

EXPLORING AND ASSESSING EXCLUSIONARY PRACTICES EXERCISED BY GOOGLE IN THE MOBILE OPERATING SYSTEM MARKET WITH THE HELP OF MADA AND AFA

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ABSTRACT

This paper is basically deals with the hypothesis that Google exercises unfair tactics according to Competition Act, in lieu of maintaining the dominant position in the market and exclude other player from the market. Paper is divided into six part, firstly in the introductory part the main concern is to find out the current literature relevant to the research such as MADA and AFA nature, steps take by the international bodies regarding the exclusionary practices of Google Android, second part of the paper deals with the Google Business Model and Licensing system ex. how they earn profit by providing Android on zero cost to the hardware manufacturer, use of MADA and AFA as a contractual agreement between hardware manufacturer and Google, thirdly what are the restriction and effect of restriction imposed by MADA and AFA on hardware manufacturer, fourthly legal assessment of these regulation in the light of Indian and European legislation, fifthly paper deals with the potential remedies against exclusionary and unfair practices, lastly the conclusion part where the integration of Indian law and international law has been discussed which can be beneficial for restricting such kind of prtises and what are the threat competing operator get from Google Android unfair behavior.

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1 Introduction

Since the launch of Android in 2007 it became a very vital part in our daily life and has become the most dominant mobile operating system (“OS”). In 2015, there are more than 4.4 billion mobile users which cover the 80% of the relevant market.³ In the light of such commercial success and other business practices, Android became a hot topic for discussion. For example, in September 2015, Russia’s Federal Antimonopoly Services completed an investigation finding that Google broke competition rules by unfairly building its own services and preventing rivals from being installed on Android software. Then in April 2016, the European Commission sent a statement of objection to Google indicating that they are involved in abusing their dominant position. The Korean Fair Trade Commission announced a similar investigation in September 2015 to have begun investigating Google Tactics in mobile.⁴

Google does not manufacture smartphones, but offers the mobile operating system Android as an open source code to original equipment manufacturers (OEMs). Android can be used by any third party free of charge, as many OEMs do. The competitor accused Google of excluding competing search applications (apps) from Android smartphones on the basis of its “Mobile Application Distribution Agreement” (MADA) with OEMs like HTC or Samsung.⁵ The difficulty arises in the Google scenario is that till date only one single case has been dealing with the restriction of Google under antitrust law. (Indeed even that decision is also applicable only in Russia and not available to the public in large parts of the world⁶). The exclusionary practice which has been discussed in this does not harm thousands of firms developing apps that do not compete with

³ *Global mobile OS market share in sales to end users from 1st quarter 2009 to 1st quarter 2016*, Statista, available at <https://www.statista.com> last seen on 20/2/2018

⁴ Benjamin Edelman & Damien Gerdin, *Android and competition law: exploring and assessing Google’s practices in mobile*, 12 European Competition Journal 159-160 (2016), available at <http://dx.doi.org/10.1080/17441056.2016.1254483> last seen on 20/2/2018

⁵ *Torsten Korber & Gottingen, Let’s Talk About Android- Observation on competition in the field of mobile operating system*, SSRN, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2462393 last seen on 20/2/2018

⁶ Benjamin Edelman, *English Translation of FAS Russia Decision in Yandex v Google*, Benedelman, available at <http://www.benedelman.org/news/092816-1.html> last seen on 20/2/2018

Google. But these practices harm makers of app that directly compete with Google's key apps such as YouTube, Google play store, Google search etc. In particular we see Google's restriction imposed on manufactures would create difficulty for them to introduce new type of services and other app manufacturer does not challenge them on merit.

This paper is divided in five parts firstly I present the relevant aspect of Google' Android business and the key contract provisions in dispute, secondly I explore the harm resulting from these provision thirdly I explore some relevant legal principle and last the conclusion of the whole research.

2 Google's Android Business Model and Licensing Requirement

2.1 Android business model, market position and apps

Google Android business was taken its root when Google acquire a Android Inc. in August 2005. In November 2007, after 10 months of public launch of Apple iPhone, Google declared Open Handset Alliance, an "alliance of leading technology and wireless companies" collaborating to develop "the first truly open and comprehensive platform for mobile devices"⁷ As an operating system Android work really well as it provide a link between user, hardware and developer and expand the market. It provides hardware manufacturer a free of cost operating system and generates specific ecosystem.

