UniServe™ STEM handles two types of hierarchies – Billing Hierarchy and Custom Business Hierarchy.

Billing hierarchy as configured within the billing system is made available in the input data feed. Custom hierarchies are required by enterprises to create cost centers across geographies and departments and assign budgets both at the cost center level and the individual user level. Enterprises can either use the simple user friendly UI with names for individual cost centers to create custom hierarchy or upload in bulk through pre-defined excel structure to minimize time taken to configure complex hierarchies.

It offers add, edit, delete elements, nodes across all the hierarchies to manage and there is also a search option across elements such as users, groups, service agreements, and accounts.

Each version of custom hierarchy may have validity period or can remain active till user modification. The custom hierarchies can be compared against each other by viewing identical and non-identical nodes and service numbers in the form of a report.

4.2.8. Billing Profile Management & Notifications

Given below are the salient features of the Profile Management & Notifications module:

- UniServe™ STEM boasts the feature that allows enterprises to change presentation language. The system has the ability to pass user-selected language to WCMS pages so that the same preferences are applied
- Supports add or amend a payroll ID to a user
- Address Book
- Allows authorized users (e.g. Business Admins and Client users) to view the user name, payroll ID and email of users within their organization

The application also helps to manage notifications better. It supports multiple default notification templates (for SMS, email, in-system) and manages notification content obviating the need for development. besides, it maintains a list of login users who have opted for email notifications for reports and invoices.

Notification Type

UniServe™ STEM can send automatic notifications when: scheduled reports, new bill data and new invoices are available to view. It can also send instant individual notifications (e.g. when a user registers or changes password) and send notifications to internal Client users before external users to advise about bill availability and the main changes in billing data since the previous bill cycle.

4.2.9. User Management

This module of UniServe™ STEM framework enables the administration and governance of all user management related activities involving the application framework. System administrators can perform configurations that permit users to create modules, access permission templates, roles, designations, and users. All roles and designations are mapped to specific access permission template and every time a user is created, the user is mapped to a role & designation. The application can be integrated with systems such as SSO and Active Directory for importing pre-registered users into the application framework.

It supports multiple user application roles that are afforded different permissions and rights to eBPA functionality and data access. The application extends a flexible and configurable user manager console using which, various users can be created. The application provides the option to define the mandatory fields to be filled while creating a user profile.

The application comes with a GUI to map users to various role-based user groups at various levels of hierarchy and define the role-based access permissions as well. The permissions configured with the user roles govern the access permission to data and application modules.

4.3. Business Benefits

Enterprises need to have better control and manage the cost of their voice, data, and wireless communications by using an integrated and proactive approach to managing their telecommunications resources. UniServe™ STEM is best suited to accomplish this task. Meant for enterprises, it is an end-to-end solution that seamlessly integrates with their back-end order management, inventory management, invoice management systems to help enterprises simplify and cost effectively manage their domestic and global telecommunications expenditures (Figure 11).

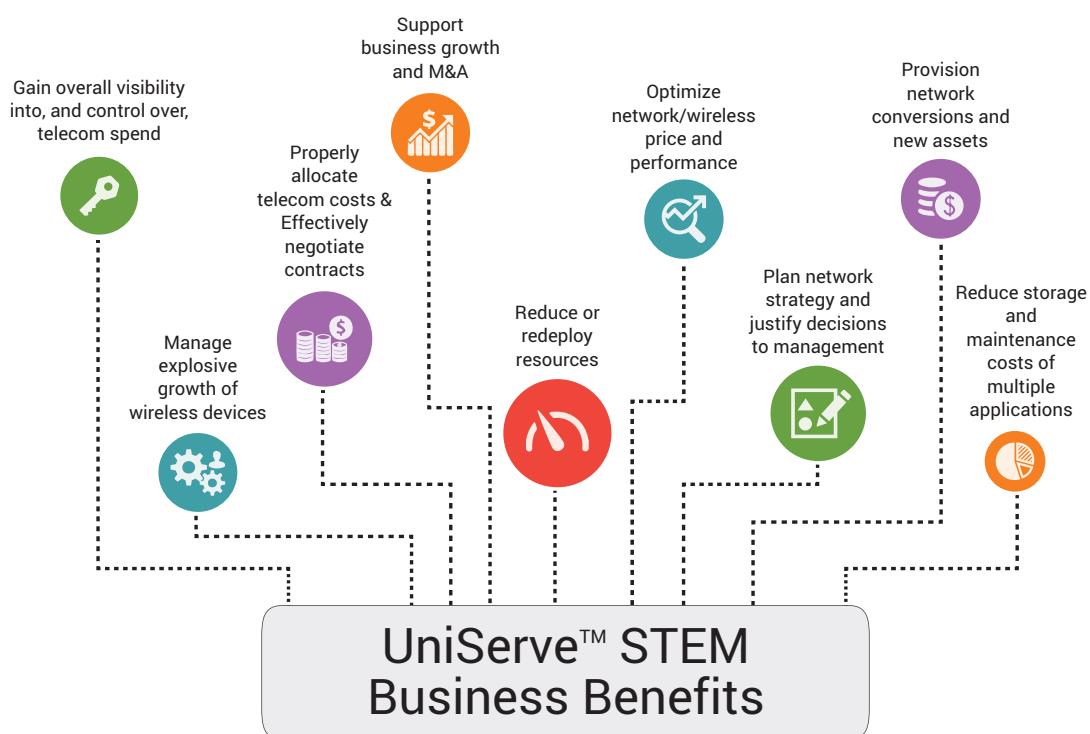


Figure 11. Business Benefits

With UniServe™ STEM, enterprises can achieve:

Improved Profits

- Reduce telecom expenses by up to 20 percent by implementing controls, standardizing across the enterprise, reducing complexity, and automating processes. This results in significant savings in telecom expenses.
- Eliminate fraudulent and unauthorized charges
- Identify errors and recover funds through close inspection of all wire line and wireless services of the corporate

Streamlined Operations

- Lower the burden on in-house resources for managing multiple cost centers, vendors, contracts, orders, and invoices
- Better align their telecom investments with business opportunities through increased visibility of assets, spends, and capacity trends
- Establish predictable telecom expenditures for enterprise business lines
- Invest in strategic business initiatives by leveraging savings from telecom expenditures
- Streamline order fulfillment, auditing, asset management, and payment processes

Reduced Risk

- Assure corporate business policy and regulatory compliance
- Increase accuracy in expense tracking and reporting
- Achieve financial goals through no-risk investment models

05 CONCLUSION



For the enterprises across geographies and verticals, telecom expense management is a much needed business practice to reduce unwanted communication expenditure. A good TEM solution enables enterprises to manage their telecom assets and services, validate service providers' invoices, and help to control telecom spending.

With an efficient TEM solution in place, enterprises can also identify billing errors and potential credits, do away with fraud and unauthorized charges, and optimize telecom service costs to match their needs.

About Intense Technologies

Intense Technologies Limited is a global enterprise software products company, headquartered in **India** with a strong and emerging presence in **USA, LATAM, EMEA and APAC**. Our enterprise software products are used globally by Fortune 500s for digitalization of customer experience lifecycle resulting in greater customer centricity and reduced operational expenses.

We have a strong track record of deploying our highly scalable product suite to Banking & Financial services, Insurance, Government, Utilities, Manufacturing and Telecommunication enterprises. We serve customers in **30 countries across 4 continents**, with a 70% market share in Telecom in India

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