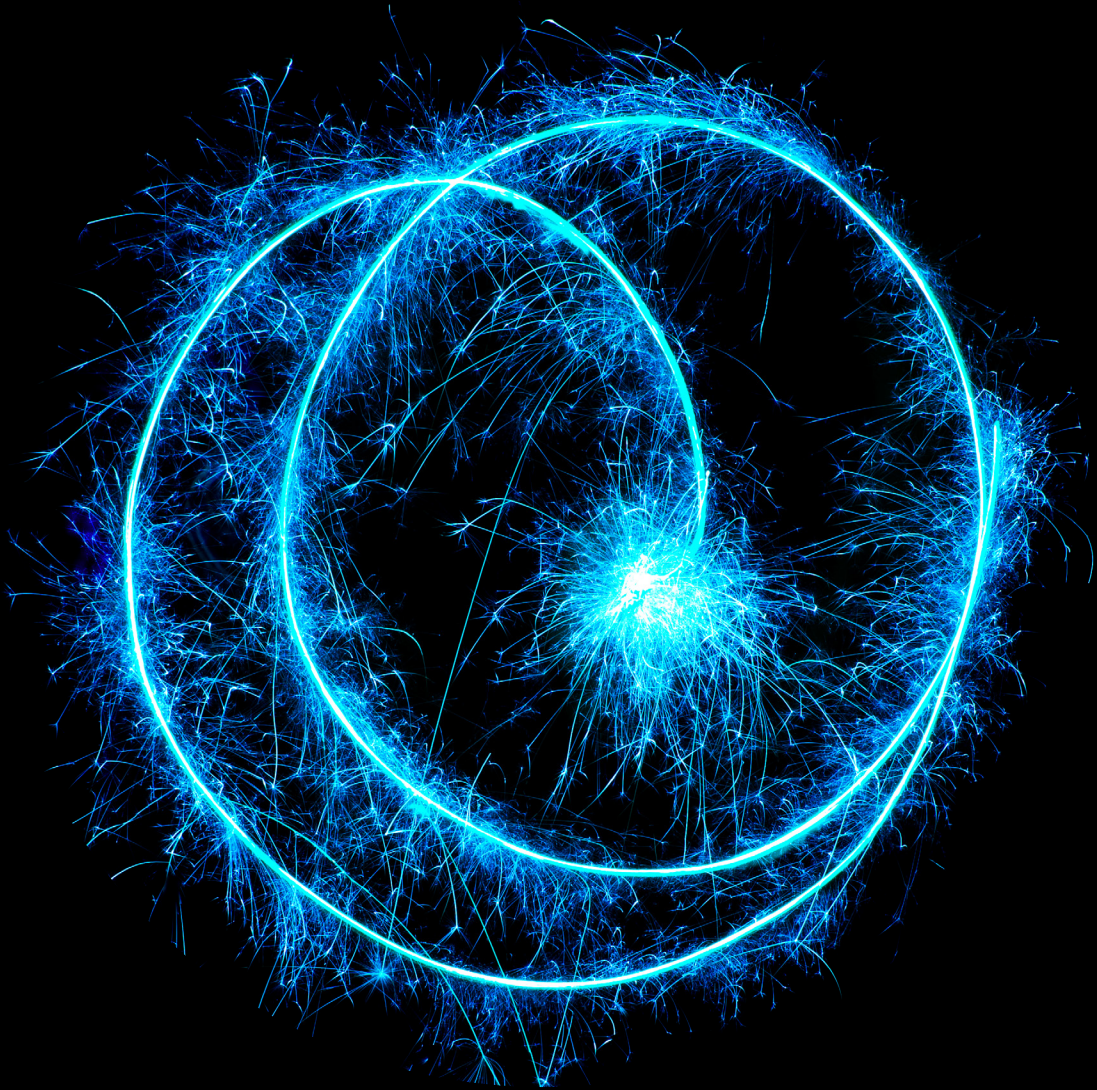


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Flashpoint:

