

The Connected Cloud – A Silver Lining for Finance

By Larsen Chung



 **SWIFT AND AGILE**
response to market demand for
CLOUD COMPUTING

People matter, results count.

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THE TIME TO BRING THE CLOUD AND FINANCE TOGETHER IS NOW

Technology has evolved rapidly through the last decade, but a risk-averse Finance industry has changed at a slower pace. In Finance there are demanding expectations of security, rules and regulations. Traditionally, competitive advantage, the so-called 'edge' in Finance, has been achieved via highly customized and proprietary systems, and sophisticated algorithms, both of which have encouraged in-house ownership of IT systems and assets.

The advent of technology has changed this dynamic. According to McKinsey, more than 30 percent of revenues at European banks will be driven by digital transformation in the future, and 86 percent of the bank chief executive officers surveyed by PricewaterhouseCoopers LLP last year agree that technological advances are poised to have the greatest impact on banking.

On the execution side, there has been a rapid evolution of vendor and exchange-supported platforms. Raw market data, risk management, direct market access and low-latency connectivity are now available to most firms, and offer a cost-effective option for developing and maintaining such capability in-house. The advantage historically gained by having custom, fine-grained control has diminished and is gradually becoming a commodity: though many financial institutions are not yet treating it as such.

Customer expectations are also evolving. As businesses in other sectors become ever more attuned to their customers' individual needs and preferences, those customers become accustomed to more personalized treatment, both face-to-face and online. Customer-facing segments of the financial industry such as brokerage and advisory arms have lagged behind in not being able to provide that highly-personalized experience.

Capgemini has a long track-record of serving the detailed needs of the Finance industry. We also have a unique practice dedicated to Cloud. It affords us a clear perspective on the gaps and opportunities that have emerged for the Finance industry where technology is concerned.

Having experienced both extremes, algorithmic Finance and big-data-enabled cloud computing, I would previously have been hard-pressed to find common ground between the two. But with the ever-changing dynamics in both industries, I believe that the time is right for Finance institutions to take advantage of the Connected Cloud.

EXAMINING THE TRENDS



Recent History - where Finance has been

For a very long time financial companies operated in private. They gained competitive advantage by devising unique services, and operating them in isolation and secrecy. It was in their interests to develop unique products and programs. That logic extended to their technology investments. Ever-changing regulations and a need to remain at the forefront of technology to gain better execution, liquidity and financial performance led to home-grown, in-house applications and expertise. That in turn allowed for individual specializations, such as high-frequency platforms and data analysis engines.

By locking their systems away, the finance industry alleviated security fears too. Banks and financial institutions developed systems that were and are heavily isolated from the outside.



A new reality

As institutions globally have worked through the complications of online banking, online trading, and data protection, the advantages of operating entirely discretely have diminished. System security is so fundamental to a financial institution's credibility that it is taken as a given. There's nothing remarkable about being secure: only about not being.

There has been a shift towards consolidated, managed-service offerings that provide multiple functionalities for financial firms, including the data sources, execution, risk management and reporting. Highly-resourced firms may continue to develop and enable home-grown platforms, but as new competition enters the market and the industry grows, outsourced solutions providing on-par features and a faster time-to-market are appealing, and lower the barriers to entry for newer firms.

On the execution and sell side, the value-proposition of microsecond, algo-based execution has been decreasing, due to the increasing costs of delivering market data. This, combined with the reduced need to show every tick for displayed applications, has led to a shift in focus for some firms. For example, a financial institution may in the past have focused on execution for its profitability during the day, with macro-based reporting and compliance on the back-end, and one-off, highly-manual prospect presentations for client

acquisition. Today, the same financial institution may utilize managed services for execution and reporting, re-allocating resources to focus more on Big Data analytics, a Marketing and CRM platform for client engagement and retention, as well as a mobile platform for client presentations and notifications.

Firms are looking at how much revenue they generate compared to infrastructure costs and liking the answer less and less. In-house, tailored systems and accompanying staff were once an advantage or even a necessity. They have now become a questionable expense, and even a barrier to business.

The new benchmarks for competitiveness in Finance have little to do with standard computing capabilities. Instead they relate to new efficiencies: cost, agility, and customer experience. Efficiencies that come with the Connected Cloud.



What is the Connected Cloud?

When people discuss the Connected Cloud, it is often in reference to the Internet of Things, or the social media cloud. Connected Cloud is more than that. It isn't just the cars, health devices or lightbulbs being enabled for the internet; it is more than big data analysis of tweets and pictures shared by a global community. It encompasses the impact of digital connectivity across everything.

How important is the connected cloud to Finance? One only needs to look back at 2014, the year of the robo-advisors, to see the potential impact to one segment of the Financial market. In 2014, companies like WealthFront and Motif Investment began to capture imaginations, as players with asset gathering capabilities in the billions of dollars. These start-up firms, with no existing infrastructure, have succeeded in wresting sizeable market segments from well-established players: companies with decades of experience, infrastructure and clients in the financial advisory business. Imagine what else the Connected Cloud can bring to Finance!



