

**SAP Solution in Detail**  
**SAP for Utilities**



# **SAP FOR UTILITIES: IMPROVING CUSTOMER COMMUNICATIONS WITH CUSTOMER CARE AND BILLING**

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## **FLEXIBLE CUSTOMER CARE AND BILLING IN THE UTILITIES INDUSTRY**

As market restructuring continues to reshape the utilities industry, success comes to those who are not only prepared but also ready to take advantage of the changes progress is bringing. These changes include the flexibility of today's new customer care and billing solutions for the utilities industry discussed in this document.

The need for flexible solutions is insistent, as utilities markets continue to pass through different types of regulation – from heavy to light regulation, deregulation, and semi-deregulation – and different ownership structures – from fully privatized to completely state-owned markets. In addition, Sarbanes-Oxley and other regulatory requirements are having an increasingly strong effect on the transparency and risk behavior of utilities. Your customer care and billing processes need to support these changing requirements – with the flexibility to adapt, reconfigure, and ensure compliance of new processes.

New energy markets are leading to more specialized utility-provider roles, including transmission, distribution, meter operation, and retail. As a result, complex scenarios such as change of supplier, settlement, and grid usage processing across systems and between the different market participants are evolving; however, these processes often still require manual intervention. But since business-process and data-exchange automation are essential to an efficient energy market, today's customer care and billing processes need to support integrated, business-to-business scenarios and standardization efforts.

Besides addressing the need for flexibility in adapting business processes to evolving market requirements, customer care and billing initiatives are strongly focused on improving operational efficiencies in customer service. These include, for instance, increased call center and agent productivity, handling of mass billing processes and exceptions, and efficient credit and collections and contract account management along the entire customer life cycle. Therefore, the importance of analytical functions supporting billing-process optimization, as well as enhanced customer segmentations to improve service efficiency and to determine customer financial risk assessments, are evolving. Business-process integration across internal and external systems – including contact centers, automated meter reading systems, and auditing systems – becomes a vital enabler for continuous efficiency improvements and innovative services.

SAP is in a unique position to offer a flexible and integrated set of solutions: SAP for Utilities, a portfolio of solutions with comprehensive support for customer care and billing processes. SAP for Utilities offers the flexibility to configure processes according to the specific needs of the different utility-provider roles and services in regulated and deregulated markets, including electricity, gas, and water services, as well as transmission, transportation, distribution, and retail roles. No other business-solution software vendor has more industry and customer experience in utilities markets than SAP. Its solutions help to improve efficiencies along the entire customer life cycle through standardization of business processes within regulatory environments.

## **CUSTOMER CARE AND BILLING SOLUTIONS FROM SAP FOR UTILITIES**

Solutions from SAP for Utilities support all of the important customer care and billing processes required in regulated and liberalized utilities markets. The scope of supported high-level scenarios is illustrated in Figure 1. The scenarios consist of multiple processes and process steps that are supported by SAP® solutions and applications, including the SAP Customer Relationship Management (SAP CRM) application, the SAP ERP application, the SAP Billing application, the SAP Invoicing and Contract Accounting application, the SAP Energy Data Management application, and the SAP Intercompany Data Exchange application.



