Legacy Software Firms Using Unfair Software Licenses to Distort Cloud Markets

New Economic Study from Frédéric Jenny, Chairman of OECD Competition Committee, highlights anti-competitive behaviours that must be proscribed in forthcoming Digital Markets Act

By Alban Schmutz, Chairman of CISPE

The cloud is a vital component in the success of Europe as it builds a sustainable and vibrant economy. More than simply another critical sector, cloud infrastructure underpins growth, development innovation and wealth creation across all sectors. Therefore, the Digital Markets Act (DMA) is an historic and important piece of legislation. Decisions made in the coming months will determine the principles and processes that will shape fair access, use, and contribution to the digital economy for decades to come. The impact of the DMA will be felt across Europe and globally as a new benchmark for fair competition in the digital era is established.

Software licensing has key role in controlling access to cloud infrastructure

Against this backdrop it is therefore essential that all the unfair practices of all those with 'gatekeeper' status are properly covered. For several years CISPE members, and its partners among the companies buying, consuming and innovating with digital technologies have been concerned by the behaviour of some legacy software providers. Business software users represented by the likes of Cigref in France and AICA in Italy have worked with CISPE as they see legacy software firms seeking to leverage their historic dominance in software to exert control in the emerging cloud ecosystem. For decades a handful of large companies which provided the lions' share of productivity, communications and database software suites have wielded enormous power in negotiating the terms of those licences and many unfair, indeed abusive, practices have been allowed to proliferate.

As businesses seek to move to the 'as-a-service' or pay as you go model of the cloud, they require access to suitable cloud infrastructure on which to run software. These services are, in effect, dematerialised data centres, providing networking, storage and compute resources to organisations of all kinds and sizes. Cloud-based productivity, operating system, enterprise and database software cannot work without this critical underlying cloud infrastructure layer. The same firms which have dominated the legacy software world are now leveraging their ability to dictate licence terms to capture these vital cloud infrastructure markets.

Software licensing plays a key role in controlling access to the cloud infrastructure – so it is imperative that the bad practices and unfair, anti-competitive behaviours of those that wield power to set licence terms are considered as part of the DMA. It must be made certain that these legacy software players will meet the definition of 'Gatekeeper' under the DMA terms, so this bad behaviours should be proscribed in the ex-ante requirements.

To further investigate the experiences of our members and their customers as they have seen their options reduced and costs increased by certain legacy software providers keen to establish predominance in cloud infrastructure markets, CISPE, working with Cigref commissioned research into potentially anti-competitive aspects of software licensing. We asked Professor Frédéric Jenny, Chairman of the OECD Competition Committee and Professor at ESSEC Paris Business School to conduct some primary research into the topic using his knowledge and expertise of the issues. As a former Vice Chair of the French Competition authority, President of the World Trade Organisation Working Group on

trade and competition as well as non-exec director of the UK's Office of Fair Trade – he is well placed to provide insights on this key issue.

Report finds long-lasting, pernicious and unfair licensing practices

His report, published today, and shared with MEPs, the Council and the European Commission, highlights long-lasting, pernicious and unfair licensing practices having a detrimental effect on the efforts of European businesses to move to the cloud. Not only are they costing organisations of all sizes and in all sectors millions of Euros, but they are chilling innovation and restricting growth. It is clear that certain players mean to extend these harms as they seek to secure their own dominance in the emerging cloud infrastructure environment. Money that could be spent on developing European services for European consumers is being diverted to the pockets of some of the wealthiest and largest software firms through unfair means.

Professor Jenny's report highlights primary evidence of these behaviours and identifies established players including Microsoft, Oracle and SAP as among those deploying unfair licensing practices to limit choice and harm competition. Business and consumers are stymied in their efforts to find alternative providers who can better meet their needs.

Key Findings

Some of Professor Jenny's findings include:

- De facto price for Microsoft Office productivity suite is higher when purchased for use on third-party clouds.

Microsoft has made critical changes to the way it licenses Office365 through its channel partners to allow it to charge different prices for the same product. Service providers, able to sell Office365 using their own cloud infrastructure, have seen prices rise 10-15%. Service providers, selling the same product, but hosted on Microsoft Azure (as a Cloud Infrastructure Service Provider) have seen no increase in the licence fees.