Cost and Cloud

Any business functionality that becomes standard across companies, becomes a candidate for cost-reduction. In most cases, the functionality provided by business systems offers no real differentiation. Companies and institutions are wise to select reliable, affordable options. Standardized

packaged software is becoming firmly established across most industries.

The cost of IT can be high where companies persist in maintaining in-house systems. Infrastructure and staff must be paid for. Any significant new project introduces further capital expense.

Cloud enables IT to be abstracted, as a service the company buys in. New models, including monthly subscription, reduce the need for substantial up-front investment. Instead, those costs, including the cost of new functionality, can be managed as operating expense.



Agility and Cloud

In today's market, it is vital to bring new products, prices and services to customers quickly. Opportunities change rapidly and being first to market is a huge advantage.

There are real disadvantages with the traditional model of in-house infrastructure, individually developed and locally hosted and maintained. Such systems are slow to adjust and require specialist knowledge. I have seen well-known major enterprises relying on in-house systems which were fully understood by perhaps only one person.

Migration to the Cloud does not solve every problem, but when non-technical companies free themselves from the burden of maintaining technical assets, they free themselves from a self-imposed obligation to be experts in infrastructure. Cloud-hosted systems can make adjustments much more quickly than traditional systems, due in part to Cloud software and in part to economies of scale.

Scalability is a particular advantage of Cloud. In businesses where there are occasional or unpredictable peaks in demand, Cloud excels. The ability to add or remove computing and storage capacity in minutes, means companies can have the confidence their systems will cope with spikes, without the long-term expense of maintaining maximum capacity whether in use or not.

Meanwhile new programs and offers can only be quickly launched if development and test capacity can be quickly obtained. In the Cloud, non-production environments can be provisioned in moments, rather than weeks or months.



Customer Experience and Cloud

A whole generation has now grown up with an expectation of rich online customer experience. Those expectations have altered every customer-facing business. To build business in this new market means building relationships. It means engaging customers in new and compelling ways. It means offering value that holds their attention and keeps them from drifting to the competition.

There is a critical need for new awareness and disciplines in Finance companies. In particular, new attention to online Social behaviors, and a much richer understanding of the customer, in order to accurately target products and services.

Managing customer accounts today means much more than securely storing names and addresses. Companies need to understand their customers' interests, habits, histories and spending patterns. Competitive companies do, and they act upon that knowledge: building tailored offers and targeted marketing, designed to capture and keep the audience's attention.

This deliberate customer profiling requires access to big data, and from a Customer Relationship Management (CRM) system.

THE OPPORTUNITIES FOR FINANCE COMPANIES

As the Connected Cloud extends its reach down towards the platform, financial services have been extending applications upwards towards web-compatible technologies. We are at the cusp of everything-to-everything connectivity in the Financial space.

Many financial institutions have already implemented master data management via an enterprise service bus, allowing for integration and streamlining of data access. Taking this one step further and opening up access via service-oriented architecture web services enables connectivity to platforms such as Salesforce.com, Heroku and Hadoop, encompassing Platform, Big Data, CRM and Mobile integration.

THE ENABLERS

Salesforce

The age of connectivity and Social means competitive advantage can be gained by enriching customer experience: and can be lost by failing to.

Salesforce is a highly respected and proven company providing packaged functionality in the cloud. The Salesforce Customer Success Platform is the core upon which all of its industry-leading sales, service, marketing, community and analytics apps are built. There is an open ecosystem of partner apps, and a scalable metadata platform on top of a trusted multi-tenant cloud.

Detailed customer profiles can be built, using social listening and profiling features. These enable targeted sales and marketing, to create 1:1 relationships with customers.

Mobile integration delivers revolutionary services to the ever-growing body of always-on customers. The trend towards communities enables customers and partners to engage experts and seek self-service in entirely new ways.



Big data

Statistics show that 90% of the world's data was created in the last 12 months! Compiling, storing and combining rich data, creates powerful profiles that support deep and long-term relationships with customers.

Traditional relational database management systems and desktop statistics and visualization packages often have difficulty handling big data. Instead, Big Data requires a fundamental shift in the way software is designed. Work requiring massive parallel processing may call for software running on tens, hundreds or even thousands of servers.

The expanding capabilities of Big Data make the discipline a moving target. What is considered to be "Big" in one year may become ordinary in later years. There is a real risk that financial institutions will quickly fall behind, and may even become obsolete, if they have no strategic initiatives in place for the capture and utilization of Big Data.

Scalable open platforms and tools, like Heroku, and Salesforce's open and mobile-first Analytics cloud, allow massively cloud-scalable delivery and analysis of Big Data.

