# Emergence of Utilities in Capital Markets — A Perspective

## Abstract

Emerging regulations, disruptive technological innovations, increasing competition, and shrinking trade volumes are making it difficult for banks to contain costs, improve revenues, and retain customer base. Innovation on a con-tinual basis is therefore the need of the hour. Straightthrough processing capabilities, regulatory compliance and risk management solutions, and digital transformation solutions are no longer nice to have, but critical for firms to ensure growth. Banks are looking to provide differentiated products to expand their customer base, which will re-quire them to deploy sophisticated solutions that help reduce costs related to repeatable and standard processes. The typical standard activities in the business value chain include client onboarding, reference data management, clearing and settlement, and reconciliation.

This article discusses the emergence of utilities in capital markets, the various utility models and their usefulness to the industry, and the way utilities will reshape the banking landscape.

• • • • • • •

## Introduction

The capital markets domain has undergone several changes over the years due to factors such as changing regula-tory requirements, evolving client requirements, and increased technological innovations. Adoption of the utilities model can result in industry standardization, better cost control, and quick adaptation to regulatory changes. Let's look at what drives financial firms to adopt utility models:

**Increasing regulatory and cost pressures:** Firms are required to increase their spend on IT infrastructure to comply with upcoming regulations such as Mifid II, FEMR, MAR. They also have to factor in penalties for non-compliance. Banks and financial instituions are required to make multiple changes in IT systems across geographies due to varying regulations.

**Evolving technology:** Banks and financial institutions face challenges managing legacy systems as they may not be compatible with upcoming technologies such as blockchain which help simplify post-trade processing and clearing and settlement.

**Declining trade volumes:** Declining trade volumes are forcing firms to evolve their business models and strategies to improve profitability. Banks need to focus on data analytics, modelling, and management to manage risks, and address client needs.

Changing derivatives landscape: Standardization of derivatives processing has led to firms adopting standard utilities across asset classes. The OTC derivatives market is also moving towards process standardization with the advent of central clearing and swaps execution facilities. Banks are facing additional cost pressures due to increased capital requirements and client segregation requirements. Adopting a utility model also offers advantages such as improvements in management of collateral systems and better margining systems for derivatives management. Firms could also look at providing an integrated collateral management system across asset classes as a result of adopting utilities.

In order to address these challenges, banks should adopt utility-based models. This will help them eliminate re-dundant and inefficient processes, remove data and process duplications, reduce costs, and minimize risks. This will also help banks improve profitability.

## Utility Adoption – Industry Trends

Here are some of the trends the industry is witnessing in the adoption of the utility model:

**Partnering with service providers:** Banks are partnering with service providers to convert existing legacy systems into utilities; this involves minimal investments. Some of the business focus areas for partnership are derivatives, settlements, and reconciliations. This also helps banks transform existing assets into industry platforms by incorporating global industry standards and regulations in the utilities, and thus monetize them.

Forming bank consortiums: Global investment banks are forming consortiums to set up multilateral trading plat-forms (MTFs), reference data utilities, trading platforms, clearing facilities, and so on. These offer the benefits of shared expenses and services, while facilitating consistent adoption of industry standards across firms.

**Establishing an ecosystem:** Banks and financial institutions are collaborating with market infrastructure firms to develop utilities. Examples include partnerships between some of the major depositories and technology firms. Fintech startups and consulting firms are also partnering with utility providers to expand market accessibility and develop new infrastructure. This also helps utility providers expand their service lines to other areas such as busi-ness process services. The recent tieup between Sernova Financial and Calypso Technology to enable cloud-based clearing services is an example.1

Further, network and data providers are utilizing their existing infrastructure, and connectivity with banks, to set up industry utilities. Several banks and network and data providers have jointly set up centralized repositories for client onboarding and other activities. For example, SWIFT has set up KYC repositories in partnership with various banks to centrally store all the KYC documents.<sup>2</sup>

# Factors Determining Utility Adoption

**Business functions:** There are several utility-based business functions across the front, middle, and back offices that are ideal for a utility model. There are also a number of horizontal functions (shared and support services) which can be moved to the utility model by adopting industry standards and eliminating process duplications.

