Volume One- Issue 1

Revenue Assurance: Implementation Considerations for Billing and Customer Care Systems

For Utilities and Retail Energy Providers
May 2010

KopacConsulting®

www.kopacconsulting.com

I. Introduction

Managing revenue at risk should be a priority for any utility or retail energy provider thinking about implementing a billing or customer care system. As discussed in Kopac's recent publication *Revenue Assurance Control Desk: A Reference Guide for Utilities and Retail Energy Providers,* the elements of system complexity, variability, and change create risk of revenue loss even in a stable processing environment. Although risk of loss is inherent in revenue processes prior to an implementation and was the subject of our first paper, revenue at risk is as prevalent during both the implementation and post implementation phases.

It is important to manage risks and avoid or limit revenue losses during an implementation of a billing and customer care system for utility or retail energy providers. Moreover, implementation provides the opportunity to build a stable process for assuring revenue by building controls into the process before "going live." This "do it right the first time" approach can save millions in customer goodwill write-offs, system reconfigurations, and accounting or audit adjustments.

The purpose of this white paper is to describe factors that need to be considered prior to implementation of billing and customer care systems in order to assure all earned revenue is captured.

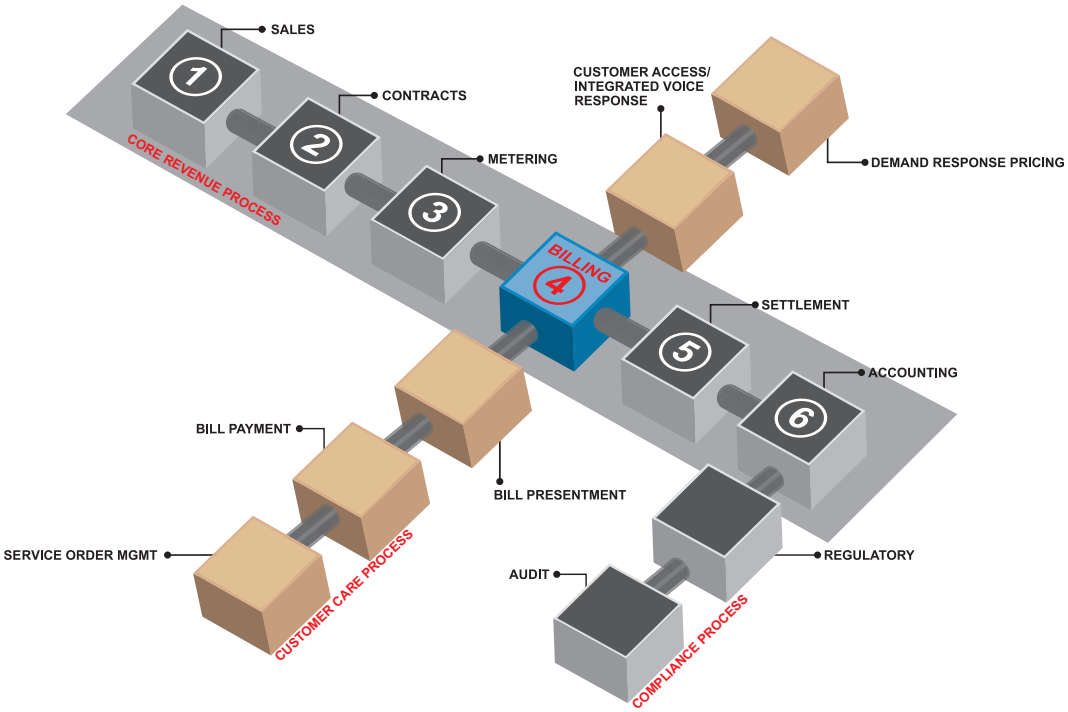
The concept of assuring company revenue applies regardless of the future state model used. The three primary billing models currently used are as follows:

1. **Full Integrated (Insourced) ERP**: either through an ERP such as Oracle or SAP or other integrated system
2. **Business Process Outsourcing (BPO)**: through third party processing models that provide services for all or part(s) of the revenue chain. Examples include bill printing providers or collections specialist firms
3. **Software as a Service (SaaS)**: this is the design and go model which is similar to the former Application Service Processing (ASP) model

Although each is unique in terms of processes, risk profiles, and expected returns, revenue assurance still applies.

Key areas to review during the implementation process are outlined in the graphic as Exhibit 1: Core Revenue and Customer Care Processes.