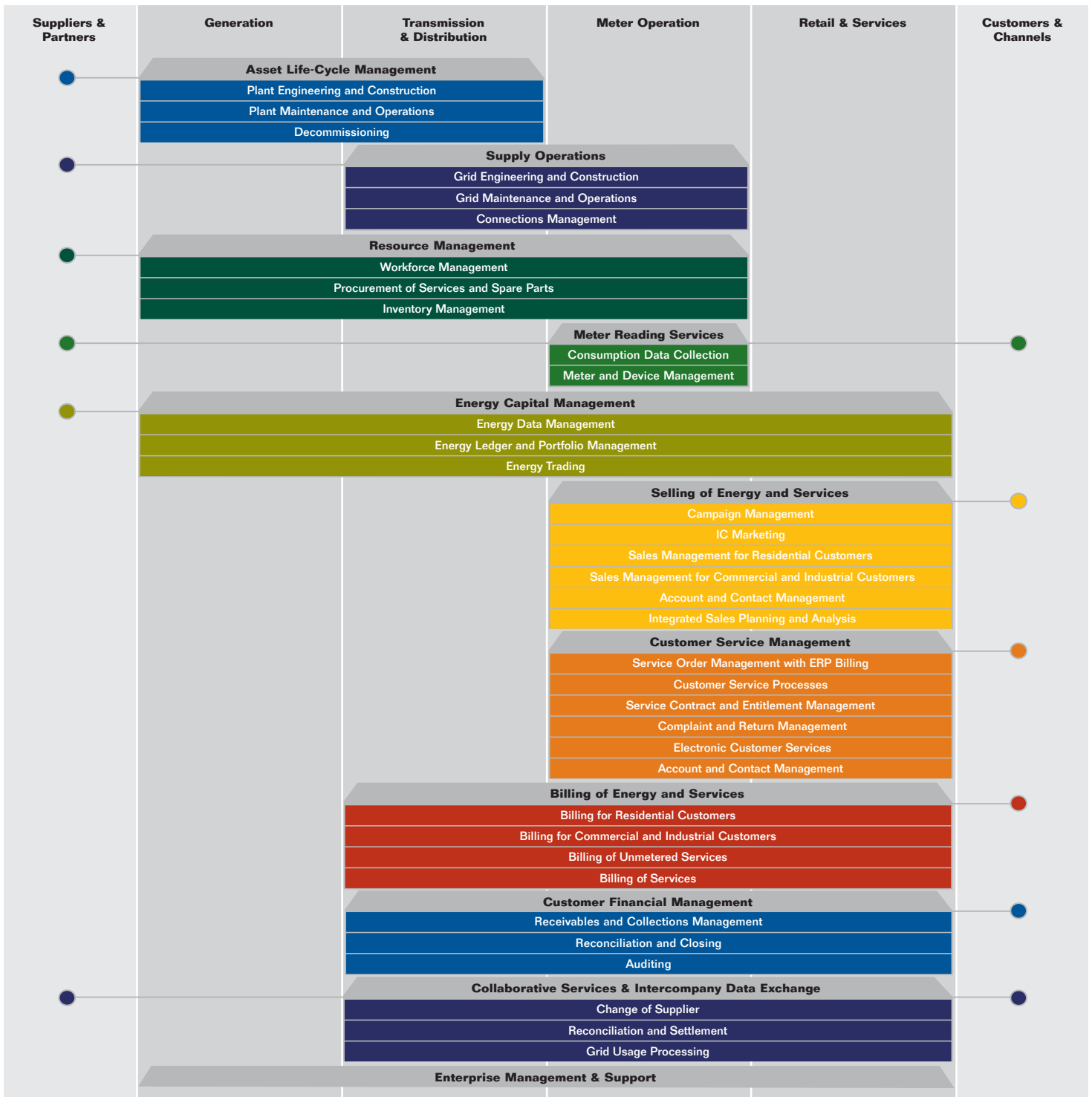


Figure 1: SAP for Utilities Solution Map: Support for Core Customer Care and Billing Processes

## METER READING SERVICES

Meter reading services applications support all processes for entering meter reading data. These include the scheduling and preparation of meter readings, meter reading result entry, plausibility checks, and comprehensive monitoring for meter reading results. In addition, interfaces to various external systems for meter reading entry are available.

Meter reading services provide end-to-end support for automated meter management processes, to enable time-of-use-based services and optimized management of energy peak demands. They ensure efficiency and accuracy of meter reading data and related processes, which are key criteria for high-quality electronic customer services.

**Consumption data collection** applications support the scheduling of meter reading events and the collection of meter reading data through various channels, such as automated meter reading systems and mobile data-entry devices, and provide flexible and powerful validation methods for further processing.

## ENERGY CAPITAL MANAGEMENT

Energy capital management applications allow for the collection and management of energy-relevant data in a central energy data repository, as well as the integration of energy data through all related scenarios: energy data management, portfolio management, and energy trading.

Energy capital management applications support powerful and accurate processing of high-volume interval data and enable integrated consumption and procurement forecasting and monitoring, load profiling, and energy settlement processes. End-to-end automated meter management processes are also supported.

The **energy data management** application enables a central data repository for discrete and nondiscrete meter reading values and provides any type of interval data independent of the measurement unit. The application supports complex, formula-based calculations based on interval data. Energy data management offers functionality for metering and measuring load shapes, settling energy quantities, managing schedules, billing interval customers, and more, and it meets the needs of energy companies both in deregulated and regulated energy markets.

A central database allows the storage of all types of time series. It enables the importing, monitoring, and validating of key data. Users can carry out replacement-value procedures automatically or on demand, and they can efficiently manage data entered. The software also enables the linkage of input and output parameters through formula calculation, regardless of the unit of measurement and dimension.