Data standardization is underway in various areas of Finance, with many institutions in Capital Markets already utilizing specialized external platforms for financial tick data.

The Big Data revolution will mean vastly more integration with sources of customer metadata. For financial applications, the old pattern of in-house isolation is very likely to die away, replaced by Connected Cloud networks.



Bringing it all together

It is now entirely possible for a financial institution to receive data, and process strategies and executions via managed services; to store records in a big-data enabled platform that can crunch reports on demand, and display them via a mobile interface to internal and external users; while managing customer service and social media client engagement.

These are just the basics of integrated connectivity. It marks a strategic turning point for forward-thinking financial institutions seeking to deliver not only performance, but the customer experience that is now the differentiator between successful and unsuccessful businesses.

An Example – A global insurance company

Recently, I have seen a global insurance company make this transition, applying the agile, social and customer-focused capabilities of cloud platforms to transform their business across three major business areas.

The customer, agent and client-facing knowledge management area was upgraded from Sharepoint to Salesforce Communities and Chatter, enabling not just self-service but community engagement. The bond and surety side transitioned from legacy ACT and Delphi-based client-server databases to one utilizing FinancialForce, enabling end-to-end scheduling, invoicing and capture with a much greater degree of automation. For commercial brokerage, the upgrade was from legacy Siebel back-end to Salesforce, combining commercial and municipal businesses into the same, single system – eliminating redundancy and upgrading to a modern Enterprise Service Bus.

Through rapid migration to the cloud, this company was able to achieve an extremely fast time-to-market and scale quickly to meet customer demand. In addition, with all of the data accessible in a single system, this has enabled big data initiatives moving forward and positions this company on the cutting edge of customer and partner engagement and success.

MAKING THE MOVE: CAPGEMINI CAN HELP

The need for a trusted advisor

Businesses that provide services on the web need to make many complex choices. Salesforce is designed to support

Our cloud advisory consultants have the technical capabilities to select the services that you require from the platform plus in-depth knowledge about local laws and industry-specific regulations, so they can guide you in your first steps to the cloud

the needs of a global economy, which means that it is highly available, highly scalable, and global.

The needs of your applications may contradict the laws and regulations that you are subject to. You will need to carefully investigate regulations to determine how to proceed. Ultimately, it is up to you and your advisors to select a combination of services that provide you with the capabilities you need and that are in compliance with the rules and regulations to which your business is subject.

The services of a trusted advisor such as Capgemini can be invaluable, especially in the area of service selection. Our cloud advisory consultants have the technical capabilities to select the services that you require, plus in-depth knowledge about local laws and industry-specific regulations, so they can guide you in your first steps to the cloud.

Properly designing and implementing secure applications in the cloud requires a specific skillset that is not easily

found on the market today. Currently, Capgemini is training developers and architects with special attention to the characteristics specific to cloud, including security, elasticity, and operational costs.

Contact Capgemini

Capgemini can assist you in multiple ways:

- Our cloud advisory consultants can help you select the appropriate services to meet your application's needs while staying compliant to regulations.
- Our developers and architects can help you ensure that your application is designed, built and integrated in a secure way.
- We can manage your cloud application's lifecycle for you entirely, if you prefer. Capgemini Application Lifecycle Services offering, which is a managed service for all or part of your application landscape, including your cloud assets. It covers all stages of an application's lifecycle, from application conception, design, and deployment through service, renewal, and disposal.

ABOUT ENTERPRISE CLOUD SERVICES

The convergence of cloud, mobile and digital technologies enables businesses to adapt to demand much faster, to engage with customers, suppliers and partners more profoundly, and to reduce costs. Cloud technologies, packages, and consumption models evolve rapidly. New IT processes and practices are needed. Cloud is often poorly understood.

Capgemini Enterprise Cloud Services is a hands-on, specialist team dedicated to cloud. We study the technologies, the processes, the trends, and their impacts on businesses and users. We prove out timely, practical courses of action. We help our customers gain clarity, and we innovate with them to achieve the goals that make sense for their business.

For more details, contact:

Larsen Chung

Managing Solution Architect,
Enterprise Cloud Services
larsen.chung@capgemini.com



Larsen Chung is an Enterprise Architect and Cloud evangelist for Capgemini, and serves as a trusted advisor for Fortune500 clients worldwide. Before specializing in Cloud technologies, Larsen architected high-frequency trading, market-making and portfolio management platforms for hedge funds and financial institutions.



About Capgemini

With more than 145,000 people in over 40 countries, Capgemini is one of the world's foremost providers of consulting, technology and outsourcing services. The Group reported 2014 global revenues of EUR 10.573 billion. Together with its clients, Capgemini creates and delivers business and technology solutions that fit their needs and drive the results they want. A deeply multicultural organization, Capgemini has developed its own way of working, the Collaborative Business Experience™, and draws on Rightshore®, its worldwide delivery model.

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