Subscription billing and revenue management capabilities

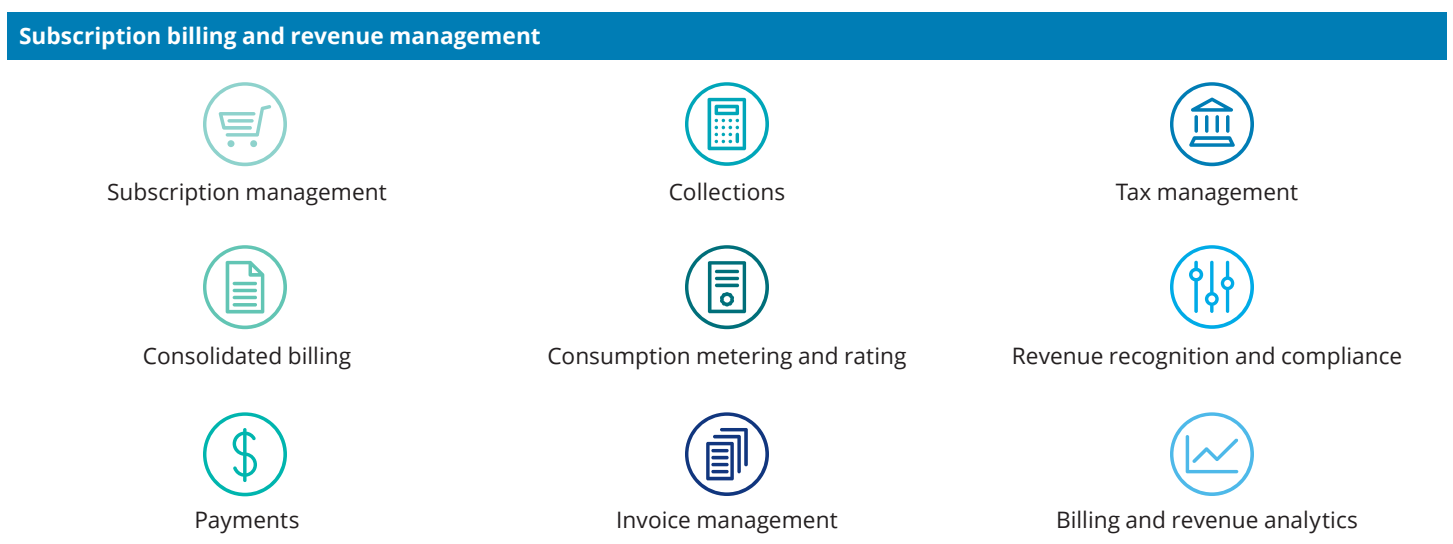
Overview

Why the right subscription billing and revenue management capability is important to transitioning to a flexible consumption model.

Companies are moving away from traditional business models to [flexible, consumption-based ones](#) that allow customers to consume and pay for products or services based on how much they use. It's a significant transition that requires reengineering the value chain and realigning teams to the new business model. In our previous articles, we talked about the [capabilities](#) and [technology platforms](#) needed to support a flexible consumption model (FCM) in the as-a-service economy. We also developed the understanding that subscription billing and revenue recognition capabilities are key to FCM transformations. These capabilities, along with offer management, [CPQ \(configure, price, quote\)](#), contract management, entitlement management, and taxation are critical enablers of the business shift toward consumption-based models. In this article, we will talk about the differences between subscription and traditional billing and explore some of the essential tenets for adopting subscription/consumption-based models.

Subscription billing and revenue management in FCM business models enable customers to pay for products or services based on what they consume (pay-as-you-go), scale their service usage up or down based on business needs, and automatically renew their subscriptions. Meeting the growing demand for these flexible consumption models requires organizations to establish a new subscription billing and recurring revenue management capability (figure 1).

