

Cloud in Capital Markets – the Backbone of Digital Financial Infrastructures

July 2021: Complimentary Abstract / Table of Contents



Copyright © 2021 Everest Global, Inc.

We encourage you to share these materials internally within your company and its affiliates. In accordance with the license granted, however, sharing these materials outside of your organization in any form – electronic, written, or verbal – is prohibited unless you obtain the express, prior, and written consent of Everest Global. Inc. It is your organization's responsibility to maintain the confidentiality of these materials in accordance with your license of them.

Our research offerings

This report is included in the following research program(s):

Banking & Financial Services ITS

- Application Services
- ▶ Banking & Financial Services BPS
- ▶ Banking & Financial Services ITS
- ▶ Catalyst[™]
- Clinical Development Technology
- ► Cloud & Infrastructure
- Conversational AI
- ► Contingent Workforce Management
- ▶ Cost Excellence
- ► Customer Experience Management Services
- Cybersecurity
- Data & Analytics
- ► Digital Adoption Platforms (DAP)
- Digital Services
- Engineering Services
- ► Enterprise Platform Services
- ► Finance & Accounting

- ► Financial Services Technology (FinTech)
- ▶ Global Business Services
- ▶ Healthcare BPS
- ► Healthcare ITS
- Human Resources
- ▶ Insurance BPS
- Insurance ITS
- Insurance Technology (InsurTech)
- ▶ Insurance Third-Party Administration (TPA) Services
- ► Intelligent Document Processing (IDP)
- ▶ Interactive Experience (IX) Services
- ► IT Services Executive Insights™
- ▶ Life Sciences BPS
- ▶ Life Sciences ITS
- ▶ Locations Insider™
- ▶ Market Vista™
- ▶ Mortgage Operations

- ▶ Multi-country Payroll
- Network Services & 5G
- Outsourcing Excellence
- ► Pricing-as-a-Service
- Process Mining
- Procurement
- Recruitment Process Outsourcing
- Rewards & Recognition
- Service Optimization Technologies
- Supply Chain Management (SCM) Services
- ▶ Talent Excellence GBS
- ▶ Talent Excellence ITS
- ► Technology Skills & Talent
- ▶ Workplace Services
- Work at Home Agent (WAHA) Customer Experience Management (CXM)

If you want to learn whether your organization has a membership agreement or request information on pricing and membership options, please contact us at info@everestgrp.com

Learn more about our custom research capabilities

Benchmarking

Contract assessment

Peer analysis

Market intelligence

Tracking: service providers, locations, risk, technologies

Locations: costs, skills, sustainability, portfolios



Contents

For more information on this and other research published by Everest Group, please contact us:

Ronak Doshi, Vice President

Sampada Rahalkar, Practice Director

Kriti Seth, Senior Analyst

Pranati Dave, Senior Analyst

Satyajit Roy, Senior Analyst

Arham Bansal, Analyst

Divyam Jain, Analyst

1.	Introduction and overview	4
	Research methodology	5
	Background of the research	6
	Executive Summary	7
2.	Build IT infrastructure for the hybrid work model	9
	Establishing a successful hybrid work model	10
	Cloud as the foundation for digital workplace technologies	11
	Cloud adoption by capital markets firms	12
3.	Accelerate data value realization to build data-driven operations	13
	Leveraging the data and AI ecosystem	14
	Role of cloud platform vendors and system integrators in accelerating data value realization	15
4.	Build digital-at-scale financial infrastructure that enables ecosystem orchestration	16
	The need for a cloud-enabled ecosystem orchestration	17
	Business case for financial-services compliant cloud story	20
5.	Innovate at speed and scale to design new products and experiences	21
	Cloud as the foundation to innovate at speed and scale	22
	Role of third-party cloud vendors in helping capital markets firms accelerate their transformation journey	24
6.	Journey to cloud – workload analysis and implications for capital markets firms	26
	Implications for enterprises	28
	Implications for cloud technology vendors	29
	Implications for IT service providers	30
7.	Appendix	31
	Glossary	32
	Research calendar	33