Apple iOS available on iPhone and iPad and it will be treated as competitor but in actual iOS is not an alternative of Android because Apple does not provide the license for the same, so any other mobile manufacturer does not enjoy their services in nutshell we can say that Apple incorporate their own closed ecosystem. Other operating system like Symbian and Microsoft also does not give sufficient competition to the Android. No Symbian handset have shipped since

⁷ Charles Arthur, *The History of Smartphone: Timeline*, The guardian, available at <http://www.theguardian.com/technology/2012/jan/24/smartphone-timeline> last seen on 21/2/2018

2013 and Microsoft also drop the idea of Windows Phone after the failure of Microsoft and Nokia collaboration. As a result, hardware manufacturer got very little alternative available.⁸

The gist of Android success is that they did not charge anything against their service from mobile manufacturer they provide this for free of cost. Initially Symbian and Microsoft charge for their operating system but now they also provide it for free to compete with android. Google's Android based their business on two-sided market on which the consumer decided about the success of a service, but the remuneration comes from advertising clients. The distribution of Android (and of most apps and mobile services) for a zero price is an indirect tool to attract as much attention as possible by consumers, increases mobile usage, and ultimately monetize this usage, through advertising and otherwise.⁹

Google offer various bundle of apps such as Gmail, YouTube, Google Maps and other highly utility app, but these app were available in preinstall mode and most of them can't uninstall. Google called these preinstall as Google Mobile Services (GMS)¹⁰. On a flip part GMS contain some app which has disproportionate important to some user but they are no substitutable. Google maps, YouTube and Google Play enjoy highly favorable condition because of the licensing and contractual agreement between Google and hardware manufacturer as discussed below.

2.2 Licensing and other contractual obligation for Android device manufacturers

Depending upon what type of Android device they want, manufacturer has to one or more agreement. Basically Android devices offered to manufacturer may be classified into two categories a) Bare Android device b) Normal Android devices

2.2.1 Bare Android Devices

⁸ Tom Warren, *Windows Phoen Is Dead*, The Verge available at <http://www.theverge.com/2016/1/28/10864034/windows-phone-is-dead> last seen on 21/2/2018

⁹ Supra 3, at 6 last seen on 21/2/2018

¹⁰ Supra 2, at 164 last seen on 21/2/2018

If a hardware manufacturer wants a “bare” Android device he had to pass only a technical test and sign the Android License Agreement¹¹. This type of device only offer a skeleton Android and nothing else, Google did not give any kind of Google Mobile Services (GMS) which will very harmful for manufacturer. For some mobile app manufacturer and consumer may trace some substitute but apps like YouTube and Google Play had no close substitute, consumer find difficulty in installing other app from direct web link because it is an cumbersome task for the ordinary people as a result hardware manufacturer had to opt for “normal” Android Device.

2.2.2 Normal Android Device

For obtaining a treat which is GMS hardware manufacturer had to sign two more agreement a) Mobile Application Distribution Agreement¹² (MADA) b) Anti-Fragmentation Agreement (AFA).

Firstly device manufacturer must sign Mobile Application Distribution Agreement (MADA). On some report it was found that MADA will customized according to the hardware manufacturer and it very confidential document but in the case of Oracle v Google, Google has to disclose it and various person study MADA and found some exclusionary and beneficiary provision exercised by Google such as. First manufacture must “preinstall” “all Google application” that Google specify¹³. Second, Google require these apps should be presented in a specific area, such as Default Home screen, new MADA also specify the sequence, from left to right and top to bottom¹⁴. Third Google search must be set as a default search engine for all web search access points, also Google Voice search also activated on holding user physical home button or swipe up¹⁵. Fourth Google also require that the handset must always set his location to Google

¹¹ *Compatibility Test Suit*, Android, available at <http://source.android.com/comaptibility/cts/index.html> last seen on 22/2/2018

¹² *HTC Mobile Application Distribution Agreement*, Benedelman, available at <http://www.benedelman.org/docs/htc-made.pdf> last seen on 22/2/2018

¹³ *Ibid*, See Section 2.1

¹⁴ *Ibid*, See Section 3.4.(2)-(3)

¹⁵ *Ibid*, See Section 3.4(4)

database¹⁶. Finally, Google require that any time a mobile app presents a web page, the web page must be rendered by a “Google WebView Component” (the core of web browser)¹⁷.

To make a normal device, a manufacturer also had to sign Anti-Fragmentation Agreement (AFA). The provision of AFA as far as confidential and no copy available till date but according to Google press release it is customized and specific agreement for every specific hardware manufacturer but as per assertion these may include exclusionary practices, although Google let on this issue that it is not compulsory to get into “normal” device category and they can get through “bare” devices. But not signing MADA and AFA had adverse effect on business and services which is discussed below¹⁸.