- Bring your own license deals have disappeared.

Previously it was possible to move previously purchased software licenses for software hosted 'on premise' (i.e. on a company's own computers) to a cloud infrastructure of their choice without the need to 're-buy' the license. In October 2019 Microsoft simultaneously launched a new feature called Azure Dedicated Hosts and introduced the requirement for businesses to purchase new licenses to move software they already own to Microsoft's most significant cloud infrastructure competitors.

- Actual vs potential user billing

The research identified stories of different charging procedures for own and third-party cloud infrastructure installation. Oracle for example charges for each CPU (the core processor within each computer) running its database when hosted in OracleCloud. If hosted in a third-party cloud infrastructure it charges for every CPU that could 'potentially' use its software. As clouds are 'pools' of hundreds of virtual computers that could be deployed, this massively inflates the licence fees for which the business is liable – as much as 10-times more according to some respondents - even if it actually uses exactly the same number of CPUs.

In addition, many respondents to the research complained of opaque and ever-changing licensing practices, including post agreement changes to agreements, deliberately vague terms and aggressive audits for compliance. All used to extract increased rents for the same software once customers are 'locked-in' to the providers cloud infrastructure ecosystem.

These bad behaviours are particularly galling as they undercut the fundamental 'pay as you go' promise of the cloud. They will surely be harming not only the day-to-day performance and growth of businesses, but their faith in the cloud as a concept overall.

Old tricks, new scenarios

The research highlights that some typical and well-worn anti-competitive behaviours are also clearly influencing the cloud market. Exclusionary tactics – designed to limit choice by unfairly raising barriers to entry for others, include limits on interoperability, bundling and tying of products, exclusionary licensing terms and artificially inflated migration costs. Plus, exploitative tactics – designed to extract increase rents from 'locked-in' customers including aggressive audits as noted above and planned obsolescence requiring frequent upgrades. The study provides evidence and commentary around each of these practices as highlighted in the table below:

	Practice 1	Practice 2	Practice 3	Practice 4
Exclusionary Abuse				
Limits to Interoperability	Proprietary Language	Technical specificities of operating system	Optimisation of native ecosystem (Microsoft)	End to product guarantees upon recourse to third-parties (Workday, Salesforce)
Mixed Bundling	Bundling of Office 365 with Azure (Microsoft)	Product Tying: Teams integration with Office 365 (Microsoft)	Maintaining opacity in SaaS price structuring	Bundling maintenance policy into subscription licence (Oracle)
Exclusionary licensing	Raising Rivals' Costs (Microsoft, SAP)	Retaliatory licensing practices (Microsoft BYOL)	Preventing 3rd party interfacing into native platform (SAP Indirect Access)	Exclusion of third party support (Oracle Maintenance)
Others	"Proprietary" data stipulations, leading to migration surcharges (Oracle)	Switching and Migration costs (Mixed feedback)	Aggressive acquisitions of competitors (Salesforce)	-
Exploitative Abuse				
Abusive licensing practices	CPU Metric Partitioning (Oracle)	Ex-post changes to licensing conditions	Aggressive auditing of non-compliance to licensing changes (Oracle, Microsoft)	-
Exploitative pricing practices	Ex-post changes to commercial conditions	"Drip Pricing" (Microsoft, Oracle)	"Only way up" pricing on contract renewals (Microsoft)	Minimum contract requirements, with refusal to supply (Microsoft)
Obsolescence / Product Incompatibility	Early termination of product cycles	Poor compatibility of new functionalities with old versions (Microsoft)	-	-

The research presents evidence that:

- Legacy software players such as Microsoft exploit bundling tactics to win tenders (often after losing out initially) by offering cloud infrastructure (Azure) for free with upcoming renewals of legacy software licenses. Unwinding these bundles can lead to significantly raised costs. One respondent suggested that trying to remove the cloud infrastructure offer and buy remaining software separately led to cost increases of up to 70%.

- Demanding information on its partners' customers for 'software billing purposes' but then approaching the customers to switch infrastructure cloud providers (away from the cloud service partner's own infrastructure).