Front Office Middle Office **Back Office** Client Onboarding Transaction Clearing/Pre & Management Management Treasury Research Asset Servicing Sales & Marketing Risk Management Pricing and Trade & Execution Processina Valuation Regulatory & Collateral Connectivity Management **Shared Services** Reporting and Product & Reconciliations Reference Data Analytics Financial Controls Tax Processina Support Services **Application** Architecture Maintenance & Infrastructure & Design Development Support Solutions outsourced, but largely maintained in-house Utility-based functions Core differentiators for banks with innovative business models

Figure 1 depicts the current utilities landscape for sell side firms.

Figure 1: Sell-side Value Chain (Source: TCS Internal)

On the sell side, there is greater scope for standard post-trade processes to adopt the utilities model, as non-standard functions in the middle and back offices lend themselves to collaborations with strategic partners. The core differentiator functions in the front office such as investment advisory, research, and client-facing functions are mostly performed inhouse, and retained with the firms.

Figure 2 depicts the current utilities landscape for buy side firms.

On the buy side, there is increased relevance of utilities, especially in the areas of client onboarding, collateral management, and custody services. With the advent of regulations for mandatory clearing of derivatives, asset managers are increasingly finding it difficult to manage margining and collateral activities. However, they are closely watching market shifts before making a decision on adopting the utilities model. As the securities lending and repo clearing move toward centralized clearing with central counterparties (CCPs), significant market and regulatory changes are evolving on the buy side. As a result, adoption of the utilities model is still in the nascent stages on the buy side.

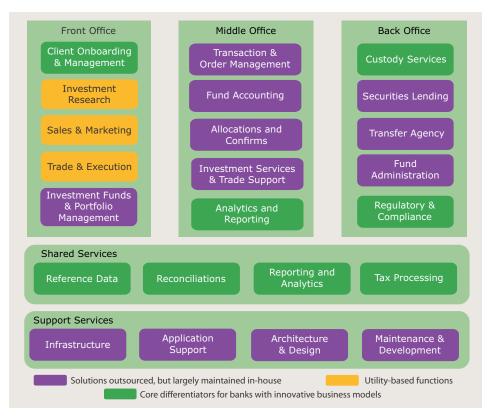


Figure 2: Buy-side Value Chain (Source: TCS Internal)

**Asset class maturity and standardization:** Higher the level of standardization, greater will be the possibilities for the emergence of the utilities model, as the model can be easily replicated across firms. Contracts well defined by regulators, and with the least scope for negotiations and customization, fall in this category. We analyzed the dif-ferent asset classes, their respective degree of standardization, and the emergence of utilities for these assets (see Figure 3).

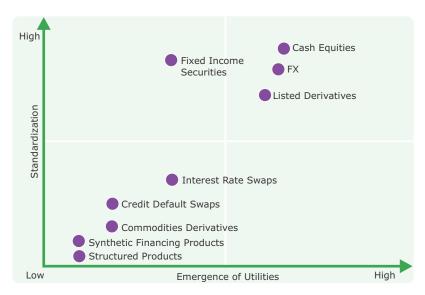


Figure 3: Asset class standardization, Source: TCS Internal

The cash equities, fixed income products, forex, and derivatives traded on the exchange are matured and standardized asset classes in respect to front and back office processes across firms. The other derivatives products are customized, as well as available over the counter, where contracts can be negotiated between two parties.

Cash equities are the most standardized and commoditized assets on the sell-side. The utilities on derivatives are still emerging as the market is moving toward centralized clearing and reporting, trade and swap data repositories, and so on.

The bond market has shown very little traction with regard to the utilities model due to factors such as volatile li-quidity and non-standard issuances. However, regulations and technological innovations will also force bond mar-kets onto standardized platforms.

Operating models of firms: Some of the key factors that influence an entity's decision to adopt a particular utility model include regulatory pressures, cost control, and the firm's strategic roadmap.

Table 1 depicts the various models a bank can adopt; it lists some of the important parameters that influence a bank's build or buy decision. The table also highlights the various features a bank evaluates before deciding on the model to be adopted along with the favorability of the various models with regard to the feature.