Figure 1: Subscription billing and revenue management capability map



Potential benefits of subscription billing and revenue management

Process standardization and automation offers a range of potential benefits for companies transitioning to flexible consumption models.

Improve customer experience and enhance customer behavior insights

Due to the continuous engagement of customers throughout the as-a-service offering life cycle, and based on each customer's subscription term, the billing operations team has insights on how customers are consuming the service and how much they are willing to pay for the service. These insights can be shared with the customer support, sales, and pricing teams to enhance the overall customer experience, drive cross-sell/up-sell opportunities, and adjust pricing based on demand. This approach also helps retain customers long term and manage churn rate (percentage of customers who stop using the service) more effectively.

Support complex monetization models and reduce billing errors

A flexible consumption model supports multiple monetization models (e.g., flat subscription, overage, standard tiered pricing, volume tiered pricing, minimum commit, etc.) that allow organizations to differentiate themselves and offer value to customers. A mature subscription billing and revenue management process and platform can enable such complex monetization models, thereby significantly reducing invoicing errors, revenue leakage, and customer escalations. In addition, it can help accelerate time to market of new SaaS offerings by quickly deploying a subscription billing and revenue management platform to manage the subscription to cash value chain.

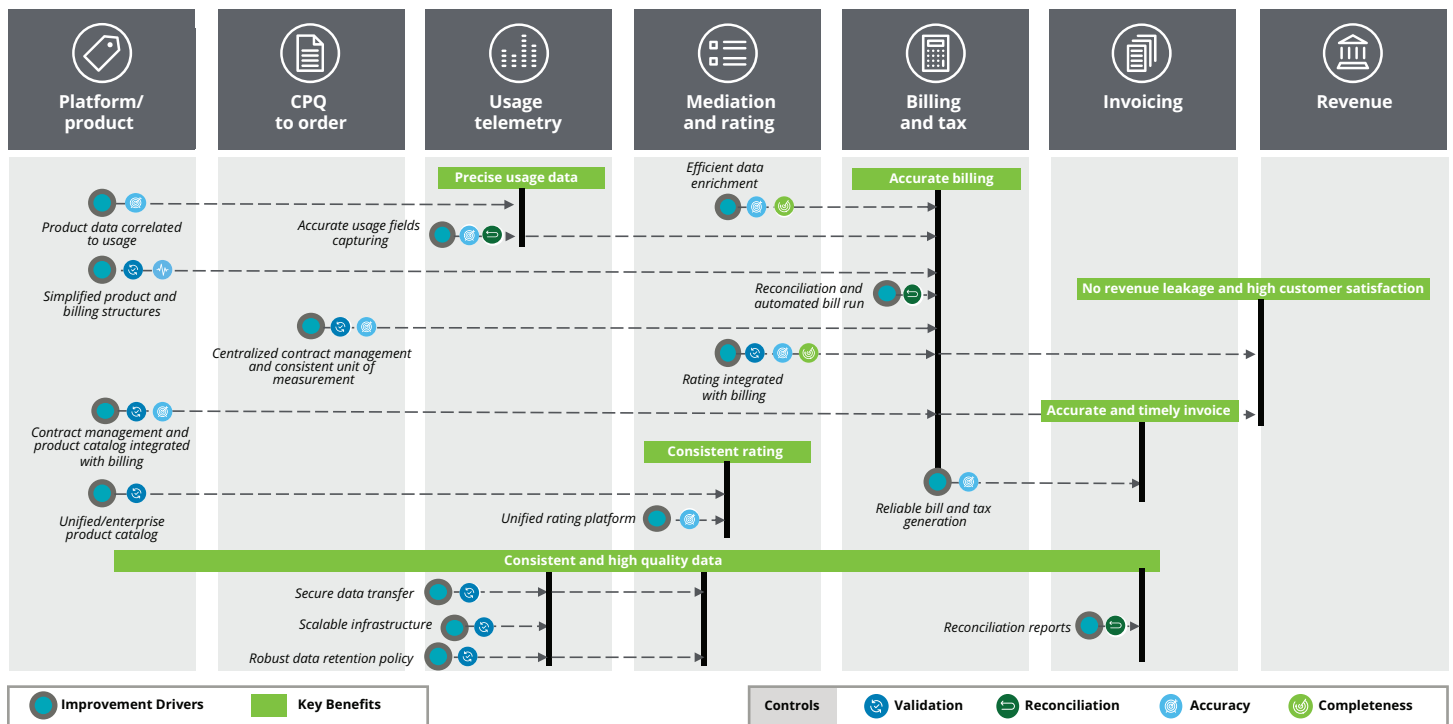
Lower operating costs

Organizations transitioning to flexible consumption models or cloud-native companies often develop custom solutions or manually support billing operations until their recurring revenue reaches a certain threshold. However, this approach can lead to increases in operating costs caused by any combination of the following:

- Revenue leakage due to inconsistent rating rules
- Inaccurate billing and invoicing along with credit re-bills issues
- Delay in invoice generation and distribution due to inaccurate usage data
- Missed contracted/consumed items during billing
- Lack of reconciliation reports and processes resulting in accounting inaccuracies

Standardizing and automating billing processes helps in overcoming these challenges through various enabling drivers across the usage to invoice value chain (figure 2).

Figure 2: Subscription billing and revenue management improvement drivers and benefits



Key considerations for subscription billing and revenue management

To successfully execute on a subscription billing and revenue management strategy, organizations must be prepared to make significant changes to existing processes, consider new approaches to system architecture, and put formal governance in place.



Simplify and standardize business processes

The subscription billing and revenue management process for flexible consumption needs to support a range of capabilities, from usage telemetry and mediation and rating, to billing and invoice generation.



Flexible and scalable architecture with focus on integration and data

System architecture must be flexible and scalable to support various monetization models and revenue growth objectives while ensuring seamless integration and data consistency across the offer-to-cash life cycle.