- Intentionally reduced compatibility to force customers to use specific cloud infrastructure. For example, the auto-save feature in Word only works with Microsoft's own OneDrive cloud storage and Teams only shares files from OneDrive.

- Artificially limiting data portability. For example, users of a third- party technical support provider find their ability to download data from Oracle is limited to 500 documents and that archived items have to be deployed within 90 day – restrictions that do not apply if maintenance support is purchased directly from Oracle.

- Tying of products to make third-party software less attractive. For example, offering Teams free as part of Office365. As one respondent commented there is "little incentive in repaying for something that does 90% of the job."

- Limiting interoperability – often under the guise of 'optimising' experience. Engineering products to work best with those from the same supplier. Whilst often appreciated by users these do create natural pathways to software products within the supplier portfolio and limit incentives to look elsewhere for better solutions.

Capturing core applications

What is evident is that some legacy software providers are deploying a wide range of unfair practices and anti-competitive behaviours to try and tilt the cloud infrastructure marketplace in their favour. Equally clear is the role that these legacy software companies play in controlling access to cloud infrastructure. Moving familiar software that is already central to operation into the cloud is often the first step in businesses' digitalisation strategies. Creating more flexible and cost-effective consumption patterns is part of the promise. By capturing these 'core' software applications into their own cloud infrastructures, legacy software companies can establish significant advantages. Professor Jenny's study has shown how technical, financial and resource barriers are created with unfair software licences to make it hard to move to third-party cloud infrastructure.

This applies not just to these core software applications, but to new and innovative applications that leverage cloud infrastructure to deliver new value. As such, legacy software companies are among the most harmful gatekeepers to cloud deployment and the growth of the cloud sector overall. They have the power to restrict choice, distort competition and raise costs for many other players. With cloud's central importance to the digital economy these legacy software giants are in danger of disrupting the entire market.

An Historic Opportunity

Professor Jenny's research shows lasting and continuing harm being done through unfair software licensing practices to businesses across Europe. The study's sample included businesses of all sizes seeking to digitalise their operations in order to improve service, cost and choice to their customers. His findings illuminate the wide variety of unfair practices being deployed to deprive these customers of choice, and as a result their consumers of innovative and effective products.

Proving the illegality of these unfair practices currently requires long and expensive investigations under existing competition laws. The timescale and resources required mean that many will simply go out of business before any resolution – and that's without the potential retaliatory measures feared by many if they speak out. It is therefore essential that these practices and behaviours are considered and added to the ex-ante requirements of gatekeepers in the DMA and that the firms that dominate the legacy world of enterprise, productivity and database software in the data centres of businesses across Europe are fully identified as gatekeepers in the final legislation.

The DMA is an historic opportunity for Europe, once again, to set the benchmark for fair legislation in the global digital marketplace. The General Data Protection Regulation has rapidly become the de-facto standard for privacy of data globally, and there is no reason to imagine that the DMA cannot become the same for fair competition regulation at digital speed. But with that authority comes great responsibility. It is critical that Europe's lawmakers ensure that those practices which are already harming business, restricting choice and denying consumers the best mix of products and services, are adequately covered by the DMA's articles.

However, as proposed by the European Commission, the DMA falls short to tackle the anti-competitive practices identified in Professor Jenny's research. His research makes it clear that the unfair practices distorting the cloud infrastructure services market segment are deployed only by those legacy software providers that also offer cloud infrastructure, not by cloud service providers as a whole. The scope of the DMA is limited to a number of 'Core Platform Services' of very large companies. In this list, a software 'Core Platform Service' category to which the obligations of the DMA will apply is missing. Without it, competitors in the cloud infrastructures services market and their customers will be unable to rely on the DMA to stop these abusive practices.

As amendments are debated, compromise amendments drafted, submitted, and ultimately adopted, the Parliament and the Council must take this evidence into consideration and act to ensure these harmful practices are fully covered in the final legislation. To secure Europe's digital leadership, the Parliament, the Council and the Commission must act on this evidence, and they must do so now.

The full report of Professor Jenny's research can be viewed and downloaded from
https://cispe.cloud/studies/fairsoftware