

Circular CSSF 19/714:

A practical update to cloud computing outsourcing

On 27 March 2019, the CSSF issued a new Circular 19/714 (the «Circular») in order to update its guidelines on the use of cloud computing infrastructure.

In the introduction to the Circular, the CSSF clearly explains that the purpose of the update is notably to «take into account the experience gained by the CSSF and the supervised entities» since the application of the CSSF's initial «Cloud Circular» 17/654 which clarified to what extent cloud computing infrastructure could be outsourced.

The CSSF also acknowledges that although the requirements of the European Banking Authority («ECB») on the subject, as published in December 2017 (EBA/REC/2017/03), were already covered in its initial Cloud Circular, the CSSF applied too constraining principles insofar as the CSSF did not require any principle of proportionality to be met.

In order to reflect the above outcomes and harmonise the content of the Cloud Circular with the latest applicable regulations and circulars, the following main aspects have been amended or introduced:

Inclusion of investment fund managers

The widely commented CSSF circular 18/698 on the authorisation and organisation of investment fund managers incorporated under Luxembourg law mentioned (under point 143) that the Cloud Circular should apply to investment fund managers. This point is now expressly covered in the Circular, which now applies to «all investment fund managers subject to Circular CSSF 18/698».

An additional authority

The concept of competent authority is widened to also include the ECB in addition to the CSSF, but only for Luxembourg credit institutions that are subject to the supervision of the ECB.



Obligation of notification now limited to material activities

An important finding of the CSSF is that most requests received under the Cloud Circular did not relate to critical or material activities, and created a burden that did not seem proportionate to the aim of the Cloud Circular. Therefore, the CSSF introduced the principle of proportionality: outsourcing activities which are not considered material are no longer subject to notification to the CSSF.

The related analysis on the materiality of the outsourced activity must include an analysis of the risk: the risks listed under point 137 of CSSF Circular 18/698 may provide guidance as to what kind of analysis would be required from investment fund managers in addition to the risks already listed in the Cloud Circular.

However, the Circular specifies that in cases where the management of the cloud computing resources made available through the client interface is performed by an entity that is not an agreed primary or secondary IT operator of the financial sector (as defined in the law of 5 April 1993 on the financial sector, as amended - hereinafter the «LFS»), then the required risk analysis must be made broadly, and not



only at the level of the resource operator, as previously required.

New register to be maintained

The simplification of the reporting mentioned above is offset by the new obligation for supervised entities to maintain a register which shall include all cloud computing outsourcing performed (whether material or not). Such a register must be delivered upon request to the CSSF or the ECB, as the case may be. However, no guidance is given as to the form and content of such a register.

A widened liability

Under the Cloud Circular, the fact that the resource operator was subject to an obligation of professional secrecy under article 41 (5) of the LFS allowed for a delegation of the regulatory obligations and responsibility of the supervised entity towards its clients. The Circular removed this exception, so that the supervised entity now remains liable towards its clients even if the resource operator is subject to such professional secrecy obligation.

Continued monitoring

The Circular clarifies the obligation for the management of a supervised entity

to review and update the outsourcing policy of the cloud computing provider on a regular basis and to ensure that any changes are implemented rapidly. However, no guidance is provided on what can be considered as appropriate timing when reference is made to reviews performed on a «regular basis» or to the «rapid» implementation of changes. In the absence of said indications, the management should be prepared to defend, on a case by case basis, the timing it decided to follow.

The implementation of a dedicated policy disclosing the timing requirements for regular reviews, as well as specific events triggering ad hoc reviews, could be of help to define the policy of the management in this respect as well as anticipate and foresee any potential issues and ways to solve them.

Another key question is, in case of outsourcing, the extent of the obligation, and related liability, of the management to ensure that «appropriate changes» are implemented at the level of the provider.

The Cloud Circular mentions that any outsourcing should be documented by an «official and detailed contract»: the terms of which should therefore specifically define what «appropriate changes» refers to, and should describe the way in which such changes are handled.

Enhanced reporting

A new point 30 inserted by the Circular provides that cloud computing services providers now have the obligation to report specific information to the signatories of the agreements formalising the outsourcing of the cloud computing infrastructure.

If the signatory and the supervised entity are not the same person, appropriate measures need to be implemented as the signatory will then have obligations towards the supervised entity: indeed, the fact that the supervised entity is not party to the agreement should not preclude it from performing its obligations or receiving any information needed.

The already very broad right to audit provided for under the Cloud Circular is now balanced by the possibility to charge a reasonable fee in consideration thereof, and by a principle of proportionality of the right of audit in light of the risks.

Data protection

The Circular did not neglect to amend the provisions of the Cloud Circular relating to data protection, by clearly stating that with regards to the data that is subject to outsourcing, the supervised entities will have to ensure compliance with GDPR (as well as with the requirements of the National Commission for Data Protection), as well as with the obligation of professional secrecy under article 41 (2a) of the LFS.

Entry into force

It is worth noting that despite the new questions raised by some of the changes, the various new obligations are «applicable with immediate effect» with the two following exceptions: the obligation to establish the cloud computing outsourcing register is delayed to 6 months from the entry into force of the Circular, except for investment fund managers who benefit from a one-year period. Any necessary action should therefore be swiftly implemented by the entities falling within the scope of the amended Cloud Circular.

What's next?

The CSSF mentions that guidelines and a dedicated Q&A will be made available very soon; hopefully these will bring clarity to some of the points that this warmly welcomed update does not yet provide.