Energy data management also provides the functionality needed for complex billing, such as real-time pricing or time-of-use pricing. This allows the billing of time series from interval customers, for example. The billing is compatible with all contract types that refer to time series, including contracts for energy supply, usage of transmission and distribution lines and storage, billing of higher and lower volumes, and settlement processes.

A settlement workbench enables the settlement of the portion of the total distributor load that originates from suppliers. This means that utilities can calculate the total energy use of all industrial and residential customers in one operational area and then divide that number by the entire consumption per supplier. Energy data management allows the comparison of the actual and forecasted consumption and then the debiting or crediting of the “overtake” and “undertake” amounts.



## SELLING OF ENERGY, WATER, WASTE, AND SERVICES

Applications enabling the selling of energy, water, waste, and services support all customer sales processes. These include implementation of customer segmentation strategies, target group-oriented marketing and product definition, and interaction center-based sales support for residential and non-residential customers, as well as portal-based sales processes for commercial and industrial customers, specifically through a key account manager role in a company.

The applications enable efficient and transparent sales processes, and they integrate sales practices from product modeling and definition through campaign management, quotations, and contracts to billing, invoicing, and contract account management. They lead to improved quality of quotations and postsales activities, reduced time of quote to cash, effective customer segment-based analytics and tactics, and an overall optimized sales process.

**Campaign management** applications enable marketing and sales professionals to create and analyze customer segments and to design, execute, coordinate, and monitor all related marketing tactics. Personalized campaigns across all communication channels – including direct sales, call centers, mail, e-mail, fax, Internet, and mobile devices – are supported. The software also enables monitoring of profitability at the program, product, customer, and partner levels.

**Sales management for residential customers** applications support end-to-end residential customer sales processes from supply-contract inquiry through delivery, billing, and invoicing. They target customers with a campaign using different communication channels.

**Sales management for commercial and industrial (C&I) customers** applications support end-to-end C&I customer sales processes – from customer acquisition and calculations of quotations to complex contract management. The applications offer portal-based functionality that provides the key account manager with relevant account information from different front- and back-office sources required to effectively manage the relationship with C&I customers.

## **CUSTOMER SERVICE MANAGEMENT**

Customer service management applications support the operation of a call center with utility-specific customer service processes. They provide tight integration with core back-office billing and contract accounting processes and support the collaborative processing of all relevant information related to residential and commercial customers. Customer service management applications also support requirements for high-quality electronic customer services and improving overall customer communications.

These integrated processes help increase call center efficiency, including increased numbers of calls closed on contact, reduced average communication time, and reduced numbers of repeat calls. Customer service management applications allow the offering of more sophisticated levels of service, including service-level agreements and bundled service contracts, as well as the delivery of a more personalized customer experience.

**Customer service processes** applications support all customer-related, utility-specific processes within a typical call center environment. These include processes such as changing account and payment data, performing move-in and move-out, doing meter reading entry, changing budget billing plans, providing bill correction, processing open items, creating installment plans, and creating processing lock. The software enables highly integrated customer service and billing processes and increases automation of standard processes in customer management. Customer service processes applications give interaction center employees an immediate, single, and complete picture of a customer's technical environment, recent interactions, and current account situation. And the software offers utilities expanded communication channels, including computer telephony, e-mail, text messaging, and Web communication.

**Electronic customer services** applications allow customers with Internet access to easily self-register at their utility customer portal and use 24x7 electronic services, such as the changing of master data, the accessing of account information, bill display, payment of bills, move-in and move-out, and meter reading entry. Since electronic customer services are tightly integrated with billing and customer financial management processes, they achieve increased customer service quality and reduced process costs. Companies avoid manual data reentry, and the software automatically transfers data to a workflow or directly into the back office, thereby providing a high degree of process automation without the need for front-office interaction. The software supports the use of sophisticated data-validation capabilities to ensure high data quality along the entire electronic customer services process between customer and utility.

## **BILLING OF ENERGY, WATER, WASTE, AND SERVICES**

Billing applications are enabled by a powerful and flexible billing engine that allows for the easy management and adjustment of mass billing rates for residential customers and complex billing rates for industrial customers. The applications also support the billing of unmetered services and multiservice billing, while enabling simulations and plausibility checks, as well as parallel processing and monitoring of mass runs. A wide range of taxes, postings, and amount clearings, as well as all common budget billing procedures, is supported. The billing applications help to monitor and handle billing exceptions and unbilled revenue, and they support integrated analytics and reporting capabilities for billing-process optimization and customer segmentation.