Features	In-house	Managed Services	Industry Utilities
Cost control			
Economies of scale			
Time to market			
External dependency			
Risk			
Regulatory change management			
Strategic focus			
Innovation and differentiation			
Data confidentiality			
Customization			
Global market-readiness			
Industry standardization		•	



Table 1: Factors influencing the selection of utility models (Source: TCS Internal)

## Conclusion

The capital markets industry, at large, favors the adoption of a utility model for post-trade processing functions such as clearing and settlement and reconciliations. However, financial institution are striding cautiously in this di-rection, especially in the areas of securities finance and collateral management, as the concept is still evolving. As banks, market infrastructure firms, and other participants move toward a connected and shared network, the in-dustry will witness a large-scale consolidation of intermediaries, and emergence of a few big utility players. Banks will have to adopt suitable 'best-fit' operating models based on several key factors such as data and technology, strategy, business models, risk appetite, customer service, and costs. Given the benefits of a move toward a utility model, firms should consider partnering with competent technology and service providers to effect the transformation.

## References

- [1] Press Release, Calypso Technology Announces Strategic Partnership with Sernova Financial, May 3, 2016, http://www2.calypso.com/calypso-technology-announces-strategic-partnership-withsernova-financial/, accesses November 18, 2016
- [2] SWIFT opens The KYC Registry to funds distributors and custodians, May28, 2016, https://www.swift.com/insights/press-releases/swift-opens-the-kyc-registry-to-funds-distributorsand-custodians, accessed No-vember 18, 2016

#### **About The Authors**

#### Anusha Sivaramakrishnan

Anusha Sivaramakrishnan is a Domain Consultant with the Clearing and Settlement group of the Banking and Fi-nancial Services (BFS) business unit at Tata Consultancy Services (TCS). She has over 15 years of experience in the capital markets space, with specialization in derivatives processing and utilities. Sivaramakrishnan has worked with leading Wall Street firms on their back-office systems, and developed solutions for various IT transformation projects. She has done her Master's in Management (Finance and Technology) from the Birla Institute of Technology and Science, Pilani, India.

### About TCS' Banking and Financial Services Business Unit

With over four decades of experience in partnering with the world's leading banks and financial institutions, TCS offers a comprehensive portfolio of domain-focused processes, frameworks, and solutions that empower organizations to respond to market changes quickly, manage customer relationships profitably, and stay ahead of competition. Our offerings combine customizable solution accelerators with expertise gained from engaging with global banks, regulatory and development institutions, and diversified and specialty financial institutions. TCS helps leading organizations achieve key operational and strategic objectives across retail and corporate banking, capital markets, market infrastructure, cards, risk management, and treasury.

TCS has been ranked No. 1 in the 2016 FinTech Rankings Top 100 of global technology providers to the financial services industry, by both FinTech Forward (a collaboration of American Banker and BAI) and IDC Financial Insights. TCS has also been recognized as a 'Leader' in Everest Group's 2016 PEAK Matrix™ report for Capital Markets Application Outsourcing and Banking Application Outsourcing.

#### Contact

Visit TCS' Banking and Financial Services unit page for more information

Email: bfs.marketing@tcs.com

Blog: Drive Governance

Subscribe to TCS White Papers

TCS.com RSS: http://www.tcs.com/rss\_feeds/Pages/feed.aspx?f=w

Feedburner: http://feeds2.feedburner.com/tcswhitepapers

#### **About Tata Consultancy Services Ltd (TCS)**

Tata Consultancy Services is an IT services, consulting and business solutions organization that delivers real results to global business, ensuring a level of certainty no other firm can match. TCS offers a consulting-led, integrated portfolio of IT and IT-enabled, infrastructure, engineering and assurance services. This is delivered through its unique Global Network Delivery Model™, recognized as the benchmark of excellence in software development. A part of the Tata Group, India's largest industrial conglomerate, TCS has a global footprint and is listed on the National Stock Exchange and Bombay Stock Exchange in India.

For more information, visit us at www.tcs.com

All content / information present here is the exclusive property of Tata Consultancy Services Limited (TCS). The content / information contained here is