EXHIBIT 1
CORE REVENUE AND CUSTOMER CARE PROCESSES



Note that billing is the core sub process within the overall revenue stream. Although billing is the critical touch point with the customer, revenue assurance controls should be built into all areas within the core revenue, customer care, and compliance processes.

II. Implementation Issue: Role as Loss Monitor

Revenue assurance should be maintained, if not heightened, during implementation of billing and customer care systems. Increased risk of billing errors and other revenue losses arise during implementation for the following reasons:

Pre-Implementation (Uncovered Losses) There are known losses in revenue processes and systems. Even in the most stable environment, current estimated losses of 2% to 5% are inherent from day one.

Implementation Losses (Systemic Losses) Loss of revenue during implementation exists due to demands related to data requests, limited resources, change, and variability which are part of the implementation process. These losses can significantly exceed pre-implementation losses.

Post Implementation Losses (Write-offs) In order to establish goodwill, often the provider makes significant billing adjustments in response to customer queries to keep the customer satisfied, regardless of whether the issue is an error or not.

The sum of these losses at different phases creates an environment where significant losses can occur during implementation.

Key areas to address as part of the implementation are as follows:

1. **Data Completeness:** An initiative should be in place to ensure all data is complete. Data sampling and testing can be used as a validation tool. Master files requiring validation for meeting completeness objectives include customer master data, pricing master data, contract master data, settlement master data, tariff master data, and regulatory master data.
2. **Data Updated:** Letters, calls, and the internet can be used to survey customers on a sample or global basis to update customer contact and other master file data to ensure data elements are current.
3. **Data Relevance:** The project team, under the guidance of management, should decide which data formats and points are relevant to the future design. For example, will additional customers or market preferences require historical data on usage? What new requirements will our customers place on the system?
4. **Data Structures and Format:** The team should agree on the appropriate data formats and rounding conventions.
5. **Data Security and Privacy:** The team should retain strict standards for privacy and security.
6. **Data Ownership:** A matrix should be completed to determine who is responsible for ownership of key data elements.
7. **Exception Processes:** Exception processes are most likely to cause billing problems. Typical exception processes include terminations, meter change outs, upgrades, and additions or deletions; contract updates, customer moves, special promotional billing programs, etc. These processes need to be clearly documented, understood, and assigned ownership for effective control. Sampling for errors prior to and during the implementation can point out trouble spots in the revenue processes.
8. **Rates Charged:** One obvious area where errors occur is in using the correct bill rates. Segmentation of bill rates into pools or plans with subsequent testing of such rates prior to roll-out can prevent an incorrect rate from being used.
9. **Special Charges:** Special billing processes may be required for scenarios such as multi tenant buildings like apartment complexes.
10. **Non-Metered Revenue:** Non-metered revenue such as reimbursements, claims, energy services, line services, and wholesale trading may require special billing procedures outside of the system.

A good place to start determining where billing and revenue assurance errors are likely to occur during implementation is in historical records such as call center data, accounting adjustments, regulatory documentation, auditor reports, and industry research on billing system errors.

III. Implementation Issue: Role as Control Designer

Controls and assurance should be built into billing and customer care processes during the implementation. The process should not be a reaction to billing complaints that occur after the new process is rolled out. Most system integrators are responsible for implementation only. Fine-tuning and configuration of controls is often left to management and the control functions after implementation. The following control points should provide a reference point for designing assurance controls into the process in a proactive fashion:

Key revenue leak points are noted in the table below.

REVENUE LEAK POINTS AND MITIGATING TOOLS

	Leakage Description	Mitigating Tool	Originating Function
1	Line Loss	• Transformer optimization • Demand Response Programs (DPR) • Meter Data Management Systems (MDMS)	Engineering
2	Commercial Losses Due to Natural Disasters and Plant Failures	• Contingency plan • Insurance • Back-up power and alternative energy • Regulation and cost recovery	Operations
3	Improper Meter Hookup and New Meter Installation	• Photographs • Training	Operations
4	Meter Change Outs and Upgrades	• Training	Operations
5	Incorrect Meter Read	• Training and RACD sampling	Operations
6	Theft (Tampering) From Known Accounts	• Seals • RFID • Advanced Meter Reading (AMR) with reverse rotation indication • AMR with data pattern analysis • Work Management Systems (WMS)	Operations
7	Theft Via Stolen Meter	• RFID tagging & Global Positioning Systems (GPS)	Operations
8	Theft From Unclosed or Other Account	• Compare billed versus delivered energy to energy service providers	Operations
9	Unmetered Accounts	• Compare billed to delivered energy	Operations
10	No Customer Assigned to Active Meter and Active Usage	• Compare billed to delivered energy	Operations
11	Timing Delays in Reading Meters	• Policies & procedures • Training	Contracting
12	Incorrect Tariff Code Used	• RACD sampling	Customer Service
13	Outdated Tariff Code Used	• RACD sampling	Customer Service
14	Plan Switches & Upgrades	• RACD sampling	Customer Service

