

Submission of Dr. Matthew Cole (University of Exeter)

The Competition and Markets Authority has raised a call for information on how the MAGs should be supplemented or reformed to provide up-to-date guidance on the CMA's approach to assessments of mergers in digital markets.

This submission focuses on the following key area as outlined by the call for information:

(a) What **market features** are likely to be relevant to the assessment of mergers in digital markets? For example:

- (i) The multi-sided nature of many digital markets (eg digital platform markets).
- (ii) The way in which digital products or services are monetised (eg through advertising revenues).
- (iii) The fact that users in certain digital markets pay for products or services through non-monetary means (eg provision of personal data).
- (iv) The relevance of data assets for competition.
- (v) The importance of network effects.

In order to deal with these matters the following analysis provides an assessment of two major decisions relating to digital mergers that have occurred in the last seven years. This analysis exposes a common thread running through decisions made by both the EU Commission and the UK's CMA (then OFT).

An executive summary of the analysis and its conclusions follows:

Analysis

Conclusions

- The functionality of an app or digital service should not replace the traditional rigorous assessment of interchangeability of a service from the perspective of a customer or user;
- Rapid growth of a service, app or product should not be confused with low barriers to entry for competitors;
- Where a market is likely to be subject to network effects once settled, competition authorities **must** look beyond the experience of first movers (whether in new product markets or new geographic markets) in order to evaluate potential strategic advantages (such as network effects) that could make later entry more difficult for potential competitors;
- Contrary to intuitive thinking, rapid growth of first movers in digitally disrupted markets may actually make entry more difficult, because the window of opportunity for imitators to enter the market before network effects make entry more difficult may be smaller.

Proposal for reform

The purpose of the call for information is to elicit views on aspects of the MAGs that should be supplemented or revised to provide up-to-date guidance on the CMA's approach to the assessment of mergers in digital markets. In light of the above the following recommendations are made:

1. In relation to the above the MAGs require very little change. This is because the concepts and points that needs to be implemented are already present in the Guidance. The difficulty is that authorities

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appear to have been slightly overawed in the past by the incredible rate of change the digital market has brought to the economy and seemingly assumed that this astonishing rate of change and disruption was going to be a permanent or at least persistent feature of the digital economy. As a consequence issues such as product market and geographic market appear to have been dealt with in a slightly superficial manner, the analysis of decisions being noted as such even at the time.¹ With the benefit of hindsight it can now be seen that digital markets require the same thorough analysis regardless of the rate of dynamism being displayed at any one time. This is related to the second point:

2. A rapid rate of growth in first mover companies does not indicate a market will remain competitive or contestable once one or two dominant undertakings have been established. Once a market is settled, where it is subject to strong networks effects the market can stagnate and become very difficult for competitors to enter. In light of this it is proposed that the MAGs incorporate the following, either attached to or just below paragraph 5.8.7 (new material in italics):

5.8.7 In assessing tipping, the Authorities will consider whether or not customers would be willing to switch to a new supplier. Customers' willingness will depend on the costs and benefits to them of switching. To assess these, the Authorities may take into account: the (actual or perceived) cost of switching, brand loyalty, the length of existing contracts and the closeness of relationships between suppliers and customers. In addition, customers may be willing to sponsor and/or facilitate new entry.

In markets characterised (or upon maturity likely to be characterised) by network effects, exceptionally rapid growth of first movers should not necessarily be taken as indicative of low barriers to entry or an absence of strategic advantages. Such growth is likely to benefit only the first mover in a particular product or geographic market. Once the market has matured network effects are likely to prevent later entrants from obtaining the same rapid growth, even when supplying a desirable product.

[Analysis contained in separate file for copyright reasons]

¹ Andreas Weitbrecht, 'From cement to digital industries - EU merger control 2014' (2015) 36(4) E.C.L.R. 148, 153 CMA109con

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[Analysis of Facebook/Whatsapp and Facebook/Instagram contained in separate file for copyright reasons]

Complete version will be made available through the edited book; Joseph Lee (ed), *Takeover Law in the New Era of Globalisation: A UK and China Perspective* (Springer forthcoming 2019)

The Whatsapp decision

The Whatsapp decision¹ reveals two major flaws in the approach of the Commission to identifying a genuine threat to competition from the concentration in digital markets. The first point is that it the Commission mistook the numerous consumer message apps in the market as indicative of a competitive market, when actually this is not the case and secondly, because of that misinterpretation, it undervalued the position of Whatsapp as a challenger to Facebook in the sphere it was gaining dominance: consumer messaging. These matters will be considered in turn.