Following is a selection of key functionalities:

- **Management of rates, prices, and period data**

Billing applications enable utilities to map and adjust rate models easily and quickly according to new requirements from internal organizations, such as sales or marketing, or requirements from external organizations, such as regulators. On the basis of standardized processes, utilities can implement rate changes of mass data for residential customers and can change even complex rates in minutes, and no reprogramming is needed. This functionality considerably reduces rate maintenance and significantly speeds up the time-to-market span for new and innovative energy products.

Billing applications support the change of all master and billing data during a billing period. They ensure that any billing-relevant changes that occur in a billing period are included in the procedure. If a price changes, for example, the total period is automatically divided into partial periods, and each partial period is allocated the relevant price for that time. At the same time, the software divides total consumption, allowing each partial amount to be calculated.

The billing master data stores rate structures containing billing rules and contractual provisions. Customizable variant programs determine how the software processes and values

measured consumption or demand. Different rate categories help define which billing schema and type of data is used. They control period-end billing and floating “backbilling,” and they define “outsourcing” checks. Utilities can allocate prices to categories, including quantity-dependent prices, time-dependent prices, rental prices, and flat rates. They can use special rounding rules and price-adjustment clauses. Users can define discounts and surcharges as percentages or as absolute values and can relate them to a quantity, a price, a demand value, or an amount. Discounts and surcharges can apply to multiple and individual contracts and appear as separate billing line items.

- **Billing-period types and billing procedures**

The billing software can process and combine all known billing-period types and billing procedures. These include periodic billing with functionality for correction, advance billing periods, and simulation periods, which can all simultaneously run through dynamic billing schemas and control processes. The billing functionality also supports unplanned interim billing – for example, at the customer’s request. Users can execute final billing upon move-out, when a contract is terminated, or when a service territory is transferred.

The billing software supports requirements for backbilling and period-end billing. Whenever a new demand peak occurs, users can execute a correction bill using the current average of three peak demand values and can select backbilling within either a fixed period or “n” periods. Users can use period-end billing to execute calculations for several billing periods by creating a period-end billing schema, and they can combine both backbilling and period-end capabilities.

Dynamic period control allows the management of any number of correction and periodic billing periods. The software can generate billing documents on the basis of estimated meter readings or during billing runtime. It supports flexible billing for deregulated scenarios where actual meter reading results are not available. Users can define and extrapolate individual steps to execute billing for actual and estimated meter reading results and can then simulate posting of relevant billing lines.

The billing functionality supports complex billing based on interval data and load profiles, including time-of-use billing and real-time pricing. Users can structure rates flexibly according to seasonal, calendar, and consumption criteria and can easily model agreements with special customers or customer groups with individual prices. Real-time-pricing billing is tightly integrated with the billing master data from contract accounting and allows direct access to the profiles managed in energy data management. The software also provides event parameters to supply the billing schema with data relevant for bill creation. They execute on-peak-rate and off-peak-rate billing on the basis of load-profile measurements and respective result calculations.

#### ■ **Multiservice billing**

The billing functionality enables the billing of multiple services in one contract account, including electricity, gas, water and wastewater, district heating, and other services, such as cable TV and multimedia. During electricity billing, the software converts the measured meter reading differences into consumption values. Register factors and billing factors are included in this process. When users make changes to the billing master data using standard and customer-weighting rules, electricity billing enables the division of consumption values – for example, for price changes – when the actual meter reading results are not available. There are particular functions in activity-based electricity billing, such as pre-processing demand, that, for example, calculate the average of demand peak values or allocate demands to a particular season.

Multiservice billing also addresses the specific situation in gas billing where meter reading and billing dimensions are normally different. Therefore, the solution converts the amounts so that it can calculate the energy contained in gas from the measured volume. Gas-billing applications support the determination of volumetric, standard volumes, and thermal billing types. They enable and combine the volume-correction factor and the calorific-value procedure. Users can store physical influences as daily, monthly, or annual values and can make calculations using calorific values. During such

processes, the software divides gas consumption into the months of the billing period and values it with each monthly calorific value. It can also calculate an arithmetic or weighted average to value the total consumption of a billing period.

