16 December 2014: Digital economy - Analysis of open and closed systems

Published on December 16, 2014

The French Autorité de la Concurrence and the UK Competition and Markets Authority have produced a joint report on ecosystems and their effects on competition.

> Version française

The digital economy gives consumers and firms increased access to products, services, and information. These different products and services often work together in a complementary way, creating what economists call 'ecosystems'. Each of the products and services works thanks to another. The various services offered on mobile devices (phone calls, music and e-book catalogues, apps, app stores, etc.) or on operating systems (computers, software, etc.) are well-known examples of such ecosystems.

The competitiveness of these ecosystems in a market depends in particular on the number of actors they bring together. The presence of 'network effects' between groups of users favours the development of large market players (Google, Apple, Facebook, Amazon, etc.) that bring together many consumers, developers, advertisers, product suppliers, etc.

The degree of openness or closure of ecosystems has important consequences both for competition and the consumer

- Some of these ecosystems operate relatively 'openly': that is, they work with a wide range of competing components. The various actors can adopt autonomous strategies, both in terms of price and product quality. A lack of

coordination may sometimes harm the quality of the system but allows consumers to mix and match and increases competition.

- Other ecosystems appear relatively 'closed': the ecosystem owner selects the products that are compatible with it, which reduces competition between components within the system and makes it fairly compatible with competing systems. Consumer choice is restricted to the products available within the ecosystem.

Case-by-case analysis of the effects and risks for competition

The report draws on the main conclusions from the economic literature on these ecosystems, inspired notably by the work on two-sided markets by Nobel economics laureate Jean Tirole. It shows that the effects of their closure or openness the degree of openness or closure should be assessed on a case-by-case basis. This depends, for example, on the degree of competition between systems, on the ease with which consumers may switch between systems, on the degree of coordination required to ensure a system's viability and on the ability of consumers to assess the overall cost associated with a system before making a choice.

> See the full text of the report

> Press contact: Anne Marchand / Tél. : 01 55 04 00 62 / Mel