Beginning with the first mistake: In relation to consumer messaging the view of the Commission was that the market did not suffer from high barriers to entry. The Commission explained how post-transaction there would remain a number of alternative consumer communications apps² and that there were no significant costs preventing consumers from switching between different apps.³ The Commission found there were no significant traditional barriers to entry,⁴ that the market was dynamic and fast growing,⁵ that developing and launching a consumer communication app did not require a 'significant amount of time and investment',⁶ was not subject to important intellectual property rights⁷ neither did either party have particular hardware, software or other advantages that would hinder expansion of competitors in future.⁸ This all sounds like the ingredients for a competitive market.

The Commission went so far as to use the explosive expansion of Whatsapp itself, along with its competitors Telegram, Line and Kik Messenger to show how easy it was to enter the market and grow to a substantial body of users in very little time. This is an odd belief to hold, not least because if it really was that inexpensive and quick to establish a consumer communication app, one should ask why Facebook was choosing to pay \$19 billion for Whatsapp, instead of expanding their own consumer messaging service. Consider, that \$19 billion is actually more than Facebook itself was valued at when it undertook its IPO.⁹

The issue of network effects was dealt with using virtually the same facts to suggest that they were not sufficient to shield the merged entity from competition.¹⁰ The Commission referenced the tendency and ease of consumers to 'multi-home,¹¹ the lack of any control of hardware or software infrastructure to control the market¹² and the dynamicism of the market, again placing weight on how other consumer communication software platforms, in particular LINE and WeChat had after three years more than 400 million active users worldwide¹³ and the fact that after the announcement of Facebook's acquisition of Whatsapp 'thousands of users downloaded different messaging platforms with better privacy protection'.¹⁴ The foundation of the Commission's error can be found in these two points, network effects do not restrict competition because (1) consumers can multi-home and (2) the market is dynamic and expanding as shown by the expansion of

¹ Commission, 'Case No COMP/M.7217 - Facebook/ Whatsapp' C(2014) 7239 final

² Commission, 'Case No COMP/M.7217 - Facebook/ Whatsapp' C(2014) 7239 final, para 108

³ Commission, 'Case No COMP/M.7217 - Facebook/ Whatsapp' C(2014) 7239 final, para 109

⁴ Commission, 'Case No COMP/M.7217 - Facebook/ Whatsapp' C(2014) 7239 final, para 117

⁵ Commission, 'Case No COMP/M.7217 - Facebook/ Whatsapp' C(2014) 7239 final, para 118

⁶ Commission, 'Case No COMP/M.7217 - Facebook/ Whatsapp' C(2014) 7239 final, para 119

⁷ Commission, 'Case No COMP/M.7217 - Facebook/ Whatsapp' C(2014) 7239 final, para 120

⁸ Commission, 'Case No COMP/M.7217 - Facebook/ Whatsapp' C(2014) 7239 final, para 121

⁹ <https://www.reuters.com/article/us-whatsapp-facebook-idUSBREA1I26B20140220>

¹⁰ Commission, 'Case No COMP/M.7217 - Facebook/ Whatsapp' C(2014) 7239 final, para 135

¹¹ Commission, 'Case No COMP/M.7217 - Facebook/ Whatsapp' C(2014) 7239 final, para 133

¹² Commission, 'Case No COMP/M.7217 - Facebook/ Whatsapp' C(2014) 7239 final, para 134

¹³ Commission, 'Case No COMP/M.7217 - Facebook/ Whatsapp' C(2014) 7239 final, para 132

¹⁴ Commission, 'Case No COMP/M.7217 - Facebook/ Whatsapp' C(2014) 7239 final, footnote 79

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competitors. Both of these points are flawed. While it is true to say that users can multi-home and that various platforms have managed to obtain significant market share in short periods of time, to suggest this establishes a lack of barriers to entry is to ignore the nuance of the market. It is argued below that customers do not in practice multi-home in a way that maintains competition and the market is not as dynamic as the statistics presented suggest.