Background and context

- Capital markets firms are seeing a wave of disruption due to factors such as rise of digital assets, the demand for self-service and personalized experiences, and the threat from new competitors. The scale of challenges they face in the current low-interest environment, as margins continue to decrease, has them seeking ways to adapt and innovate. Additional cost and time-to-market pressures attributed to the pandemic served as a catalyst for accelerated transformation and modernization initiatives
- Capital markets firms are moving workloads to cloud for increased agility, access to disruptive and innovative technology, improved performance, and reduced infrastructure cost, enabling them to deliver personalized customer-centric experiences
- There is a need for a collaborative financial services ecosystem to help firms leverage and partner with technology vendors to create and deliver new products and innovate at speed and scale
- As capital markets firms navigate through a complex regulatory landscape and continue to face a volatile economic environment, we explore the current state of cloud adoption in capital
 markets, the drivers for cloud adoption, and benefits and challenges the capital markets firms face. We also look at how enterprises, service providers, and technology vendors can
 collaborate to form a financial services ecosystem
- We lay out the key priorities for capital markets firms in 2021, key strategy initiatives capital markets firms need to undertake, and explore how cloud adoption serves as long-term revenue enablement initiative and not just a tool to cut costs

Scope of this report:





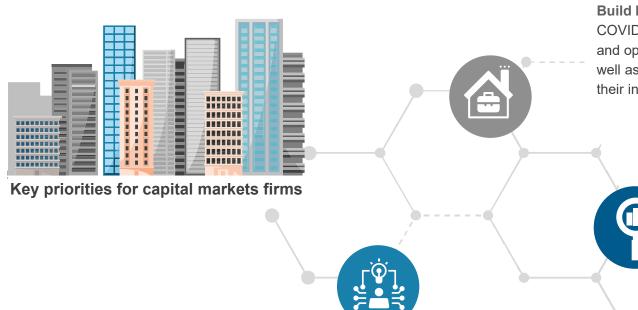


Service and technology
Cloud



Use cases
AWS, Azure, Cloudera,
GCP, Snowflake, IBM, Calypso,
Charles River, Murex, Avaloq,
Salesforce, and Oracle

Capital markets firms are building modern IT infrastructure to enable hybrid work, datadriven operations, ecosystem orchestration, and digital products and experiences



Innovate at speed and scale to design new products and experiences

Capital markets firms need to create new products and experiences, to cater to the rapid changes in consumer behavior/preferences, due to the impact of the pandemic and the accelerated move to digital channels. Legacy technology holds back firms in their ability to innovate at speed and scale, and they are banking on their cloud initiatives to accelerate the modernization journey, while balancing the compliance mandates.

Build IT infrastructure for the hybrid work model

COVID-19 has posed unique challenges for the capital markets firms and ensuring a secure and optimized work-from-anywhere environment is paramount for compliant communication as well as enhanced employee experience and productivity. Capital markets firms need to rethink their infrastructure strategy and deploy the right technologies to help them function effectively.

Accelerate data value realization to build data-driven operations

As the volatility in the market continues to increase, it becomes increasingly important for firms to use data-driven insights to respond. The onset of large-scale digitization has led to a build-up of large, unstructured, and siloed data sets within firms. These data sets can be leveraged for real-time and predictive analysis for improved fraud detection, portfolio optimization, and streamlined customer experience.

Build digital-at-scale financial infrastructure that enables ecosystem orchestration

Need for an ecosystem enabled by digital platforms and APIs is a competitive imperative, fueled by rapidly-evolving regulatory environment and technological advancement. Capital markets firms need to reimagine their financial and digital infrastructure to manage not just the born digital crypto assets, but also provide end-to-end digital experiences for traditional assets and products.



This study offers a deep dive into cloud adoption demand themes and supply trends in capital markets; below are four charts to illustrate the depth of the report

Build IT infrastructure for hybrid work model

COVID-19 induced the work-from-anywhere model, but now, as some employees yearn to return to offices while others choose to stay at home, capital markets firms need to ascertain their hybrid work model strategy. For an effective work-from-anywhere construct, it is essential for capital markets firms to set up a collaborative environment with secure and compliant infrastructure, and answer a key question of what pieces of work they want to keep in the office versus what can be done from home. This input can then be used to design workplace technology and infrastructure. Several firms have modernized their customer service operations with born-in-thecloud intelligent solutions and chatbots. The cloud-powered tools for building digital workplaces will help improve productivity and build better employee experiences.