	Leakage Description	Mitigating Tool	Originating Function
15	Duplicate or Missing Customer Files	• Contract testing • Contract Management Solution (CMS)	Contract Management
16	Data Input/System Errors	• Control checks and monitoring	Information Systems
17	Unit Changes	• Control checks and sampling	Information Systems
18	Improper Netting of Trade Activity	• RACD reviews and controls	Settlement
19	Variances between Actual and Forecasted COGS	• Isolate and understand variances between actual and forecasted COGS	Settlement
20	Incorrect Volume Assignments	• Reconciliation of trades to consumptions	Settlement
21	Ineffective or inefficient Hedging	• Defective hedges	Portfolio Management and Hedging
22	Customer Walks From Account	• Credit scoring, modeling, pre-pay and deposits • Aging of accounts	Collections
23	Customer Fails to Pay	• Credit scoring, modeling, pre-pay and deposits where allowed by regulatory authority	Collections
24	Liquidated Damages for Contract Terminations	• Training	Collections
25	Customer Moves	• Tracking	Collections
26	Customer Post Shut off for Non-payment	• Credit scoring, modeling, pre-pay and deposits	Collections
27	General Ledger and Sub Ledger Interfaces	• System access control	Information Systems & Accounting
28	Credit and Debit Memo Application	• Accounting controls	Accounting
29	Manual Entries to Accounts	• System controls	Accounting
30	A/P (Trades) Netted with AR Accounts	• Accounting and system controls	Accounting
31	First Bills and Last Bills	• Accounting and system controls	Accounting
32	Billing Corrections	• Reconciliation of accounts	Accounting
33	Duplicate Postings	• Reconciliation of usage data to accounting data	Accounting
34	Budget Billing and Fixed Billing	• Reconciliation of accounts	Accounting

	Leakage Description	Mitigating Tool	Originating Function
35	Unbilled, Accrued and Unearned Revenue Accrual	• Training • Reconciliation of accounts	Accounting
36	Data Input/System Errors	• Training • Testing of timing/algorithms	Accounting
37	Cash Applications in Bulk or to Incorrect Account	• Training • Reconciliation	Treasury
38	Security Deposits Netted with AR and Other Accounts	• Training • Accounting control	Treasury & Accounting
39	Regulatory Reporting Inaccurate	• Test market trading partners for compliance with standards	Regulatory
40	Improper Allocation of Revenue to Markets or Business Units	• Reconciliation with commodity trades	Reporting

Adapted from Revenue Assurance Control Desk a Reference guide for Utilities and Retail Energy Providers 2010.

IV. Factors to Consider During an Implementation

Teaming: From the start, the project management team should include broad representation. The ideal project management team should include representation from the following: Data, Systems Configuration, Risk and Revenue Assurance; Accounting and Finance; Regulatory, and Change Management.

Baseline Key Statistics and Metrics: The organization's leadership should establish a solid baseline of current metrics. Likely metrics include call center billing errors, accounting adjustments, customer complaints, rebills, error rates, customer ID's, churn percentages, and days sales outstanding. The purpose of the baseline is to establish a reference point for measuring improvements and systemic changes as the implementation progresses through completion. Ultimately, these key metrics should improve several months after the implementation.

Risk Assessment: Risk assessment assists in scoping those markets, products, commodities, and systems for processes most likely to contribute to revenue leakage or customer service issues during the implementation. The effects of new customer plans, rates changes, proposed rate cases, new regulatory requirements, new customers, and system upgrades strain the system.

Design and Test System to provide for Visibility: Design for the future. Visibility drives accountability. The time to survey user groups, customers, regulatory bodies, and counterparties is during the requirements phase. Looking ahead, will customers require more payment options? More internet servicing and bill presentment options? Can the proposed system support Smart Metering, new market entrance, or providing additional services? Will customers require visibility to energy usage and efficiency options? These potential requirements or options need to be considered for future expansion of the platform.