Multi-homing

In relation to multi-homing it is very likely that a user in the EU will have Twitter, Facebook, Whatsapp, LinkedIn and perhaps another network on their smartphone or other computer. Although the functions of these apps appear similar, all have, for example, a messaging function, not all are interchangeable for consumers. If a consumer wants to contact a member of their family or close friends, they are extremely unlikely to use LinkedIn. LinkedIn is a professional network for making professional connections. They are also unlikely to use Twitter, since this is more for engaging with celebrity personalities, politicians and others who are not really personal contacts or for obtaining news. This explains why 97% percent of all 193 UN member states have an official presence on Twitter¹⁵ and why LinkedIn, unlike other platforms, has restrictions on how many messages you can send and to whom¹⁶ and allows you to know who has looked at your profile, while others do not. These differences make sense because although the basic functions of the different platforms are very similar, they are in fact distinct from the consumers' point of view. Each platform is targeted toward a particular type of communication, consequently from a consumer's point of view they are not interchangeable. Consider, by way of analogy the following: a University campus coffee shop, an airport lounge coffee shop and a local independent café in a shopping district. Each may serve hot beverages and provide a place to sit and relax, but the purpose of visiting each and to whom you would suggest each as a meeting place is probably completely different. Consequently where a user appears to multi-home and have a number of similar messaging or social media apps on their phone that they use simultaneously, this does not mean those apps are in competition. It is more likely that the user has apps with similar functionality that are used for different purposes. After all, most people have a work profile on their organisation's webpage, but realistically no one would suggest that would be a substitute for a MySpace page, their intended audience render them to all intents and purposes, wholly separate services despite the functionality being almost completely overlapping.

Explosive growth ≠ dynamic market

Some apps that the Commission considered are genuine substitutes however. Consider Line and WeChat, both of which started as simple consumer messaging services, which provide the same features, in likelihood for the same purpose and the same possible groups of people. These are, of course, interchangeable. As the Commission stated they also achieved huge growth in users in a short period of time, so are these genuine competitors with Whatsapp? The answer is still no. The Commission in part acknowledges this stating: 'certain consumer communications apps enjoy a greater reach than others in certain world regions. For example, WhatsApp is widespread in the EEA, but not so much in the USA; LINE and WeChat are particularly popular in Asia.'¹⁷ This is then backed up by the Commission's data setting out the market shares¹⁸ within the EEA as follows:

- WhatsApp: [20-30]%;
- Facebook Messenger: [10-20]%;
- Android's messaging platform [5-10]%;
- Skype [5-10]%;
- Twitter [5-10]%;

¹⁵ <https://twiplomacy.com/blog/twiplomacy-study-2018/>

¹⁶ <<https://www.linkedin.com/help/linkedin/answer/192>> (Accessed 03/04/2019);

<<https://www.linkedin.com/help/linkedin/topics/6073/6089/437>> (Accessed 03/04/2019)

¹⁷ Commission, 'Case No COMP/M.7217 - Facebook/ Whatsapp' C(2014) 7239 final, para 38

¹⁸ Data provided by the Parties for their market share in the EEA market for consumer communications apps on iOS and Android smartphones between November 2013 and May 2014.

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- Google Hangouts [5-10]%;
- iMessage [5-10]%;
- Viber [5-10]%;
- Snapchat [0-5]%;
- other market players with a share of [0-5]% or less.¹⁹

Notably the two platforms that the Commission identifies as examples of consumer communication apps that have successfully entered the market and are genuinely similar to Whatsapp (LINE and WeChat) are completely absent from the market. If LINE and WeChat were able to build up a user base of 400 million users in just three years, why are so few users to be found within the EEA? It is argued that this phenomenon can be explained by the lack of genuine multi-homing that has already been described. If users do not really have more than one app for the same purpose, but actually have several apps for several different realms of communication (professional, intimate friends, broader public) and they don't use more than one app for any one group then the market may be close to tipping, while on the Commission's analysis, it looks competitive. Therefore, when the Commission notes the explosive growth of apps like LINE and WeChat this does not mean there is a dynamic market, but rather that the global market is coalescing into several geographic markets that are initially subject to explosive expansion as a new consumer messaging app becomes popular, then stagnation as network effects cause that particular geographic area to settle on one particular app. This explains why LINE has a strong user base in Japan, (where it started) Taiwan, Thailand and Indonesia, which accounts for 67.3% of its monthly active users and is struggling to grow elsewhere.²⁰ WeChat has around 700 million users, however of those 700 million only 70 million are outside of China.²¹ Despite an ambition to do so, WeChat's plan to expand outside of China 'is not considered to be a success'.²² Consequently competition exists only when there are a number of apps that target similar social interactions, in geographic areas where each app has substantial user populations. Only these are genuinely contestable markets.