Workplace tools

Workplace collaboration tools to establish an active work environment and manage everyday activities



Strong infrastructure

Access to high compute power, stable network, and data for better employee productivity and efficiency



Security and compliance Establishing secure networks and data access points as essential, keeping in mind the highly regulated environment

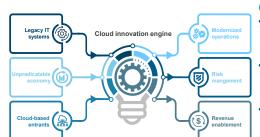
Cloud innovation engine

- Capital markets recognize the challenges they face in an environment of low interest rates, narrow margins, and increased capital requirements. Firms are increasingly seeking ways to simplify business and IT operations and innovate. At the same time, the increased economic volatility and competitive pressure has heightened the need for innovation at scale
- FinTech innovators are rapidly eating up the market share of traditional capital markets firms, to keep up firms' need to adapt and adopt faster ways for reduced time-to-market As consumer demands evolve, a new market segment looking for innovative financial products is up for grabs. Capital markets firms need flexible infrastructure to respond to changing customer needs

Capital markets firms need to have an innovation engine in place to create these products at speed and scale, and at same time manage these new offerings

Drivers

- To attain benefits of cloud adoption. it is essential for firms to undergo material modernization and reengineering of IT applications, most of which were monolithic systems tied to legacy mainframe infrastructure
- Pandemic induced market volatility has stressed the already troubled capital markets firms, as unpredictability continues to rise firms are increasingly looking for ways to optimize operations
- The majority of the capital markets firms agree to the fact that cloud-based, new-age FinTechs are a threat to the traditional business model, and adopting cloud-hosted technology has become a survival imperative



. Every incremental step of IT modernization adds to the for both IT as well as business operations. Cloud can enable rapid rethink to modernization that can simplify

both IT and business operations

- Capital markets institutions are embracing cloud as part of a broader strategy to adopt a proactive, fluid approach to risk management. In addition, some firms are rapidly adopting public cloud to reap its sustainability and ESG
- Cloud is a revenue-enablement play for capital markets firms, as historical IT constraints on speed of provisioning and compute and storage limitations are removed, empowering them with higher flexibility and analytics capability

Key demand themes for cloud adoption

Everest Group analyzed more than 40 capital markets cloud adoption use cases, and according to the market analysis, core modernization and legacy system update stood out as primary themes for cloud adoption initiatives; other key themes that pushed these firms to adopt cloud technology were reduction in operation costs, improving performance and analytical capability, enhancing customer experience, and driving automation.

Reduced time-to-market and introducing innovative solutions faster via cloudenabled, flexible, and scalable infrastructure was observed to be a key drivers for a cloud adoption push.



modernization 55%



45%

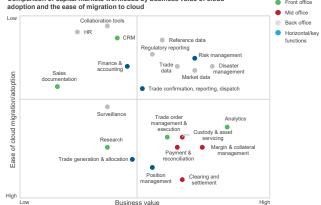




enhancement 35%

Source: Everest Group (2021)

Comparison of capital markets workloads by business value of cloud



BFS workload analysis and implications on enterprises

- The majority of the capital markets firms realize the importance and urgency of moving their workloads to cloud
- While the majority of the firms have already started their migration journey or plan to do so, only non-core workloads have observed broader cloud adoption
- Enterprise applications workloads like collaboration software, HR, and CRM tools have transitioned to a cloud-based model faster. Ease of transition and added customer value are some of the major drivers
- Data and analytics workloads are set to observe the strongest movement as the role of intelligent data-driven operations increases exponentially. A shift to cloud becomes necessary as enterprises would require additional compute to enable faster processing across functions, from risk and underwriting processes to servicing and maintenance operations, as well as take advantage of the cognitive technologies offered by cloud vendors
- . Attributed to the pandemic, contact centers are observing a sudden increase in demand to shift operation to cloud and adopt a Contact Center-as-a-Service (CCaaS) model: this trend is expected to continue as companies shift toward a hybrid work model
- The majority of core systems, however, have not yet transitioned to cloud because of multiple legacy systems, data and business rules tied to the system that are difficult to untangle, need for significant change management across IT and business operations, cost of cloud migration, and the need to manage complex regulations and security vulnerabilities
- Born in the cloud core systems, modern workflow tools and low-code tools are helping accelerate movement of core workloads to cloud