The billing of water and wastewater processes specifically addresses the requirements of “flat-rate” and calculated subsidies and deduction amounts, primary and secondary meter relationships, and combination billing. District-heating billing processes support different measuring, according to the heat carrier, including steam and hot water, and allow the conversion and billing of variables such as weight, volume, and heat quantities. Billing of lighting units, cable TV fees, municipal fees, and third parties is also supported.

#### ■ **Analytics and reports**

Users can analyze and report individual quantities and revenues from billing to achieve billing-process optimizations and handle unbilled revenues. The reporting functionality allows the provision of detailed, up-to-date information about sales, customer behavior, open items, and other parameters. Using integrated business intelligence processes, utilities can reduce inefficiencies from manual data collection, implement monitoring and alerting functions, and manage billing exceptions. Analytics functionalities also allow the estimation of values for billed and unbilled revenues of a certain period by simulating the relevant contracts. In addition, the integrated applications support the implementation of customer segments on the basis of consumption history within the billing schemas and on the basis of values from simulation runs.

#### ■ **Bill preparation and invoicing**

The invoicing functionality supports the preparation and processing of billing documents that may originate in SAP and non-SAP billing software, termed “joined invoicing.” It connects and posts billing documents to contract accounts receivable and payable, integrates subledger accounting, processes the mass data produced by billing, and then processes the bill prints. Invoicing helps to clear billing requests, supports reversal processes, contains automatic bill checks,

## CUSTOMER FINANCIAL MANAGEMENT

provides functions for budget billing plans, and supports the determination and collection of taxes, charges, and duties. During the bill preparation, invoicing software supports additional functions from contract accounts receivable and payable, including interest calculation, dunning, booking, and account maintenance. The invoicing processes result in bill requests and credit memos that are processed further in contract accounts receivable and payable. The software produces print documents used as the basis for printing bills and then sends the bill to the bill-to party.

### ■ Budget billing

The billing software supports annual consumption billing and the collection of budget billing amounts for an anticipated bill amount. In case of monthly billing, the software allows the flexible determination of amounts to be paid with each bill, while the difference between the amount paid and the actual bill amount is recorded and shown on a bill at a later stage. Amounts and payment dates are recorded in a budget billing plan that is used as the basis for collecting budget billing amounts.

The functionality supports various budget billing procedures. They can be differentiated by budget billing dates and amounts, management of budget billing data, and the posting procedure used. The software defines the budget billing procedure within the contract account. Billing procedures such as statistical budget billing, partial billing, payment plan, and payment scheme are all supported.

### ■ Collective bills

The billing functionality supports the processing of contract accounts collectively during bill preparation. It ensures that contract accounts in a collective bill continue to be regarded and processed collectively by subsequent business processes in contract accounts receivable and payable. Collective bills are required, for instance, for property management companies, for housing associations, and for relationships between branches and head offices.

The customer financial management applications are based on a powerful subledger that is tailored to the specific needs of the utilities industry. To meet these demands, the customer financial management applications support highly flexible processes to allow for a maximum of automation as well as a mechanism to guarantee outstanding system performance and scalability. As the applications are compliant with statutory requirements on an international scale, their auditability is guaranteed.

Customer financial management supports the efforts of utilities to improve their financial situation by reducing financial risk and the amount of bad debt and write-offs, while decreasing day sales outstanding and lowering the cost of collections.

**Receivables and collections management** applications support end-to-end processes that deliver the control and visibility needed to ensure revenue, eliminate leakage, and avoid loss. The software seamlessly integrates upstream and downstream processes, such as credit scoring, billing, cash management and forecasting, customer self-service, customer relationship management, analytics, and more.

Utilities post receivables through integrated billing and invoicing or by integration of legacy or best-of-breed processes through the SAP NetWeaver® technology platform. They can post receivables as standard invoice documents, as part of a collective bill, or as subject to the specific treatment of a third-party bill in the deregulated market; the system will apply the appropriate processes to the various types of receivables. In addition, receivables may result from automated processes, such as the calculation of fees and charges in interest calculation, dunning and collections, bank returns, or any adjustment processes. Receivables and collections management also provides functionality for securities handling.

A variety of options for both payments and refunds is available. A utility may initiate payments through credit card or by direct debit, if the customer has agreed to one of these payment methods. Other options include payments by cash; check,

including lockbox handling; or bank transfer. The clearing of open items is highly automated and follows a company's specific business rules. Exceptions are handled through clarification work lists that are assigned to the responsible person or unit. The software provides further functionalities, such as an integrated cash desk with cash journal, check management, and automated processing of returns.