The next questions that must be answered is: at the time of the Whatsapp decision were there any contestable markets and if so, which apps were in contest? A 'virgin' market with no real up take of consumer communication apps could be contested by any market entrant, but a market where 50% of the smartphone owning population uses platform A and 50% uses platform B is unlikely to be contestable by any other platforms other than platform A and platform B. In the EEA, at the time of the decision, there was a contestable market for consumer messaging services for personal contact between Whatsapp and Facebook messenger. Both are oriented towards personal contacts (in the sense of not being professional contacts or public figures) and both have significant market shares in overlapping countries. Consequently, they are two platforms that are genuinely in competition. This becomes all the more obvious when it is considered that other messenger services noted in the Commission's market share analysis are proprietary messaging systems that are set as default on particular mobile Operating Systems (iMessage for Apple, Skype for Windows Phone and Android Messenger for Android) and are not available on alternative systems, preventing them becoming universal cross platform apps. Given the fact that markets tend to tip when there are strong network effects, Whatsapp and Facebook messenger could be considered to be competing strongly against each other, each seeking to tip the market sufficiently so that they become the singular dominant cross-platform communication app in the EEA.

Astonishingly, the Commission considers similar facts to these and comes to the reverse conclusion. The Commission notes that Facebook Messenger and Whatsapp offer similar products, neither having features that are unique to them.²³ The Commission notes that a significant overlap exists between the Whatsapp and

¹⁹ Commission, 'Case No COMP/M.7217 - Facebook/ Whatsapp' C(2014) 7239 final 96

²⁰ <<https://www.techinasia.com/line-annual-revenue-2015>> (Accessed 03/04/2019)

²¹ <<https://www.businessinsider.com/wechat-breaks-700-million-monthly-active-users-2016-4?r=US&IR=T>> (Accessed 03/04/2019)

²² <<http://www.businessofapps.com/data/wechat-statistics/>> (Accessed 03/04/2019)

²³ Commission, 'Case No COMP/M.7217 - Facebook/ Whatsapp' C(2014) 7239 final, para 104

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Facebook network.²⁴ The Commission expressly states '[i]n particular, WhatsApp and Facebook Messenger have been reported as being the two main consumer communications apps simultaneously used by the majority of the users in the EEA',²⁵ and strangely draws the conclusion that '[t]his fact suggests that the two consumer communications apps are to some extent complementary, rather than being in direct competition with each other.'²⁶ This could not be further from the truth. In order to demonstrate this consider the following hypothetical scenario based on the evidence submitted to the Commission: Facebook represented that 60% to 70% of Facebook Messenger active users already used WhatsApp.²⁷ This would mean in likelihood that from this initial position a user of both Facebook Messenger and WhatsApp would have between 60% to 70% of their contacts network in both Facebook Messenger and WhatsApp. If a hypothetical event then occurs where, for example, Facebook degrades the quality of their product, perhaps by allowing significant breaches of data privacy or some other degradation, the users of Facebook Messenger can switch to communicating through WhatsApp with virtually zero switching costs. Their network is largely present on both systems, they already have both systems available, all that is necessary is to use one app instead of the other. This could lead to a significant loss of customers that would provide significant competitive pressure on Facebook. In contrast, switching from Facebook Messenger to LINE or WeChat would require convincing the majority of one's contacts to also download the new app, which may take a significant period of time, since each user would be unlikely to switch unless they were confident that a majority of their contacts would do the same within a reasonable space of time. This leads to not so much as a chain reaction, but a continuous chain of friction, each user not switching because they need to get all their contacts to switch first. On the facts then, the Commission made a significant mistake, interpreting the only genuine competitor for Facebook Messenger as a complement rather than a competitor.

It is worth noting that some recognise the WhatsApp shut down in Brazil as evidence of the contestability of WhatsApp's market.²⁸ When WhatsApp was shut down 1.5 million users joined WhatsApp's competitor, Telegram²⁹ in just 48 hours. But this was only after a court-ordered shut down of WhatsApp's service, this was not a competitive event such as a competitor's product launch or new price or function being implemented by a competitor. It wasn't even a system failure by WhatsApp, it was a court mandated shut down. This shows that only an event that forces all users of a service to change their provider simultaneously leads to a newly competitive, genuinely dynamic environment. In other words, one that returns the market to an almost virgin state.