2.2.3 Consequences of not obtaining MADA and AFA

When anybody challenge MADA and AFA, Google says these agreement were not compulsory to impose. But if we scrutinize all the scenario of the market then we find survival with “bare” device is near to impossible because there is no close alternative were available of these apps. For ex with the help of Google Play we can install anything with very ease and if we don't get the service of the same hardly anyone knows how to install app from other sources.

Nonetheless some device manufacturer show courage to go with “bare” devices such as Amazon, which began in July 2014, Fire phone launch in the market without possessing GMS and go to the market with “bare” device. Many customer complain about the same that it is difficult for them, to download any Application, even some of review say that please don't expect to much from Fire Phone¹⁹. With limitation of fire phone it is not going to far as they had shut the plan in one year.

¹⁶ Ibid, See Section 3.8(c)

¹⁷ Ibid

¹⁸ Supra 2, at 166

¹⁹ Geoffrey A Fowler, *Amazon Fire Phone Review: Full of Gimmicks, Lacking Basics*, The Wall Street Journal, (2014) available at <http://www.wsj.com/articles/amazon-fire-phone-review-full-of-gimmicks-lacking-basics-1406077565> last seen on 25/2/2018

Other cases also denote the same situation that if a hardware manufacturer does not go with GMS it will be hard for them to find a place in the market. Microsoft try to do the same with the collaboration of Nokia but ended up going nowhere, even Nokia also lost its market share in the relevant market. The crux of the fall is non availability of alternative download source such as Google play, YouTube and most importantly the non functionality of WhatsApp²⁰. If a consumer try to download these thing form website called “sideloadfirephone.com”, it a very cumbersome task for them to do so, because of this Nokia X also did not able to capture the market.

3 Effect of Restriction imposed by Google on Hardware Manufacturer

The whole idea of imposing agreement like MADA and AFA was to protect the market dominance of Google and market share in other utility services where there is the scope of alternative. Google try to wipe out the competition either expressly or impliedly.

3.1 Compulsory requirement and their effect

The MADA based on the strategy either you opt all things or you are not got any kind of GMS. Requirement intended to impose certain thing given below

3.1.1 Foreclosing the market for others

It creates barriers on entry for others, MADA work basically on two side firstly it will protect the existing market and secondly expand the market. The strategy of tying app together is certainly help Google for example if a manufacturer does not preinstall the Google Play and YouTube then it will reduce the effectiveness and attractiveness of the Hardware. Google take the advantage of the same and tie up other app with these two highly popular app and exclude other utility apps to get into hardware in preinstall.²¹ For example Google Maps are preinstall so other navigation did not get edge and space to fit in the scenario and ultimately uses of Google Mops are way higher in comparison to other navigation app like Yahoo etc.

²⁰ *Distinguished Nokia X Phones Suffered from a Lack of Identity*, NDTV-Gadgets, available at <http://gadgets.ndtv.com/mobile/features/discontinued-nokia-x-phones-suffered-from-alackof-identity-561119> last seen on 25/2/2018

²¹ *Supra* 2, at 172-173

3.1.2 Additional advantage from default setting

Google also try to extract benefit from the compulsory default setting of app like Google search engine, voice search, location tracking and other. It will create a block for other competitive app because large number of buyer do not change the default setting and competing app did not get enough market space for them. Google on contrary says that it is not compulsory to manufacturer to set as default but if we study MADA it is clearly said that Google search engine should be set as default search engine to access all kind of Web.²²

3.1.3 Assessing Google justification

In response try to say many thing such as firstly Android is an open source operating system to the manufacturer and they can download the entire operating system for free and modify how they wanted. It is not obligatory for manufacturer to sign MADA but in absence of Google play and YouTube the respective device will become less attractive²³. Secondly Google also tell it is harmless for their competitor but as we discussed earlier it is indirectly effect the competitor and work as an exclusionary practice. Thirdly Google tell that consumer is not effected with their condition as later they may create personalized phone by downloading various app and customize their phone. But in reality consumer can only customize specific area because there are various app which are inbuilt and not substitutable with other. Fourthly Google argues that they work on the two fold strategy of providing free services on one side and collecting advertising revenue from another, they try to build an ecosystem of their own so they can maximize their profit and this is the real rational behind imposing these types of restriction, but to build an ecosystem of own and in order to generate more profit Google cannot eliminate the competition. Google charge 30% fees from other app which are sold under the domain of Google App store, Google try to implement every opportunity through which they can generate income