Establish billing and revenue management governance and operational structure

Successful adoption and enforcement of subscription billing and revenue management processes requires a formal billing operations governance structure and resources with the right skills (e.g., recurring billing skills to rate the customer usage appropriately before generating the invoice for the customer).



Simplify and standardize business processes

A shift to subscription model and flexible consumption requires an entirely new business model that fundamentally alters how products and services are priced, consumed, and billed and how revenue is recognized. To enable diverse and complex as-a-service offerings, a robust set of monetization capabilities and associated billing processes should be established across the following areas:

1

Usage telemetry

In a flexible consumption model, usage telemetry refers to gathering data (such as service features usage, pricing unit of measures, and user activities for security and audit purposes) on how the service is used by the customer. The usage data is collected from different sources including files, IoT sensors, software-as-a-service (SaaS) platforms, etc. The real-time monitoring and collection of this usage data is important for agile billing. This data is fed to mediation and rating engines for processing prior to billing. It is also critical to provide usage reports via a portal so that external stakeholders (customers and partners) can manage their service usage and internal stakeholders (services operations team) can plan and forecast resource consumption.

2

Mediation and rating

Mediation is required to convert the raw usage data gathered from products/SaaS platforms into billable/chargeable data units. The data must be normalized, transformed, and enhanced for billing purposes. The process should also support advanced mediation features like deduplication, automated validation, usage aggregation, and real-time rating.

3

Billing and tax

A flexible billing engine allows customers to set billing frequencies, leverage configurable charging models (minimum commit, tiered, etc.), and consolidate billing across multiple subscriptions, business units, or hierarchy of accounts. It also enables the billing operations team to customize invoices based on customer preferences across geography, customer account hierarchy, or billing entity. As part of the billing and tax effort, it is critical to:

- Define policies for how price changes will affect billing for the service
- Enable various billing schedules (monthly, quarterly, annually)
- Verify and rate billing events logged by the system
- Ensure that both the standard subscription bill as well as unique overage charges can be calculated and consolidated into a single invoice
- Integrate third-party usage billing into the subscription billing platform
- Ensure exchange rates are kept up to date and applied appropriately for financial reporting
- Maintain configurable global tax rules based on product, customer, and channel attributes

From a tax management standpoint, tax calculation is automated with minimal touch, and flexibility is provided for products/services with multiple tax rates in specific regions. The tax rates and rules, along with tax exemption applicability, should be configurable per the different criteria for each region, product and/or service, and even specific customers.