Jérémie SCHAEFFER, Partner
Head of Corporate Implementation
ATOZ Tax Advisers

Olivier de La GUERONNIERE,
Director, Corporate Implementation
ATOZ Tax Advisers

The authors may be contacted at Jeremie.Schaeffer@atoz.lu and Olivier.DeLaGueronniere@atoz.lu

The value of business intelligence for investment managers

By Lars Ole HANSEN, Director, Product Manager, Performance Measurement and BI, SimCorp

The investment management industry today is facing many challenges including political, regulatory, and competition-based concerns. Firms are also increasing their focus on customer centricity and embracing digital transformation whilst trying to effectively “keep the lights on” for their day-to-day activities.

Of course, one of the consequences of all this change is a significant increase in the volume of data that investment management companies are holding and handling. Now, having a lot of data could be considered a good thing, but as stated by the UK mathematician, Clive Humby, “Data is the new oil. It's valuable, but if unrefined it cannot really be used.” In other words, if investment managers want to drive real value from data, they need to know what they want from the data and how to work with it.

The importance of strategy

In order to do great things with data, you need to know what you want to use it for. What do you want to achieve, how do you want to achieve it, and how will you know when you've accomplished it? These questions are best articulated by defining and documenting a business intelligence (BI) and analytics strategy. Your BI and analytics strategy will help you focus on the important matters for your company and, ideally, your strategy will align with the wider company strategy, goals, and objectives.

Executing the strategy

For years, business intelligence was a synonym for modernized reporting tools, where business users received visualizations in a nice interactive front-end. This has changed a lot in recent years. Today, a mature BI implementation requires many things to be best-in-class, including:

- an agile ETL layer to collect and model the disparate data into multi-dimensional data structures
- a powerful analytics engine to support the ever-increasing demands of the data literate business users on the front-end applications
- a fast and flexible charting layer with the ability to easily slice, dice, and drill into the key dimensions across the data.

Another key element being demanded by BI users and developers today is a powerful suite of open APIs that allow for 3rd party chart libraries and in-house web applications to bring visualizations and interactivity to the business user. The most important criteria in financial services is the speed of results delivery and the capability of handling complex data.

The challenge of achieving and leveraging the value of new business insights

Whilst many companies succeed in the technical implementation of software tools, a greater challenge arises when integrating a new way of handling information and decision making in the organization. Often, the technical implementation just continues to replicate existing traditional reporting processes and does not leverage the real strength of new business insights. Today, we are witnessing a growing

trend whereby the market and commercial success of investment management companies is highly dependent on the BI, analytics, and data strategy that the company has implemented. Therefore, we believe it is highly important that firms identify and are able to realize the significant value of the data available within their systems, also when being combined with external data. Further, it's important that technology vendors provide their clients with best-in-class data management and analytics solutions that will enable them to maximize the value of their data.

Adoption of the self-service mindset – from reporting to insights

Whilst traditional reporting tools have focused on making pixel-perfect layouts that could be printed, archived, and stored for different reporting purposes, a BI and analytics strategy goes beyond this thinking and asks the question, “What do you need this report for?”. If the answer is simply that the user wants this report due to existing (potentially outdated) habits or if this report is shipped to another colleague, the new BI and analytics strategy should challenge this and transform the traditional reporting strategy to a self-service mindset including the options to discover data and provide business insights.

Self-service business intelligence is defined by Gartner as “... end users designing and deploying their own reports and analyses within an approved and supported architecture and tools portfolio.” Where traditional reporting tries to answer the questions put forward by the business, BI aims at putting the data in the hands of the

users, providing tools that not only give answers to known questions, but which inspire curiosity and where every action may give thought for new questions. An example could be a portfolio manager or data scientist that explores correlations between events and social media in conjunction with changes in investment market data.

Improving investment decision-making with machine learning

Some of the more modern BI platforms even use machine learning to derive automated insights from large data sets that exist in the financial industry. Precedent-based machine learning allows the BI platform's cognitive engine to get smarter over time, continually learning from user interaction and feedback as well as other sources. So, the next time the portfolio manager explores data in relation to their asset holding, the tools may make some suggestions based on previous interactions. This kind of artificial intelligence and machine learning capability together with human intuition will enable the investor in a way that truly augments his/her power to discover insights and improve decision making.

Strengthen operational efficiency

Apart from strengthening the decision-making process, business intelligence also plays an important role in helping financial institutions improve their operational efficiency. Instead of manually reading through printed reports or randomly looking for optimization opportunities, modern BI tools can help improve operational workflows by exposing key performance indicators on trading and settlement processes in order to measure the effect of process

changes or dive into the root cause of inefficient workflows. Business intelligence also has the potential to automate routine tasks, release efficiency bottlenecks, and improve existing business processes. The efficiency and productivity gains can be considerable including better use of portfolio managers time to analyze investments and gain insight on the financial markets – rather than struggling to get a report ready in the right format for senior management.

Improved data quality

Another valuable application of BI is related to data quality. Today's computational power combined with end-user-oriented analytics tools enable data management teams to quickly identify outliers in huge result sets. Take, for example, those related to risk and performance measurement. The consequence of incorrect data in these parts of the business can be severe and the additional operational cost of correcting and re-calculating historic information can also be substantial. The figures themselves are naturally not getting more correct than the source data allows but enabling strong BI capabilities to look for patterns and breaches will make it easier to correct the discrepancies and to continuously deliver higher data quality long term.

Leveraging the value of data

Going forward, the amount of data available will increase and so will the need to find ways to create and sustain competitive advantage. Implementing a holistic BI, analytics, and data management strategy supported by best-in-class technology can be what enables firms to turn data into a competitive differentiator.