Receivables and collections management applications support comprehensive credit and collections management capabilities along the entire customer life cycle:

- Utilities may implement credit scoring for new customers, as well as review credit scoring for existing customers, on a regular or event-triggered basis. External information from credit bureaus or black-and-white lists, together with internal customer behavior data, is taken into account in risk-class determination. This is the basis for an effective segmentation of customers for collections purposes. The software also provides the flexibility to define as many collection strategies as required. Each of the strategies will define the activities within each collection level. Activities include, but are not limited to, the following: issuing a letter that is tailored to the particular strategy and level, putting the customer on a collection work list, triggering a collection call through dialer integration, issuing a service order for disconnection, initiating contract termination, or triggering a workflow.



- An extensive set of functions is available to the collector. These include integrated telephony handling, automatic update of customer history, and access to all relevant data, such as invoices, open items, payments, disputes, and previous collections activities. Also included is the functionality to update customer data, including bank and credit card details; capture payment authorizations; offer payment plans; offer promises to pay; and more.
- Utilities may submit open items to an external agency. The system provides the necessary applications to submit and recall items, determine the right agency, and keep track of the receivables until finally settled. Uncollectible items will be written off according to a company's rules.

**Reconciliation and closing** applications support closing operations and reconciliation of postings between the accounts receivable accounting and the general ledger accounting. The reconciliation mechanisms are highly automated and allow drilling forward and backward between the two accounting systems. All differences are logged for further investigation. Closing operations – such as foreign currency valuation, doubtful receivables, and individual value adjustments and write-offs – are part of these applications.

**Auditing** applications support requirements from national tax legislations, enabling a company to make all tax-relevant data available to the tax auditor or the tax office. This can be handled directly, indirectly in an online system, via reports, and via data carriers. Auditing supports the extraction of tax-relevant data from the productive system prior to archiving; therefore, it addresses the need for relevant data to be kept available by law for a certain period of time. Utilities can import the produced extraction files into a separate system for administration and evaluation purposes. Extracting the files in an appropriate format allows for a direct handover to the tax auditor.

## **COLLABORATIVE SERVICES AND INTERCOMPANY DATA EXCHANGE**

Collaborative services and intercompany data exchange (IDE) applications support the data exchange between different market participants in energy and utility markets. Automated workflows enable utilities to exchange, control, and monitor aggregated information about customers, consumption, demands, and payments.

The applications are built on a flexible process and rules repository to map the different processing rules for the different markets. Change of supplier, reconciliation and settlement, and grid usage processing are examples of preconfigured core applications for specific country extensions and requirements. Collaborative services and IDE enable standardized and automated business-to-business processes and communication – even integrated with a call center and billing.

**Change of supplier** applications support all processes and market-specific rules to be managed between the different market participants, such as distributors and suppliers, to fulfill supply registration processes in cases of start of supply for out-of-area customers and end of supply for customer churn. Change of supplier applications also perform monitoring and due-date processing, flexible validations, and sending and receiving of messages.

**Reconciliation and settlement** applications support the exchange of aggregated energy consumption and forecast information from interval and residential customers between suppliers, distributors, and system operators. They provide an efficient data-exchange platform, supporting processes of load schedule management and the determination of overtake and undertake amounts of energy.

**Grid usage processing** applications support all processes concerned with billing, payment, and collection of payments between different market participants. They provide an efficient exchange platform for processing invoices and payments of distribution and energy charges through different distribution companies and suppliers on the basis of local market rules.

## **SAP NetWeaver, ENTERPRISE SOA, AND INDUSTRY BEST PRACTICES**

SAP NetWeaver, the SAP application and integration platform, provides immediate integration with SAP and non-SAP customer care and billing applications and enables the flexible configuration and packaging of applications to manage business from an end-to-end perspective. It also provides an open standard to integrate best-of-breed applications in support of these processes. SAP NetWeaver allows the deployment and evolution of customer care and billing solutions according to business needs – whether the utility is a municipality utility, regional service provider, or international utilities group.