Create an Auditable Process: Closely related to visibility is designing and creating a system that is auditable. Key compliance groups and their requirements are as follows:

> **Financial Analysts** – request data related to customers, contracts, demand, pricing, and market segmentation
>
> **Auditors (Internal, External and Energy Auditors)** - request data on sales, costs, margins, unbilled/accruals, flow month and accounting month data, and explanations on variances
>
> **Compliance and Regulatory** – request data on costs, returns, rates and capital
>
> **Energy and Utility Auditors** – request data on meter readings/usage and rates

Often such requests are not anticipated in the systems design phase. These standard sets of data can be obtained by polling the appropriate group and building in the requirements prior to "going live." Create a "golden thread" or the ability to reference a transaction through the entire process: pre-contact, contract, customer set-up, usage, meter reading, billing, settlement, general ledger, reporting through conversion to cash.

Understand Accounting Impact: The accountants are responsible for recording the complex set of billings, accruals, unbilled, and unearned revenue necessary to report gross margin and earnings. Will the system support data mining and reporting requirements for recording actual and estimated revenue and costs?

Communicate with Customers as Part of the Billing Process:

- Sample charges for accuracy of rates prior to, during, and after the implementation—include measures for error rates and data accuracy
- Timing: Avoid "going live" during a shoulder month. Abnormal bill amounts due to seasonality can raise questions from customers after release of the bill from the new system.
- Statistically, usage and revenue amounts pre-release of a new bill should be insignificant compared to those processed after the new bill. If not, the estimation, meter reading, or billing process should be questioned.
- Provide sample bills; determine and survey bill format
- Generate sample billings with a subset of customers as part of a survey
- Determine if one bill or multiple bills will be provided
- Consider using customer invoices which show weather patterns, historical usage, competitor rates, usage trends, and energy efficiency appliance ratings.

Parallel Processing: Both the new and the existing processes should be run in parallel to determine risk points and errors, especially for the exception processes.

Innovation: The best time to consider innovation is during the implementation phase of the customer care process. Can billing plans be tied to alternate payments, other products such as credit card programs, frequent flyers, and other bundled offerings? Can the system support pre-payment or rewards for on-time and early pay?

Implementation of billing and customer care systems provide challenges to the organization. However, assuring hard earned revenue is critical both during and after implementation.

About the Author

John Kopalchick is the founder and President of Kopac Consulting. John has more than 22 years of progressive leadership experience in Big Four public consulting and international corporations. John has gained his reputation consulting for over 100 major clients across multiple industries including energy, manufacturing, retail, distribution, waste management, services, and high technology.

ABOUT KOPAC CONSULTING, LLC

How is Kopac different?

Kopac Consulting is a Houston based company providing solutions to energy related companies in North America. Our leadership has more than 55 combined years of consulting, professional accounting, and industry experience. We are measurably improving companies with disciplined thought and impeccable execution. Our integrated teams of experts in business, accounting, information technology, and operations will deliver permanent answers to your company's challenges. Kopac will work expeditiously and efficiently to strengthen your company, then leave.

Innovative Services

Kopac Consulting provides four groundbreaking tools for lowering costs and increasing revenues:

1. ***Revenue Assurance*** - Our proprietary Revenue Assurance Control Desk (RACD®) solution
2. ***Capital Planning & Investment***℠ - Our method to provide maximum visibility of investment decisions and deal flow
3. ***Managed Project Solutions***℠ - Special project management and technical support for your accounting reconciliations, implementations, recoveries, and due diligence support
4. ***Supply Chain Management*** - Our SCM solutions support key systems such as:
   - Supply Chain Risk Management
   - Strategic Sourcing
   - Process Improvement
   - Inventory Control and RFID

Commitment to Success

Kopac consultants will exercise individual initiative in solving your company's problems. Our consultants are trained to make value judgments. They will separate the essential from the non-essential and prioritize their time and attention in tackling the biggest problems first.

Kopac only hires experienced proven problem-solvers. All full time employees have masters or professional degree, a CPA or another professional designation; and extensive energy industry and professional service firm experience.

Energy Industry Expertise

Kopac offers specialized energy expertise across multiple segments including geological and geophysical; oilfield services, exploration and production; transmission and distribution; refining and marketing; power generation, regulated utility and deregulated retail energy providers; and trading and marketing.

Integrated Perspective

Successful business improvement must integrate throughout your entire organization. Any new project must work harmoniously with your organization's current Operations, Accounting and Finance, and Engineering departments.

Integrity and Confidentiality

Kopac adheres to strict business conduct and industry standards of confidentiality. We will complete your project expeditiously and leave. When you engage Kopac you enlist a partner. You should expect our help in permanently improving your business. Your company will receive what it needs to prosper.