Arthur D Little

Viewpoint

Time for a pivot

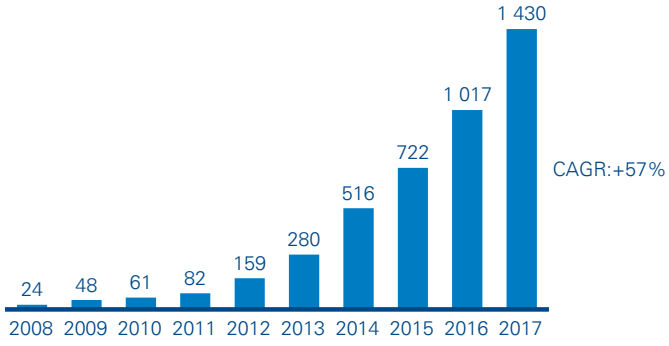
Going it alone has proven to be neither faster nor further

The cloud is the playing field of the digital economy. However, most financial services companies have only been able to scratch the surface. Working within its existing operating practices and vendor ecosystem, it seems impossible to look beyond the lowest-hanging fruit. We make the case that it is time to try something new.

A tale of two clouds

Public cloud technologies underpin the digital economy. They provide scalable infrastructure that is particularly suitable to hosting highly variable consumer workloads. They enable step-change improvements in application development (from months to continuous delivery). The public cloud accommodates data-driven architectures essential to build an impeccable user experience and superior customer knowledge. That is not all – the public cloud innovates constantly. For instance, during 2017 AWS launched 1,400 new features and services, including artificial intelligence, workload placement and advanced security, all features highly valued by the industry. At the same time, the public cloud promises significant running-cost reduction based on scale and automation.

Number of major services and features released by AWS



Source: AWS

Financial institutions recognize that cloud technologies are a critical lever for competitiveness. The industry has invested substantially, building cloud sandboxes, tool chains and platforms. It has retrained staff as cloud architects, product owners, scrum masters and the like to become more agile. Many would claim these efforts have hijacked technology governance. However, despite all of this, the cloud has delivered only superficial impact. For a number of reasons, cloud platforms are either never used in client-facing production platforms or used for only 5–20 percent of total workloads. The outcome is cost containment rather than savings, and marginal gains in overall agility.

New entrants could not be more different. With wind in their sails, often paid for by financial institutions, fintechs talk of advanced customer experience and digital customer interactions, API everything, analytics-centric operating models and artificial intelligence-driven marketing. These players have not built these capabilities on traditional stacks; rather, they have tapped into the massive potential offered by the public cloud. N26, Atom, and Revolut, among others, have demonstrated the scalability of the cloud, onboarding as many as 2,000 customers per day, which is not dissimilar to a regional universal bank or insurance company.

The situation is untenable. Unrealistic expectations have discredited most cloud efforts. This means that more often than not, the approach to the cloud in financial institutions has become opportunistic. The competitive advantage of scale has turned into a scale-driven technology disadvantage. Traditional financial institutions are stuck with their legacy and cloud strategies, while new entrants profit from the innovation advantage built on more agile and efficient platforms. Our

analysis shows that the gap between the unit technology cost in a traditional bank versus that of a digital bank at scale could provide new players with a 45–60 percent advantage, in addition to the cost advantage associated with being branchless, ATM-less and self-service.

What went wrong

Most financial institutions have bet the house on DIY approaches to the cloud. Believing the cloud could be a source of sustainable competitive advantage, each company has invested in its own first-mover strategy. Working within their existing vendor ecosystems, they have built on-premise private cloud platforms. These initiatives have often been led by technical decision-makers with limited understanding of how public cloud players use technologies to derive platform performance and economics. On-premise means operational processes are tightly coupled or executed by the same teams that run corporate DC. This means manual processes in everything from server cabling and racking to hardening and testing limit how fast the infrastructure can be scaled.

Security and regulatory concerns are frequently mentioned as roadblocks to large-scale cloud adoption. Financial regulation is of utmost importance, and it is evolving and adapting to the age of fintechs and cloud computing. Requirements cover diverse[1] topics, and the overlap and interlinkage is mind-boggling. To make matters worse, rules differ across geographies. This requires a great deal of effort to ensure compliance in both a national and a cross-border context. What the industry must recognize is that regulators are economists and lawyers, not architects and engineers. They are willing to change rules if shown the evidence that this will not put the financial system at risk.

Open source is a taboo, so commercial solutions are required for all features of virtualization, infrastructure management, monitoring, logging, security, and numerous others to integrate these systems and enable automation. However, this means the solution is far too expensive, so private clouds cut corners and implement sub-sets only, forgoing the scalability gains associated with automation and closed-loop control. And if, along the journey, the company realizes that the cloud cannot be used to support a particular security, logging or workload placement feature, a new cloud initiative tends to be spawned, resulting in multiple cloud silos with differing vendors.