Enterprise service-oriented architecture (enterprise SOA) is a business-driven software architecture that increases adaptability, flexibility, openness, and cost efficiency. It provides a road map for utilities to more easily deploy new customer care and billing processes at the pace of changing market requirements and energy policy, while they master efficient business-standard processes. Areas such as automated meter management and end-to-end exchanges of aggregated information about customers, consumption, demands, and payments between different market participants are examples where new processes are evolving. Enterprise SOA also allows utilities to craft their own IT practice road map in stages through SAP NetWeaver; together, enterprise SOA and SAP NetWeaver support practices such as user productivity enablement through key account manager portals and mobile asset management processes, as well as business information management through regulatory-reporting and billing-exception analytics.

Utilities can also leverage the embedded best-practices features delivered with the SAP for Utilities solutions in support of core customer care and billing processes – for instance, for water utilities. These describe exactly how to implement key business processes in the system, including how to set up and configure the SAP software. They are delivered as a combination of detailed business documentation, which describes first-in-class business practices, and a complete set of technical tools and information to help implement the business processes.

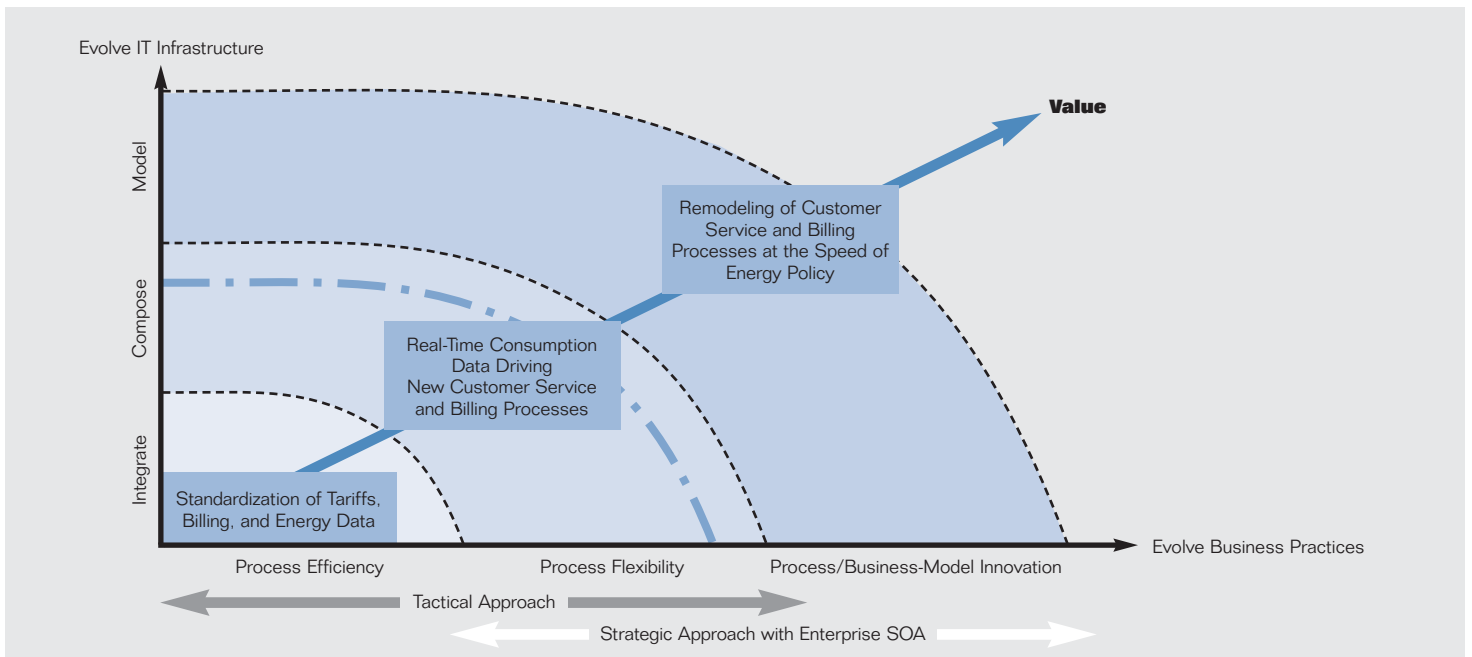


Figure 2: SAP for Utilities: A Phased Path Toward Enterprise Services Architecture for Customer Care and Billing

Utilities achieve process efficiencies by making use of integrated energy data functionality and standard rates defined in billing. The possibility to obtain information about the customer's actual consumption whenever demanded allows the development of new products and ways to bill those products. Eventually, the architecture will provide utilities with the flexibility to act at the speed of change within political and economical frameworks.