4

Invoicing and payments

Invoice management should be fully automated from generation to delivery, including a self-service portal for invoice viewing and downloads. Subscription management platforms can generate automated invoice notifications to customers (per their preferences) and provide an invoice history for audit purposes on the customer portal. The platform should also include a repository of invoice templates with defined standards for displaying billing details and capabilities that allow customers to tailor their invoice layout and/or roll up billing based on their specifications (e.g., by geography, customer account hierarchy, billing entity, business unit, etc.).

Automated payment capabilities enable collections for multiple payment types (such as debit, credit, purchase order, purchasing card (P-card), electronic payments, payment wallets) through multiple channels and process them automatically.

5

Revenue recognition

Recurring revenue needs to be recognized according to the subscription plan opted into by the customer. The revenue management system automates revenue recognition and the closing process for recurring charges, nonrecurring (one-time) charges, and usage charges as calculated by the billing platform. Many services are packaged as bundles, which demand that revenue also be accounted for according to complex standards of allocation according to Standalone Selling Price. The process should be compliant with the new revenue accounting standard from the [Financial Accounting Standards Board \(FASB\)](#) and the [International Accounting Standards Board \(IASB\)](#). In addition, companies need to consider how to account for the incremental costs of obtaining a contract (including commissions), as well as the costs to fulfill a contract, which may need to be recorded as an asset and amortized.

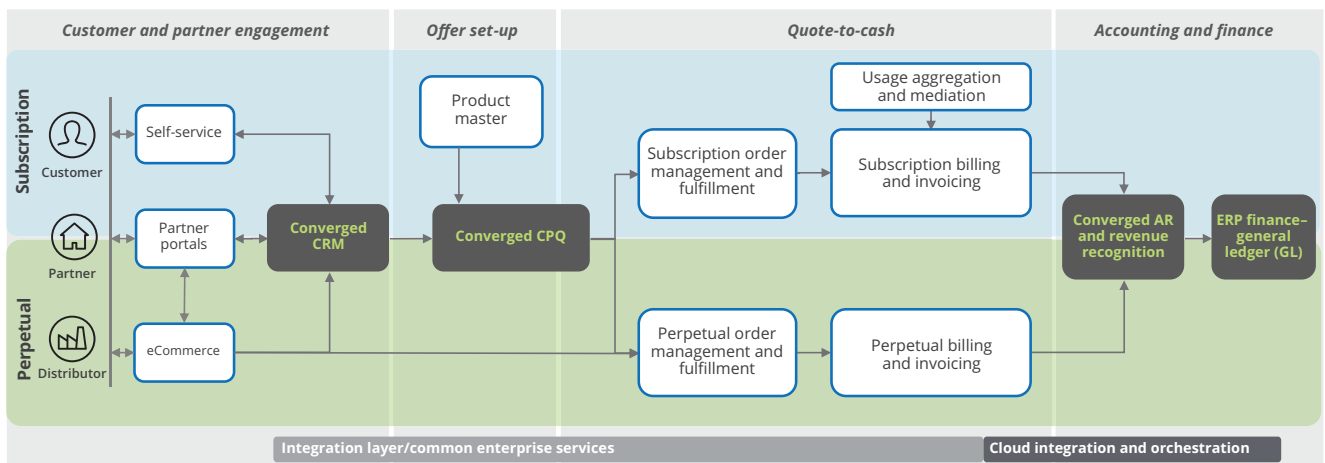




Flexible and scalable architecture focused on integration and data

Moving from a perpetual software architecture to a flexible consumption architecture requires the addition of many new elements and integrations. While some elements, such as CRM and General Ledger, may require little to no change, most components of the order to cash eco system will require unique tooling and/or enhancements. There are options to either run perpetual business on the same, new, or enhanced architectural components as subscription and consumption-based products, or there is the option to diverge perpetual business from subscription and consumption at a logical point where the systems may require functionality that is in too stark a contrast to be converged (as shown below in figure 3). This ultimately will be dictated by the level of complexity required and the level of commitment to maintain a perpetual model.

