

A 3D bar chart with four blue bars of increasing height from left to right. An orange arrow points upwards and to the right, starting from the left side of the chart. The background is a light gray grid.

Best Practice Recommendations for SECURE CLOUD COMPUTING in the Finance Sector



KNOWCO
Governance, Risk & Compliance

Cloud computing drives a vast spectrum of current and emerging applications, digital products and services.

It is also a key technology enabler for innovation and the future internet. Its impact is such that the European Commission on the Digital Single Market considers it an “economic game changer”. Yet the cloud is still only gradually being adopted within the European financial industry.

The vast majority of Financial Institutions (FIs) still rely on in-house infrastructure rather than the speed, capacity and accessibility of comparable cloud solutions. The European Network and Information Security Agency (ENISA) believes that “both FIs and regulators are overly cautious in their approach to cloud computing, due to misconceptions about the technology.”

The FCA in the UK also supports this stance. In a guidance consultation released last year¹, it stated that “we see no fundamental reason why cloud services (including public cloud services) cannot be implemented, with appropriate consideration, in a manner that complies with our rules”.

So why the relatively slow take-up by the finance sector?

The issue is most likely one of perception, particularly around the security of the cloud. As of June 2015, 88% of FIs were already using cloud-based services, but primarily for non-critical business functions such as email management, business management and application development.

The vast majority (92%) of the organisations with a developed strategy rely on a hybrid of public and private cloud, hosted both externally and also as in-house IT services. Just 8% of FIs currently have a ‘no-cloud’ strategy – either because they have chosen not to adopt cloud-based services, or have not yet had the time and resources to implement them. The main obstacles impeding cloud adoption are standards, certification, data protection, interoperability, lock-in and legal certainty. Loss of control and compliance top the FIs’ and regulators’ list of risks. Whether the risk is perceived or real, this poses challenges for the Cloud market players to address.

¹ Proposed guidance for firms outsourcing to the ‘cloud’ and other third-party IT services: <http://www.fca.org.uk/news/fg16-5-guidance-for-firms-outsourcing-to-cloud-and-third-party-it-services>
ENISA Cloud Computing Risk Assessment: <https://www.enisa.europa.eu/publications/cloud-computing-risk-assessment>
Secure Use of Cloud Computing in the Finance Sector: <https://www.enisa.europa.eu/publications/cloud-in-finance>

The most pressing short-term issue for promoting the adoption of cloud services is reducing the information gap.

Neither FIs nor regulators consider security as a main benefit of cloud services, despite the fact that security is paramount for cloud service providers (CSPs), and expert bodies including ENISA espousing the security benefits of cloud technologies. Furthermore, in many instances regulators do not differentiate between outsourcing and cloud computing. Further guidance from regulators would facilitate the adoption of cloud services in the finance sector while meeting the regulatory requirements. Various FIs find ENISA's Cloud Computing Security Risk Assessment a helpful tool for developing a corporate risk assessment for cloud computing.

One of the primary concerns that prohibits many FIs from using the cloud is an understanding of whether their clients' personal data will be secure. This includes any information considered to be 'sensitive data' under the Data Protection Act.

KnowCo, the specialist bank compliance support resource, has recently announced a cloud version of its class-leading KST stress-testing system. This intuitive and transparent software facilitates compliance with regulatory requirements for stress testing and management, as it relates to credit risk capital, IRRBB and liquidity. The company also offers consultancy to FIs about what should be done to support secure adoption of cloud services in the finance sector.

"Attributable personal data is unnecessary and not required for stress-testing and business-modelling purposes," says Paul Ashton, Head of Consulting at KnowCo.

"A bank accessing its own non-attributable data for stress-testing via the cloud is not outsourcing, nor adding materially to operational risk. There is nothing standing in the way of financial institutions adopting cloud services for these business functions – you just need to have clear policies for governance and compliance."

Governance and assurance standards – ISO 27001 and PCI-DSS in particular – have been specifically developed for secure use of the cloud. Any firm that follows these standards and takes reasonable steps to avoid undue additional operational risk should be secure. This potential operational risk is mainly concerned with outsourcing.

Crucially, firms should not undertake the outsourcing of important operational functions in such a way as to materially impair the quality of their internal control, and the ability of the PRA to monitor compliance with regulatory obligations. Whether or not a particular cloud-based arrangement constitutes outsourcing is a matter of circumstance from case to case.

The KnowCo stress-testing software has been designed with cloud security in mind. The non-operational, non-mission-critical system uses anonymised data and is completely transparent, providing a clear, demonstrable audit trail. CTOs and CIOs can vet the architecture, the environment and the Service Level Agreement, but they don't need a stress-testing system in their infrastructure, and can leave the system's operations to business users.

About KnowCo Ltd

KnowCo Ltd offers cloud-based software to facilitate compliance with regulatory requirements for:

- Credit risk capital stress testing and management
- IRRBB stress testing and management
- Liquidity stress testing and management
- Funds transfer pricing
- Strategic business modelling
- Regulatory metrics such as LCR, HHI and ALMM

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