## SUMMARY

With flexible customer care and billing solutions come many business benefits:

- **Applications enabling meter reading services: efficient meter reading processes and support for automated meter management**  
SAP for Utilities applications, including SAP Energy Data Management, provide end-to-end support for new, emerging automated meter management processes and ensure efficiency and accuracy of meter reading data and related processes.
- **Applications enabling energy capital management: efficient load profiling, settlement processes, and integrated energy forecasting and portfolio management**  
SAP for Utilities applications, including SAP Energy Data Management, support efficient load profiling and energy settlement processes, integrated energy procurement and consumption forecasting and monitoring, the management of high-volume interval data, the enabling of automated meter management, and integrated information and processes from portfolio management and energy trading.
- **Applications enabling the selling of energy, water, and services: improved segmentation strategies, integrated product definition, and sales process efficiency**  
SAP for Utilities solutions, including SAP CRM, support efficient and transparent sales processes, allowing the implementation of customer segmentation strategies and enabling integrated sales information from product modeling and definition through contract account management. This leads to improved quality of quotations, reduced time of quote to cash, effective customer analytics, and an overall optimized sales process.
- **Applications enabling customer service management: enhanced call center efficiency, sophisticated level of service, and a personalized experience**  
SAP for Utilities solutions, including SAP CRM, help utilities increase call center efficiency, which leads to increased numbers of calls closed on contact, reduced average communication time, and reduced numbers of repeat calls. The software offers more sophisticated levels of service, including service-level agreements and bundled service contracts, as well as delivers a more personalized customer experience.
- **Applications enabling the billing of energy, water, and services: comprehensive, flexible, and powerful billing processes**  
SAP for Utilities applications, including SAP Billing, provide a powerful and flexible billing engine, easily capable of managing and adjusting mass billing rates for residential customers and complex billing rates for industrial customers. They also support billing of unmetered services and multiservice billing, while making possible simulations, plausibility checks, and the parallel processing and monitoring of mass runs. A wide range of taxes, postings, and amount clearings, as well as all common budget billing procedures, is supported. The applications help monitor and handle billing exceptions and unbilled revenue, and they support integrated analytics and reporting capabilities for billing-process optimization and the enabling of customer segmentation.
- **Applications enabling customer financial management: revenue assurance through comprehensive credit and collections management**  
SAP for Utilities applications, including SAP Invoicing and Contract Accounting, support the assurance of revenue through comprehensive credit and collections management. Customer financial management supports the efforts of utilities to improve their financial situation by reducing financial risk and the amount of bad debt and write-offs, while increasing day sales outstanding and lowering the cost of collections.

- **Applications enabling collaborative services and IDE: automation and flexibility of data-exchange and collaborative processes**

Enabled by SAP for Utilities applications, including SAP Intercompany Data Exchange, collaborative services and IDE support the efficient and flexible handling of data-exchange processes and address the requirements of standardized and automated business-to-business processes and communication, as well as provide for integration with customer care and billing.

- **SAP NetWeaver and enterprise service-oriented architecture: new level of responsiveness to new market models and processes**

SAP NetWeaver provides immediate integration with SAP and non-SAP customer care and billing applications and enables the flexible configuration and packaging of applications to manage business from an end-to-end perspective. And enterprise SOA provides a road map for utilities to more easily deploy new customer care and billing processes at the pace of changing market requirements and energy policy, while they master efficient business-standard processes.

## **WHY SAP FOR UTILITIES?**

As a portfolio of solutions for the utilities industry, SAP for Utilities is designed to help your utility meet the challenges of change head-on with solutions that are tailored to the specific standards, processes, and needs of the utilities industry. The solutions are built not only to fit the way you do business but also to improve it. They deliver rich functionality and productivity-building tools throughout your enterprise. And they help you adopt best-practices procedures that SAP has developed in over 30 years of working with industry leaders from around the world.

SAP for Utilities solutions give you the flexibility to deploy innovative applications and drive business-process standardization. And because they offer easy integration and virtually unlimited scalability, SAP for Utilities solutions are an investment you cannot outgrow – no matter how times keep changing. Today, more than 1,100 utilities in more than 90 countries run SAP for Utilities solutions. Shouldn't you?

To learn more about SAP for Utilities and the customer care and billing solutions that can transform your business, call your SAP representative today or visit us on the Web at [www.sap.com/utilities](http://www.sap.com/utilities).







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