Figure 3: Subscription model architecture: new elements for greater scale and flexibility



As shown in figure 3, one of the key new elements in the flexible consumption architecture is a **product master**. Required for the offer set-up, the product master holds the product repository/catalog comprising all the details about the different services available, including pricing. This information is particularly important as a subscription billing model allows vendors to dynamically adjust the pricing of services.

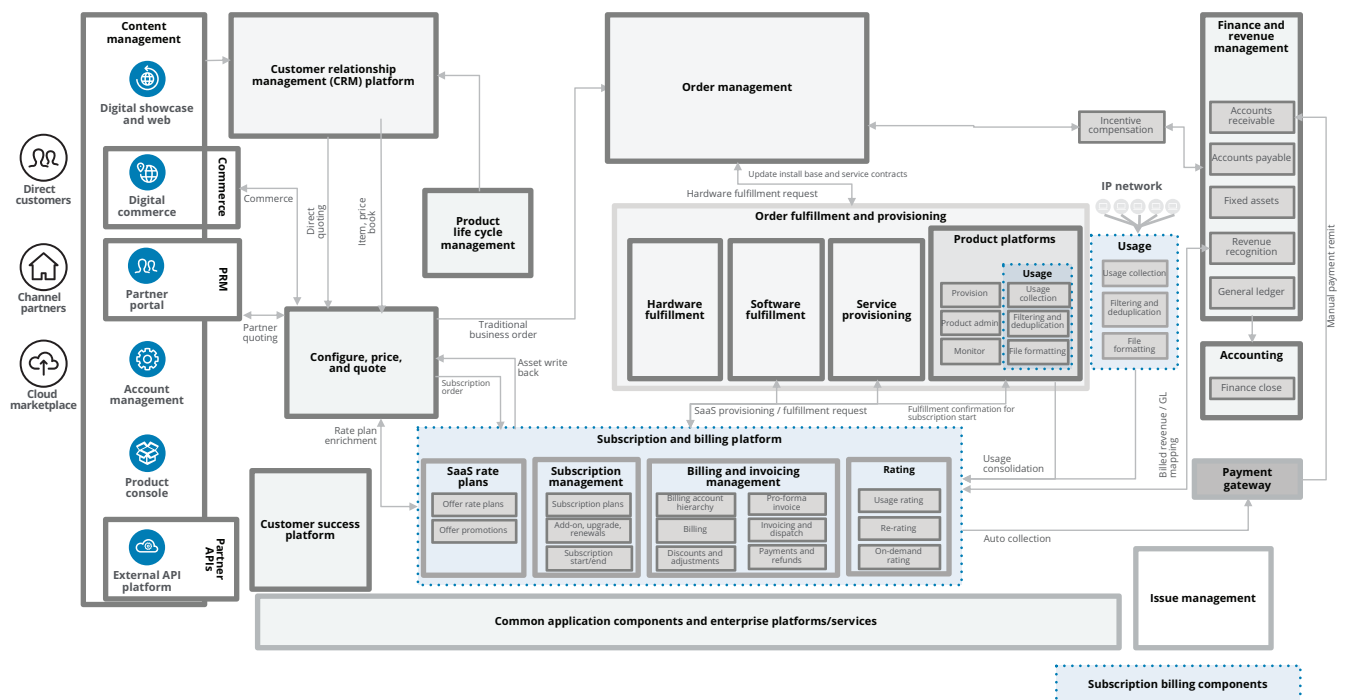
Subscription **order management and fulfillment (provisioning)** is very different from the perpetual model because the services platform is owned and managed by the provider but consumed via cloud by the customer. In the perpetual model, there is a one-time sale and the customer is responsible for deploying and managing the software solution on their infrastructure.