In parallel, financial institutions have hired new-age consulting firms to transform ways of working, introducing agile to a skeptical audience that includes employees and waterfall vendors. Putting agile into practice on a poorly built cloud infrastructure platform that must co-exist with a large number of legacy applications developed using the traditional IT paradigm has been challenging. Consequently, the "cloud-ification" of financial institutions has split into two streams. The first involves simply moving or lift-and-shift workloads because application modernization/recoding is far harder than re-platforming efforts. The second includes focus on new agile applications, often built on the public cloud, with many never reaching production because client-sensitive data cannot be extracted, handled securely or governed outside of existing processes due to regulatory concerns.

The outcome is that despite considerable investment, the industry is stuck at the basics. Limited involvement from top leaders and risk aversion have led skeptics to encourage inaction. As a result, large financial institutions have been unable to take advantage of the innovation and cost potential of the cloud.

Where do we go from here?

Cloud platforms are not just a technology choice. They are the new playing field for financial services. They provide an opportunity to modernize applications, as well as redefine the basis of cooperation and competition in the industry. The cloud assumes a fundamentally different operating model on which to build applications and run technology operations. The most visible evidence is that no financial institution has a cloud platform that comes close to the feature set of any of the major public cloud providers.

It is time for a pivot, to break the technology impasse. By joining efforts, financial services incumbents could share the risks of technology innovation and legacy migration and avoid duplication in a cost-constrained industry, as they are all working on very similar solutions for private clouds and non-core functions. Collaboration approaches would also allow provision of a single and more powerful voice in front of the regulators. In addition, collaboration initiatives can strengthen bargaining power (on costs, lock-in conditions, etc.) against technology providers through demand cooperation and benefit from operational scale advantages.

From the economic perspective, enterprises can achieve annual savings of 10 to 25 percent (depending on the extent of the cooperation) on top of their current cloud programs' benefits. Operational-scale advantages and negotiation power are relevant drivers to reach the mentioned savings. These drivers could save circa 10–15 percent more annually on top of their current cloud programs for joint operations than a single private cloud could. Apart from private-cloud efforts, leveraging public-cloud technologies allows enterprises to optimize their infrastructure to achieve better automation and utilization and, in other words, better economics. These types of initiatives could bring an additional 20 percent savings on top of the benefits from private

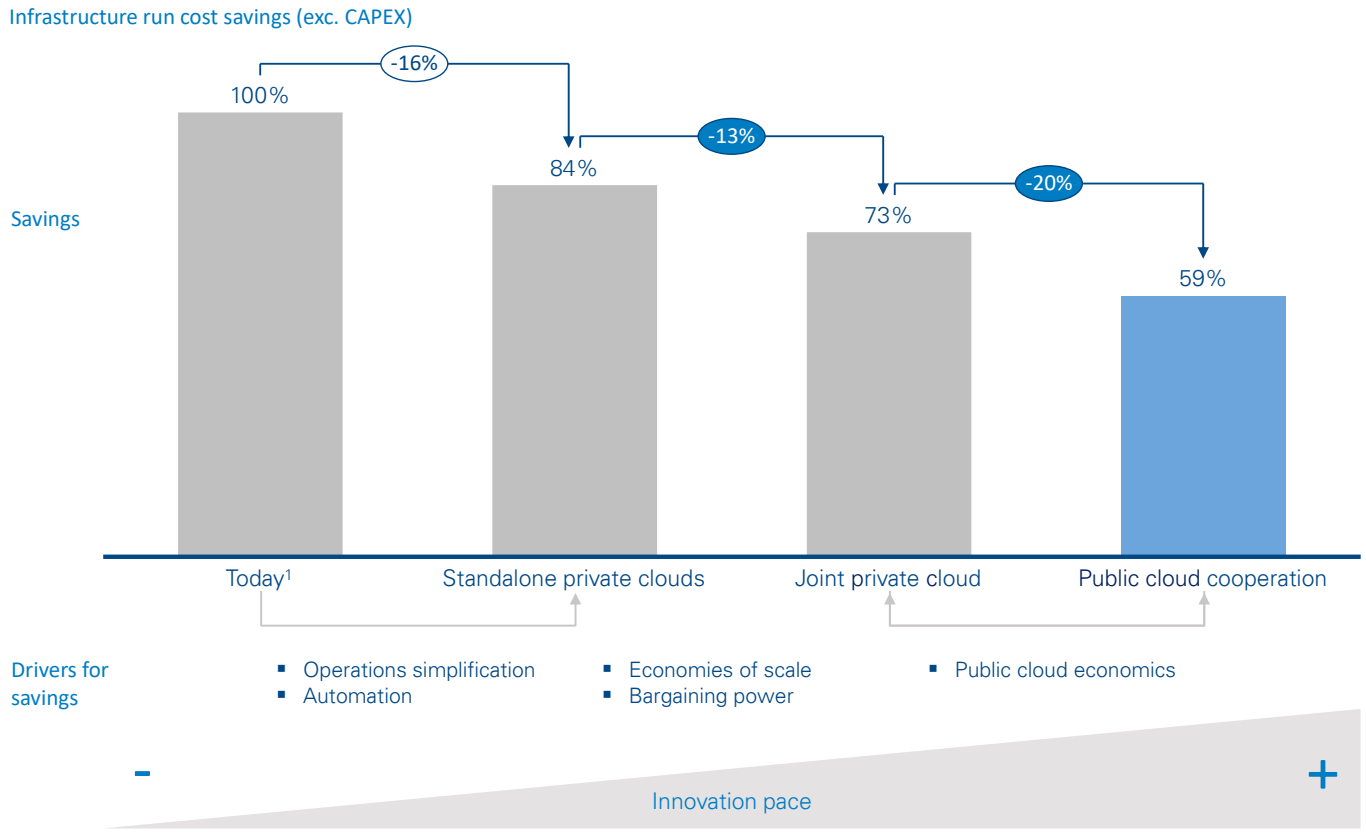
1 Privacy, cyber-risk reporting, risk management, outsourcing, disaster recovery and data localization