²² Supra 10, See Section 3.4(4)

²³ Supra 2, at 174

and most importantly no single consumer pay them directly, they always generate revenue from sources other than consumer.²⁴

3.2 Preventing manufacture from selling other competing devices

To distribute GSM a manufacturer has to sign AFA as discussed earlier and large part of AFA is not available to general public. Paper published by Google says that AFA will work for the benefit for the customer and reduces the problem of modified OS code and increase the functionality of all apps by concentrating their utility, in simple word it reduces fragmentation for ex Google search is linked with the Google maps and it will reduce the burden of functionality as both work complementary and help them to produce best potential result. Google called this as strategy to reduce fragmentation. But as we read MADA we found that if a manufacturer sign agreement with Google they have to fulfill their criteria in all of their devices they did not possess choice of variety, they had to provide all GSM to all of their devices. For ex if Samsung want to launch a phone without GSM services they can't do the same if they wanted they have to surrender all GSM app in other phone also²⁵. Google work on the strategy of "all-or-nothing".

3.3 Exclusionary Payment

In a press conference European Commission alleged that in addition to the restriction imposed by MADA Google also try to give financial incentive to mobile manufacturer and mobile network operator on a condition that they exclusively preinstall Google Search on their device. If this info is true than it is definitely subject to the exploitation of dominant position and these practices also come under the restrictive exclusionary practices.²⁶ If the story of financial incentive were true then it will become big threat for the search engine who specially focuses on a specific geographical area, regional language, search any specific type of business or specialist in providing solution for a specific field etc, will not get the opportunity to connect with the

²⁴ *Transaction Fees, Google Developer Console Help*, Support Google, available at <http://support.google.com/googleplay/android-developer/answer/112622?hl=en> last seen on 27/2/2018

²⁵ *Supra* 2, at 176

²⁶ *Ibid* at 177

consumer because Google search engine already taken the market place (device) and no one can enter without the permission of the Google, this will ultimately result into exploitation of consumer.

3.4 Mechanism for dispute resolution and penalties

If any person read carefully the provision of MADA he will found that Goggle had single authority in dispute resolution and strict penalty provision. If a manufacturer already signed MADA and try to install third party app or other customize app for different device then they are subject to the penalty, for Google MADA specifically require that a device manufacturer obtain Google approval for each new devices²⁷. In MADA it is specifically written if anyone breech the condition Google had the power to impose penalty and make another order as they deemed fit. For example if any Manufacturer varies the condition of MADA then Google can impose stop-ship order, on a unilateral basis, Google posses lot if power in dispute resolution with the virtue of the court.

3.5 Preventing Entry of more efficient competitor

If we taken together the entire contractual obligation and other relevant factor we found out that entry of new company in the field of any Google app is mere to impossible. If we suppose a hypothetical situation where a New company providing high quality search engine better then Google and want to compete with Google, then New company will not do the same because of MADA because Google search engine is already installed in it and customer did not want to install any other parallel app, even if they want to work as a parallel search engine then new company should pay a amount to hardware to install their app. But due to financial incentive hardware devices would not install new search engine as they fears form breech of MADA condition. Google largely influence the market with financial incentive as seen in earlier they pays Apple more than \$ 1 billion to be the default search provider on iPhone²⁸ If a well

²⁷ Supra 10, See Section 4.3

²⁸ *Joe Rosenblatt and Adam Satariano, Google Paid Apple \$ 1 Billion to Keep Search Bar on iPhone*, Bloomberg, available at <http://www.bloomberg.com/news/articles/2016-01-22/google-paid-apple-1-billion-to-keep-search-bar-on-iphone> last seen 1/03/2018

established want to install other search engine then they had a risk of breaching MADA restriction and if they did not want to sign MADA then they are entitled the services of GMS. On other side new company had to manufacture other utility app which can act as substitute of GSM services including Google Play and YouTube.²⁹

4 Legal assessment

Before going to assessing the position from more legal perspective, I must clarify you that these assessment is largely based on MADA because their no availability of AFA and other contractual document and evidence of financial incentive, so research is heavily focused on the MADA. Secondly the assessment is heavily based on Indian and European authorities. Three alleged exclusionary practices were scrutinized which are (i) Google's MADA requirement that devices manufacturer include certain Google apps and defaults in order to get any part of GMS: (ii) Google's AFA prohibition that devices manufacturer sell devices running on competing operating system based on Android and (iii) Google financial incentives to devices manufacturers and carriers for exclusionary preinstallation of Google Search. The first and third directly protect Google's dominance Search while first also benefit other Google's position in the market for certain other app and services. The second raises the stakes for devices manufacturer and increases the effectiveness of the other method.³⁰