For billing and invoicing, the subscription model requires two important additional components: **usage aggregation and mediation** as well as **billing on a recurring basis** rather than a one-time, upfront process like in a traditional model. Usage aggregation and mediation is responsible for capturing the consumption data per customer contract, while the billing engine processes these usages as well as recurring charges and proration from mid-billing period changes.

In detail

Figure 4 depicts the high-level quote-to-cash reference architecture that enables a subscription and flexible consumption model.

Figure 4: Order-to-cash reference architecture



Foundational to standardizing and automating subscription billing and revenue management processes is consistent, secure, and high-quality master data (product, customer, entitlements, and partner) and transactional data supported by an integrated application architecture. Here are the key integration and data considerations for building an architecture that is modular and scalable to accommodate future growth needs, but also able to address the complexities of flexible consumption models:

Integration considerations

- **Upstream integrations:** It is critical that a subscription billing platform is integrated seamlessly with upstream systems such as CPQ, contract management, entitlements, and provisioning so that billing schedule set-up, usage data validation against the contracts, and timely invoicing to customers is managed effectively.
- **Downstream integrations:** Subscription billing platforms should also be tightly integrated with downstream systems such as tax, general ledger, cash collection, etc., to report the financials accurately and be compliant with regulatory requirements.
- **External integrations:** It is equally important to integrate with third-party systems (such as channel partners) to share the relevant channel partner invoicing information in a timely manner.

Data considerations

- Master data (product, customer, entitlements, partner) should be managed effectively to ensure invoicing is accurate and done in a timely manner. Usually, bill-to/ship-to errors are very common during billing which either delays the invoice issue or invoices get lost in communication, which delays the cash collection.
- Data access controls need to be put in place to stay in compliance with Sarbanes-Oxley (SOX) policies.
- If a cloud-based subscription management platform is used, then data will require enablement of appropriate security controls and policies to avoid any cyber thefts which can damage the brand.
- Enterprise data model strategy also needs to be refined to align with flexible consumption model needs as data models are different from perpetual software business models. In addition, data from billing systems need to integrate with enterprise data lake for corporate reporting.



Establish billing and revenue management governance and operational structure

Moving to a recurring revenue model requires the definition and enforcement of an appropriate governance structure to enable billing accuracy, recognize recurring revenue, and execute billing and revenue reconciliation processes. Redefining roles and associated responsibilities within specific business functions (such as finance and service provisioning) is essential in helping to ensure a successful implementation of billing and revenue management governance and the adoption of a new operational structure.

It is critical for billing operations and finance teams involved in billing and revenue management to embrace and adopt new processes and systems. These stakeholders should be well trained on new billing and subscription management capabilities to quickly identify and correct any billing errors and proactively respond to revenue recognition/allocation issues.

In addition, the transition to a flexible consumption model will require teams to move from traditional tools to new billing platforms. These solutions can be sourced from cloud and provide better functionality, but they also require a different user interface and workflows.

Let's talk

Streamlined subscription billing and revenue management must comprise several capabilities, including usage metering, billing, invoicing, revenue recognition, and reporting/analytics. A billing platform must integrate with sales, financial, support, and product platforms to deliver a seamless customer experience. Before the billing transformation can even begin, a thorough business capability assessment should be conducted, along with a technical architecture assessment. These assessments help identify business capability gaps, align architecture to future business needs, and define an actionable transformation plan.

At Deloitte we understand the complexity of this challenge. We have guided numerous companies through the successful design and deployment of subscription billing and revenue management capabilities and architectures.

Let's talk about what this transition could mean for your organization.

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