BUSINESS IN CYPRUS

BIG DATA: IMPLICATIONS FOR COMPETITION LAW

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Big Data is a concept that has emerged as a result of the evolvement of the digital market, causing implications for competition law enforcement. These implications arise from the use of Big Data by firms aiming to restrict competition, either by exploiting their dominant position in the market or by enhancing the stability of cartels.

Big Data is characterized by four elements commonly known as the "4V's of Big Data": Volume, Velocity, Variety and Value.

The **Volume** of data is increasing day-by-day due to the continuing growth of the digital market, e-commerce, the development of smartphones and social networks (e.g., Facebook, Twitter, and LinkedIn).

The **Velocity** of data refers to the speed with which data is produced, analysed and expanded.

The **Variety** of data is used to describe the various types of information that data can contain. Big Data may contain information about the demographics of a person, their interests and the history of their purchases, which can lead to targeted advertisements.

The **Value** of data is a result of the combination of the Volume, Velocity and Variety of the data.

Big Data can have severe implications in competition law. Firstly, the collection of Big Data by firms which already have many customers, may lead to the creation of barriers to other competitors entering the market. In particular, large firms may develop a dominant position in the market by attracting more and more customers. As a result, small and medium enterprises are prevented from entering the market because they are incapable of competing with firms that have a stronger customer database.

Furthermore, collecting and using Big Data may result in the creation of a dominant position in the market. Although this is not illegal, a dominant firm may not take advantage of that position to distort competition to the detriment of consumers. In the case of Big Data, their analysis' high costs may also contribute to the concentration of Big Data in the hands of large firms. This enables firms to take advantage of their dominant position by easily accessing data of value with the effect of distorting competition. An example of such a case is when the use of Big Data by large companies leads to the lack of incentives for new firms to enter the market.

In addition to these, using Big Data could give rise to discrimination against consumers on the basis of price and quality. For example, large firms that take advantage of their dominant position in the market may violate the principle of non-discrimination by applying different prices on same-volume transactions. Moreover, the terms and conditions regarding the use of Big Data may be vague and/or opaque, thereby causing confusion regarding the way the data will be used. Online companies present their products as free in exchange for consideration in the form of data, which may also lead to further implications when it comes to consumer protection.

Collecting and using Big Data may result in the creation of a dominant position in the market

Using Big Data can also contribute to the improvement of cartel stability, as the advanced methods of analysis, along with programming tools and the ability to compare prices online, may facilitate coordination between companies. For example, by analysing data, companies are able to ensure their compliance with collusion practices. At the same time, firms may use similar algorithms in order to set prices for their products, allowing for a simultaneous adjustment of prices to market's terms. Big Data can also lead to the creation of cartels by contributing to the improvement of market transparency and being used in programmes, which may promote the instant adaptation to any decrease in the pricing of the products of competing companies.

Big Data constitutes an important parameter that should be taken into consideration when it comes to competition. Hence, national competition authorities are advised to carefully assess any challenges that may result from its burgeoning use.