4.1 MADA requirement that devices manufacturer include certain Google apps and defaults in order to get any part of GMS

As we discussed earlier Google compel device manufacturer from MADA to uses all other app which are not so popular and have substitute in the market in consideration with the app which are enjoying dominant position in the market such as Google Play and YouTube. In other words Google compel them to either purchase both dominant app and substitutable app or nothing, this is clearly a case of tying. In this section I will describe the possible effect of tying and relevant provision of tying in the Indian Competition Act, 2002.

²⁹ Supra 4 at 179-180

³⁰ Ibid

4.1.1 Tying and its effect

Any agreement amongst enterprise or person at different stages or levels of the production at different stages or levels of the production chain in different markets, in respect of production, supply, distribution, storage, sale or price of, or trade in goods or provision of services, including ((a) tie-in agreement) shall be an agreement in contravention of anti competitive agreement if such causes or likely to causes an appreciable adverse effect on competition in India³¹

Explanation of this section says “tie-in agreement” includes any agreement requiring a purchaser of goods, as a condition of such purchase, to purchase some other goods.³² Tying in general sense refers to a situation where a seller refuses to sell one product (tying product) unless the buyer also takes another product (tied product).³³ Seller can implement the tying by contractual as seen in the Google case. In many cases tying seems to be pro-competitive but it can be used for exclusionary strategies. First if a firm is in a dominant position in specific market and have substitute in the other market then they can tie both product and exclude the competitor from non dominant market, as seen in Google case they uses their dominant App like Google Play and YouTube for providing extra push to the which have competition like Gmail, Google Maps with the help of tie-up. Second tie up may be used for the expand the market of substitute goods and try to achieve dominant position in the competitive market as seen in the Google case if they are continue to impose such kind of restriction then in short period of time other app also continue to gain dominant position.

4.1.2 Test of Anti-Competitive Agreement

In the case of Microsoft v European Commission³⁴ General Court propounded six step test whether a tie-up will come under the category of anti-competitive agreement and these are (i) does defendant have market power in the tying product; (ii) are the tying and tied product different?; (iii) are the tying product and the tied product tied together?; (iv) does the tie

³¹ S.3 (4), The Competition Act, 2002

³² Ibid, Explanation (a)

³³ Supra 4, at 181

³⁴ Microsoft v. Commission, T-201/04, [2007] ECR 2007 II- 3601

foreclose competitors?; (v) does the tie create consumer harm? and (vi) are there countervailing efficiencies? To establish any tie-up as an anti competitive we must establish that customer harm is more than increased efficiency.

Application of these principles to Google MADA restriction

- (i) Market power in the tying agreement- Google tie up with the product and services which are app, so far no commission determine market for the app but for the objective study and other survey we found out that Google play and YouTube certainly enjoy the dominant position in the market. So Google tie-up between these two app with other app who had close alternative to exclude the competitor. Google with the help of MADA try to increase their market power.
- (ii) A tie- The MADA agreement prohibits device manufacturer from preloading Google play and YouTube unless they do not install all other apps because for the commercial success of device, manufacturer has to install Google play and YouTube. As we seen all app are not same they are differ and MADA is imposed to expand the market of other product.
- (iii) The tying and the tied product are separate – In the case of Google the tying and tied product can be separated because some app may later uninstall. Some user may want to use Google play but does not want to use Google search because of lack of privacy and preferred other search engine with greater privacy.
- (iv) Foreclosing Competition- Google agreement act as an exclusionary practice in the market because firstly it will prohibit other mobile apps and secondly compel device manufacturer to set their app in the most usable area of phone for ex Home Screen.
- (v) Consumer Harm- By foreclosing competition Google defiantly harm the consumer. Firstly to the device manufacture as they are not got benefit from the competition among the various app. Secondly it will harm the advertising provider because Google search become only source through which they can approach to the more consumer but Google is the only wide covering platform they had to go with Google

in high cost. Thirdly to the direct consumer of search engine because they had very less amount of alternative available through which they can negotiate.