cloud cooperation. This fresh approach to leveraging state-of-the-art technologies and operating models could also help to attract, retain and develop talent.

Faced with the growing gap between current performance and the potential value of the cloud, companies must find ways to systematize their moves to the cloud and, thereafter, figure out approaches to execute that can be operationalized.

1. Define the target state. Provide a sense of direction to shape the business as well as the technology conversation. Be open with staff, vendors and regulators. Use this to mold and prune the technology project portfolio and ensure that the public cloud becomes a core component of the strategy.
2. Clearly identify the IT elements that provide competitive advantage: Figure out what is key to differentiation and keeping existing customers loyal; everything else should be managed for cost and could be potentially shared.
3. Decide how to collaborate: Financial institutions could open-source their current developments, structure "bilateral" efforts with innovative suppliers, or build "community" collaboration efforts or joint ventures. A key decision criterion should be the opportunity to attract, retain and develop talent.
4. Select the right partners for the cloud journey. Partners include other financial institutions as well as technology providers. The former need to be at similar stages in their cloud adoption plans to capture the full value of the collaboration, and have similar levels of maturity to ensure the balance in the agreement and a win-win situation.
5. Develop a regulatory strategy that demonstrates the value of cloud technologies for financial-system control and stability. Rethink how to engage with cloud service providers to create regulatory compliance.
6. Adapt management and vendor incentives to sharing, risk-taking and collaboration, delineating clearly between proprietary know-how of non-differentiating elements.

We hope that this viewpoint provides food for thought, and we look forward to supporting you and your organization on the journey to the cloud.



Note: (1) Perimeter considered includes distributed systems teams, comms & security, private cloud and big data, and excludes legacy and DC costs
Source: Proposals, Arthur D. Little analysis

Arthur D Little

Viewpoint

Summary

Cloud computing has become an essential platform for competitiveness in the digital economy. Despite the scale of the threat and opportunity, Cloud adoption has proven to be a hard problem. Focusing on private-infrastructure clouds has left financial services companies in the transition trap. As a consequence, large financial institutions have only been able to address low-hanging fruits that bring 10–20 percent of the benefits. Faced with these challenges, the industry must pivot to the public cloud, leveraging web-scale technologies to accelerate innovation and modernize security, as well as capture step-change efficiency gains through retiring legacy platforms. However, the path to the public cloud is not easy; large financials face many technical, regulatory and capability hurdles. A new approach is needed urgently.

Contacts

Austria
taga.karim@adlittle.com

Belgium
vanoene.frederik@adlittle.com

Brazil
guzman.rodolfo@adlittle.com

China
pell.russell@adlittle.com

Czech Republic
brabec.dean@adlittle.com

France
bamberger.vincent@adlittle.com

Germany
doemer.fabian@adlittle.com

India
srinivasan.srini@adlittle.com

Italy
caldani.saverio@adlittle.com

Japan
harada.yusuke@adlittle.com

Korea
lee.kevin@adlittle.com

Latin America
casahuga.guillem@adlittle.com

Middle East
kuruvilla.thomas@adlittle.com

The Netherlands
kolk.michael@adlittle.com

Norway
thurmann-moe.lars@adlittle.com

Russian Federation
ovanesov.alexander@adlittle.com

Singapore
harada.yusuke@adlittle.com

Spain
gonzalez.juan@adlittle.com

Sweden
harenstam.fredrik@adlittle.com

Switzerland
doemer.fabian@adlittle.com

Turkey
baban.coskun@adlittle.com

UK
eagar.richard@adlittle.com

USA
beaumont.mitch@adlittle.com

Authors

Jesús Portal, Juan González, Salman Ali and Rocío Castedo

Arthur D. Little

Arthur D. Little has been at the forefront of innovation since 1886. We are an acknowledged thought leader in linking strategy, innovation and transformation in technology-intensive and converging industries. We navigate our clients through changing business ecosystems to uncover new growth opportunities. We enable our clients to build innovation capabilities and transform their organizations.

Our consultants have strong practical industry experience combined with excellent knowledge of key trends and dynamics. ADL is present in the most important business centers around the world. We are proud to serve most of the Fortune 1000 companies, in addition to other leading firms and public sector organizations.

For further information please visit www.adlittle.com or www.adl.com.

www.adl.com/TimeForAPivot