Modernize IT and business operations using public cloud

Client context and business challenge

- Rockefeller Capital Management provides financial services for high-net-worth and ultra-high-net-worth
- · As part of a recent modernization initiative to overhaul its technological landscape, the company wanted to move its infrastructure to cloud, facilitating cloud-centric security services and lay ground for future growth

- . The company moved to Microsoft's ecosystem leveraging Azure, Microsoft 365, and Dynamics 365
- Implemented an Azure-based, single sign-on platform to facilitate secure access to third-party vendor functionality, including financial services and

Business outcomes achieved

- · Improved client experience delivered through an end-to-end identity and access management
- Enhanced collaboration enabled via Microsoft Teams and Microsoft SharePoint
- · Helped address the core needs of the business improved team efficiency, infrastructure elasticity, and cross-asset integration

Source: Everest Group (2021) and company websites (Microsoft)

Research calendar

Banking & Financial Services IT Services

	Trainined Guirent release
Flagship ITS Banking & Financial Services reports	Release date
Risk and Compliance IT Services in BFS Service Provider Compendium 2020	June 2020
Capital Markets State of the Market Report 2020: Automation, Data, and Cloud Trends for Buy-side Firms	July 2020
Banking IT Services State of the Market Report 2020: Hyper-segmentation Strategy Enabled by Digital Capability Platforms and Data Exchanges	July 2020
Application and Digital Services in Capital Markets – PEAK Matrix® Assessment 2021	December 2020
Healthy Rebound in BFS IT Services Spend – Growth Themes and Cautions	March 2021
Modernizing Data, Applications, and Infrastructure for the Next Phase of the Payments Revolution	April 2021
Application and Digital Services in Banking PEAK Matrix® Assessment 2021: Global and Europe Focus	June 2021
Application and Digital Services in Banking – Service Provider Profile Compendium 2021	Q3 2021
BFS Platforms Services – PEAK Matrix® Assessment 2021	Q4 2021
Loan Origination Systems PEAK Matrix® Assessment 2021	Q4 2021
Thematic ITS Banking & Financial Services reports	Release date
State of the Market for Third-party Enterprise Platforms in Banking and Financial Services: Ecosystem Collaboration for Modernization at Speed and	Scale April 2020
BigTechs in BFSI Industry: The Theory of Co-existence for Market Expansion	August 2020
Lending Technology: Assessing Loan Origination System Vendors – The "One Lending" Model for Journey to the Cloud	September 2020
Cloud in Capital Markets – the Backbone of Digital Financial Infrastructures	July 2021
ESG Data and Solution – supplier trends	Q3 2021

Note: For a list of all of our published Banking & Financial Services IT Services reports, please refer to our website page



Planned Current release





Everest Group is a research firm focused on strategic IT, business services, engineering services, and sourcing. Our clients include leading global companies, service providers, and investors. Clients use our services to guide their journeys to achieve heightened operational and financial performance, accelerated value delivery, and high-impact business outcomes. Details and in-depth content are available at **www.everestgrp.com**.

Stay connected

Website

everestgrp.com

Social Media

- ₩ @EverestGroup
- in @Everest Group
- @Everest Group
- ▶ @Everest Group

Blog

everestgrp.com/blog

Dallas (Headquarters)

info@everestgrp.com +1-214-451-3000

Bangalore

india@everestgrp.com +91-80-61463500

Delhi

india@everestgrp.com +91-124-496-1000

London

unitedkingdom@everestgrp.com +44-207-129-1318

Toronto

canada@everestgrp.com +1-647-557-3475

This document is for informational purposes only, and it is being provided "as is" and "as available" without any warranty of any kind, including any warranties of completeness, adequacy, or fitness for a particular purpose. Everest Group is not a legal or investment adviser; the contents of this document should not be construed as legal, tax, or investment advice. This document should not be used as a substitute for consultation with professional advisors, and Everest Group disclaims liability for any actions or decisions not to act that are taken as a result of any material in this publication.