- Efficiencies- Google claim that they increase the efficiency of the devices and made Google a more open eco system, but if we see thing more subjectively then we will find out that through MADA they manufacture a close ecosystem of GMS. This will ultimately affect the efficiency of the devices³⁵.

Thus from the above assessment I found out MADA restriction according to my view largely harm the consumer in comparison to increased efficiency.

4.2 AFA prohibition that devices manufacturer sell devices running on competing operating system based on Android

To build a device which are capable of being successful in the modern time, device manufacturer has to sign MADA and in addition to it AFA. The parts which are available in the public, AFA uses two types of exclusionary practice. Firstly, AFA prevent mobile manufacturer from developing a new android platform, so a device manufacturer is afraid to develop a new android base without GMS. Secondly, AFA prevent mobile manufacturer from accessing alternative mobile platform so if a company sign MADA and AFA then they are not able to sell any device other than GMS³⁶. If they do the same Google impose penalty on them as discussed above. Device manufacture does not have any choice left so they approach to the Google and consumer also did not have any other alternative except Apple but Apple devices were too costly so they had to purchase android based mobile³⁷.

4.3 Financial incentives to devices manufacturers and carriers for exclusionary preinstallation of Google Search

³⁵ Geoffrey A Fowler, *Amazon Fire Phone Review: Full of Gimmicks, Lacking Basics*, The Wall Street Journal, (2014) available at <http://www.wsj.com/articles/amazon-fire-phone-review-full-of-gimmicks-lacking-basics-1406077565> last seen on 25/2/2018

³⁶ Supra 4 at 189

³⁷ Ibid at 190

As discussed above Google try to give financial incentive to some mobile manufacturer that they should not install any other search engine in their phone. But the question is if it is true then why Google try to do the same because from the provision of MADA Google already set their main app in the default mode, it may be answered in the way that what is consumer after using another inbuilt devices and satisfied with their experience frequently uses other search engine, these type of scenario seems to be harmful for the Google well established market, Google try to exclude that possibility and may try to give financial incentive to do the same.

5. Remedies

The question arises what will if Google practices find out anti-competitive and what remedies should commission have to adopt to dispose of this case. The remedies are discussed below

Firstly, it can be said that the Google had to end up the contractual ties and allow device manufacturer to install other app according to their configuration as what they find convenient. Secondly to assure that contractual ties are truly unlocked, Google should be barred from implementing pretextual restriction or other practices that have the same effect as the contractual ties. For example, Google ought not limit the functionality of Google Play when accessed from devices with competing app, nor should Google withhold the latest version of the operating system or apps from device manufacturers who begin to distribute competitors apps³⁸. Thirdly it should be taken care of if Google give the right to use a single device such as Google play then the cost should not be too high or price should not be unfair and discriminatory. Remedies should be imposed more affirmatively because there is large number of people interest were involved.³⁹

In the light of the implementation Google put in the way of competing app developers, a full remedy would also attempt to restore competition for key app. Here, the European experience with Windows is squarely on point. From 2010 to 2014, a new Windows computer in Europe

³⁸ *Torsten Korber & Gottingen*, Lets's Talk About Android- Observation on competition in the field of mobile operating system, SSRN, available at http://papers.ssrn.com/so13/papers.cfm?abstract_id=2462393 last seen on 20/2/2018

³⁹ *Supra* 4 at 192

was required to show a screen offering a choice of five web browsers in random order, with no default such that each user made an affirmative choice. The same approach could be used for Android “Ballot box” decision would most naturally be requested for all the categories of apps that benefited from, tying under Google’s MADA. Alternatively, the ballot box could be restricted to the categories that are most commercially significant, i.e those with frequent usage and those that show advertising. A ballot box could also be presented when a user first activates a given category of app. i.e. when a user first request a map or first requests a map or first request a local review, in order to get “just-in-time” contextualized decisions and reduce the up-front decision requested of users.⁴⁰

6. Conclusion

The new budding lawyer and student of competition law should try to explore in the area of high-tech market and find out the real position of the matter. Till now there is no specific research which can explore the real and specific threat in the market, as seen in the paper we all find out in *prima facie* that a case can be established against Google in India on the basis of restriction imposed by the MADA which are come under the domain of exclusionary practices. The latest effect of the MADA has been seen in the case of Nokia and Microsoft where they try to build their own ecosystem and not go with android and launch their own operating system but because they did not sign MADA they did not got the benefit of GMS and thrown out of the market in a very short span of time. This is why I think competition authorities are particularly likely to question Google’s contractual restrictions

⁴⁰ Ibid at 193

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