

## Regulatory Reporting in the Cloud (RRiC): Let's run with the cloud

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Post 2008 financial crisis, plethora of regulations which results in several regulatory reporting requirements and huge burden to the banks and financial institutions to comply with. These regulatory reports are too complex and cumbersome and banks spent huge efforts and money on setting up the infrastructure, processes and controls to support these reports. Now, as most of the banks regulatory reporting framework is matured and set-up is in place to comply, are exploring an effective way to reduce the cost of compliance and increase overall efficiency.

Regulatory reporting is one of the key function of Banks and financial institutions where they specifically allocate significant budget to comply, monitor and implement new regulatory requirements. However, this is a cumbersome task especially complexity of regulatory reports and regulators expectation (e.g. governance, focus on qualitative assessment, more frequent review and disclosures, etc.) has increased over recent years. Additionally, banks are facing multiple challenges due to limitations of current reporting infrastructure. Some of the challenges are mentioned below:

- **Legacy and multiple data source systems:** Banks with legacy and multiple data source systems for regulatory reporting making it difficult to perform comprehensive and cost-effective analysis. This also creates challenges to standardize the process, improve operational efficiency and require high implementation and management cost.
- **Vendor solutions:** For regulatory reporting, banks usually have vendor solutions which require licensing costs and the expenses of managing the associated infrastructure such as servers, data marts and specialized resources. In addition, any new regulations and specific rules changes demands quick turnaround which increases the overall cost of the implementation and ongoing regulatory compliance.
- **Manual calculations and processes:** There are manual calculations and processes exist for regulatory reporting within the banks which require cumbersome task and possibility of compliance issues due to unintentional manual errors.
- **Lack of scalability:** Due to huge infrastructure and processes, there is a limitation of scalability along with expensive and painful efforts to meet today's increasing storage and data demands from different sources (structured and unstructured).
- **Missing alignment across regulatory reports:** Lack of alignment among various regulatory reports due to which lot of redundant and repetitive activities.
- **Extensive process of gathering business insights:** This relates to longer and tedious process to collect the data and perform analysis for business insights.

These challenges along with intent of reducing the cost of compliance are pushing banks to explore the options. One of such option is cloud-based solutions i.e. regulatory reporting in the Cloud (RRiC).

### RRiC (Regulatory reporting in the cloud) overview:

In digital era, banks and financial institutions are exploring and continue to invest in digital technologies to reduce the burden of regulatory compliance. Cloud based services are arising as an effective option for ensured regulatory reporting compliance by meeting banks needs to process massive and complex data and reducing cost by removing traditional IT constraints.

### What is RRiC (Regulatory reporting in the cloud)?

RRiC is hosted on the cloud which is a modern data warehouse or invisible data centers where data is stored and can be accessed for the regulatory calculations and reporting. In other terms data storage is taken off from physical work location and made available in the cloud for regulatory reporting. Objective is to create a common technology platform for regulatory reporting without direct active management by the bank users. This is a cost-effective way for banks and financial institutions to take benefit of the latest technology without the huge upfront cost of procuring, configuring and setting up the required hardware, software, and infrastructure. Additionally, cloud based regulatory reporting have multiple features and can facilitate below services:



Figure 1: RRiC features and services

Cloud enabled solutions for regulatory reporting are available in the form of public, private, and hybrid clouds. Banks depending upon the strategic direction, level of innovation, risk appetite, security features, and other requirements can choose any cloud option for regulator reporting. Although, there are multiple banks and financial institutions which are moving towards hybrid cloud to get the best of both Public and Private cloud. Thus, using private cloud in order to house customer and other sensitive data whereas public cloud to access open-source, applications development and rapid testing and deployment.

To cater cloud services, there are multiple vendors available which offers services depending upon the service models such as Infrastructure as a Service (IaaS), Platform as a Service (PaaS), and Software as a Service (SaaS). The common aspect among all these service models is the task of purchasing, deploying, and configuring the data centers space, and the hardware to support the data warehouse which transfers from the user to the vendor which can be huge relief to the banks and financial institutions. SaaS is one of the most common service models which banks and financial institutions are inclining towards and adopting. For this, vendors deliver a complete cloud solution i.e. provide all the hardware

and software, upgrades, security, data availability, data protection, and governance. Banks typically pay only for the storage and computing resources they use, when they use them.

### RRiC Key benefits and drivers:

RRiC addresses many current reporting challenges and comes with many benefits some of which are especially worth considering for banks; here is an overview of the most basic yet impactful benefits and key drivers for banks to adopt RRiC.



Figure 2:RRiCKey benefits and drivers

- **Cost savings:** With RRiC, banks can avoid to invest heavily in dedicated hardware, software, maintenance, and related manpower. Instead, banks can get all these services through cloud service providers in cost effective manner (e.g. pay-as-you-go, one-time-payment). This cost savings may lead to drive product innovation, more focus on the business and regulatory aspects, increase headcount and boost wages.
- **Scalability and Flexibility:**RRiCprovide banks the ability to rapidly scale processing capability up and down according to changing regulatory requirements, market conditions and technological needs. The ability to respond quickly will be an important competitive edge especially suites to regulatory reporting due to new regulations as well as demand for data and workloads usually high during quarter and year ends.
- **Security:** Data security is one of the critical aspects which makes banks and financial institutions skeptical about cloud adoption for regulatory reporting. The cloud can be open to risks for regulatory violation, from hackers and various other cyber-attacks. However, in recent years, multiple cloud service providers took this seriously and specifically worked to address the challenges. They are upgrading their services to protect the data against such threats and providing encryption services as an additional layer of data encryption for applications that cloud

services providers do not control, thus keeping data secure at all times, wherever it is stored. Additionally, multiple cloud service providers are working with regulators and setting up the strict protocols and security certifications to align with ISO, FedRAMP, SOC, GDPR, etc. into their services to provide assurance to banks on the data security.

- **Operational Efficiency:** RRiC can help banks to standardize the processes, remove redundancies, create single source of data, reduce reporting delivery timeframe and respond to market forces more rapidly. Thus, banks can improve the efficiency ratios, operating leverage and enjoy regulatory excellence.
- **Innovation:** By adopting RRiC, banks can enable other digital transformation themes (e.g. machine learning, AI, cognitive, etc.) and adapt to a culture of innovation and creativity and leave the traditional IT constraints. This can help regulatory reporting teams in multiple ways and bring efficiencies. For example, regulatory rule assessment through Natural Language processing (NLP) techniques and variance analysis through Chatbots can be achieved. Additionally, cloud can provide a platform where banks easily build, test and deploy applications without the need to setup complex infrastructure. Thus, throughout the transformation phase, a bank can experiment with multiple applications on different platforms.

**Summary:** In digital era, technologies (e.g. machine learning, artificial intelligence, cognitive, IoT, etc.) bringing lot of creative ways to perform business and key functions (e.g. regulatory reporting) and providing opportunity for banks to leave the old practices in order to be competitive and quickly adapt to market changes. As the industry progresses further into digital transformation, the benefits of the cloud adoption are hard to ignore especially as an enabler for digitization. This makes it crucial for banks and financial institutions to have sense of urgency and act now in order to cope with an unpredictable and constantly changing financial services landscape.

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