



Deployment of revenue assurance excellence for the largest water distribution organization in the middle east region

Client expectation

The client engaged Protiviti to establish a best-in-class revenue assurance function within their finance department to achieve operational excellence. In addition, they wanted to be equipped with the best-fit functional structure, governance framework, and operating model with well-defined policies and procedures, ensuring adequate risk and controls across all major revenue-generating streams.

Challenges faced by client in Revenue Assurance operationalization

- Limited understanding of existing revenue streams and associated processes
- Unawareness of existing process risks and exposures leading to revenue losses
- Unavailability and access to key data points to analyze leakage risks
- Limited awareness on data quality and accuracy issues of data points
- Limited awareness on Revenue Assurance activities to be performed

The utility industry is poised to evolve with a converged ecosystem over the next five years by digitizing customer experience, leveraging data, and optimizing lean and standardized processes focused on automation. The water crisis is among the top three global risks present in the world today. Globally, 28% of water is lost to undetected leaks in water infrastructure, failure to accurately meter usage, and theft.

The Non-Revenue Water (NRW) rate exceeds 50% in several countries. We refer NRW as the water leaking from the system before it reaches the end consumer (*technical or physical losses*) and water consumed without being correctly billed. For example, through illegal connections or improper metering of the consumption (*commercial or apparent losses*). NRW management allows utilities to expand and improve service, enhance financial performance, make cities more attractive, increase climate resilience, and reduce energy consumption.

Our client was focussed on providing the best water and wastewater treatment services and improving the quality to international standards across middle east . The client was looking for a trusted partner to build operational excellence by establishing a world-class Revenue Assurance function. The objective was to establish policies and processes with adequate controls ensuring compliance with internal and external reporting requirements, proactive assurance of order to cash cycle processes, and accuracy of billed revenues.





Due to the limited experience in revenue assurance best practices, the client approached Protiviti to define the scope of the RA function, functional responsibilities, tools, and capabilities required to carry out the function effectively. The best industry Revenue Assurance Methodology had to be leveraged to identify, analyze, and report the risks and exposure to revenue.

How did we help

a	Business process review – Assessment of key business processes following the revenue chain to encompass critical risks and controls to be defined for all revenue streams.	d	Identify revenue leakage points across the revenue chain and recommend risks associated with revenue and cost monitoring KPIs by executing controls into the existing environment from the order to cash lifecycle, and report the level of inaccuracies through independent data analysis.
b	The understanding of IT systems and their data flow within the various systems.	e	Build knowledge repository and process maps for the existing team to perform the continuous monitoring of RA controls. Perform Knowledge transfer to the RA team, including plan, materials, and workshops to perform the controls along with data source identification and its understanding.
c	Revenue assurance function structure and frameworks – Define the structure, strategy, charter, and transformation guidelines to achieve phase-wise functional maturity, excellence, and roadmap for implementing transformation initiatives. In addition, identify technology needs for the function by assessing current state and future sustainability and assurance compliance.		

Our approach

Protiviti followed the below customized approach to address the client expectations:

-  **Data assessment** – Identified and assessed the data points from 20+ systems and applications for revenue-related processes. Performed gap assessment and feasibility of datasets required for performing RA controls.
-  **Governance setup** – Developed a comprehensive RA governance framework including the following:
 - a) RA strategy and charter
 - b) Leakage detection and prevention guidelines
 - c) Reporting guidelines
 - d) Risk and control matrix
 - e) Standard operating procedures for each RA control
 - f) RA tracker for monthly reporting of findings
 - g) Operational and executive management dashboard for monthly reporting
-  **Billing analysis and leakage impact**
Independently performed RA controls across Order to Cash revenue cycle while covering the below data points:
 - a) Configuration reviews of rates and discounts
 - b) Billing assurance and invoicing review of all major revenue streams
 - c) Revenue reporting – Revenue validation between billing and ERP reporting
 - d) Customer and vendor contract reviews to identify business risks
 - e) Analysis of collection mechanisms and bad debts
 - f) Data integrity and consistency from provisioning to billing system
 - g) Usage integrity between metering to billing system
-  **Knowledge transfer and training**
 - a) Performed knowledge transfer and workshops on the control performance and risk mitigation techniques
 - b) Conducted awareness sessions of RA activities through workshops for external teams
 - c) Training to the RA team on best practices, methodologies and frameworks around RA processes, tools, and technologies

Our solution highlights

Uncover the process gaps, control weaknesses, and quantify leakages, exposure, and cost-saving opportunities

20+ Processes reviewed around Connection Management, Meter Reading, Billing Operations, Collection/ Receivables Management, Payment Violations, Adjustments, Disconnection, etc.

Identify gaps in existing processes and controls and subsequently improve the overall effectiveness and efficiency of operations

50+ Controls executed across 8 revenue streams and identified revenue impact of over USD 127M, out of which leakages amounted to USD 20M, which can be fixed through process enhancements or fixing the data discrepancies across business processes.

Analyze, identify, and address issues for areas that are currently not covered due to system, people, or skill limitations

18+ Data sources used to analyze the data, including Customer Care and Billing System, Automated Meter Reading, Mobility, ERP, Tanker Express, SMS Gateway, Payment Gateway, etc.


Maximize ROI by informed prioritization of initiatives across the organization based on risk profile across various processes


Over 31 gaps were identified across business processes, out of which 22 were quick wins and 9 were long/medium term initiatives that could fix and optimize the processes of Order to Cash cycle having impact on to the customer journey.


Value delivered


The client was able to provide the management with a view of revenue risks applicable in water and non-water revenue streams and the leakages incurred to the business because of process, system, and data integrity issues. In addition, way forward action plans and initiatives were designed along for mitigation through prioritization based on the risk criticality and impact to the business.

This project helped the client in achieving the following:

 Uncovered the leakages and exposures to the revenues having direct impact on the bottom line.

 Operationalize the second line of defense against potential threats on revenue accuracy through enhanced assurance of the entire revenue chain.

 Reduction in data integrity and accuracy issues to increase the accuracy of customer billing and reduction of billing complaints.

 Well-developed revenue assurance function with best-in-class governance supported by strategy, charter and latest methodologies and techniques.

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