The Instagram decision

The Instagram decision³⁰ is dealt with in a surprisingly concise 3,015 word document. The product scope of the decision is broken down into three relevant services; the provision of a camera app, social networking services and advertising space for advertisers.³¹ Two sets of issues are considered, horizontal issues³² and vertical issues,³³ the point at issue here relates specifically to the horizontal issues. At this point the decision becomes a little strange, it explains that the OFT considered two unilateral effects theories of harm, the first being 'actual competition in the supply of photo apps' and then the second is 'potential competition in the supply of social network services'.³⁴ These are both perfectly valid aspects to consider, and yet, the following paragraphs go on

²⁴ Commission, 'Case No COMP/M.7217 - Facebook/ WhatsApp' C(2014) 7239 final, para 104

²⁵ Commission, 'Case No COMP/M.7217 - Facebook/ WhatsApp' C(2014) 7239 final, para 105

²⁶ Commission, 'Case No COMP/M.7217 - Facebook/ WhatsApp' C(2014) 7239 final, para 105

²⁷ Commission, 'Case No COMP/M.7217 - Facebook/ WhatsApp' C(2014) 7239 final, para 140

²⁸ Daniel Mandrescu, 'Applying EU competition law to online platforms: the road ahead - Part 1' (2017) 38(8) E.C.L.R. 353, 353

²⁹ <<http://money.cnn.com/2015/12/17/technology/telegram-whatsapp-brazil-suspension/>> [Accessed 10 July 2019]

³⁰ OFT, 'Anticipated acquisition by Facebook Inc of Instagram Inc' (2012) ME/5525/12

³¹ OFT, 'Anticipated acquisition by Facebook Inc of Instagram Inc' (2012) ME/5525/12, para 7

³² OFT, 'Anticipated acquisition by Facebook Inc of Instagram Inc' (2012) ME/5525/12, para 14

³³ OFT, 'Anticipated acquisition by Facebook Inc of Instagram Inc' (2012) ME/5525/12, para 30

³⁴ OFT, 'Anticipated acquisition by Facebook Inc of Instagram Inc' (2012) ME/5525/12, para 14

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to describe theories of harm titled 'Actual competition in the supply of photo apps'³⁵ and 'Potential competition in the supply of online display advertising'.³⁶ The latter of which is clearly different to that which is described as the second theory of harm that it would investigate. Whether this was just some sort of typographical error or actually some sort of greater mistake where the wrong facet of the acquisition was considered is not clear. What is clear is that whatever the nature of the error an analysis of harmful effects on potential competition in the supply of social network services was necessary, but unfortunately omitted. Instead all that is provided on this topic is found at the end of the decision under the heading assessment, where a summary is provided:

'The OFT examined this merger on the basis that the parties overlap in the supply of social networking services ... In the social networking space, the OFT has no reason to believe that Instagram would be uniquely placed to compete against Facebook, either as a potential social network or as a provider of advertising space.'³⁷

This analysis provides an argument but does not give any detail to support it. Instagram would not be uniquely placed to compete against Facebook as a potential social network. Who are Facebook's other potential competitors? This is a question that has even caused Facebook's own founder to struggle.³⁸ Why are these other social networks equally well placed to compete with Facebook? What is their user base? While the decision explains who Facebook's competitors are in terms of advertising space (Google, Yahoo, and Microsoft³⁹) discussion of social media competitors is absent. Later however, social media is considered under vertical issues, if it is assumed that this discussion applies equally within the horizontal sphere this does provide some answers. It is noted in the decision that, according to one third party:

'Google is the strongest constraint to Facebook because it has a social network, Google+, and because its combined services allow it to gather large volumes of information on users making it an attractive proposition for advertisers. Google has an additional ability to constrain Facebook through its AdSense subsidiary which matches advertisers to online advertising space.'⁴⁰

This could be one of the other social network competitors that the OFT considers to show that Instagram is not 'uniquely placed to compete against Facebook'. If that is the case Google+ provides cautionary tale of why competition authorities should pause for thought when considering the ease with which incumbent dominant undertakings can be dislodged from their position.

Google, as a company would appear to be ideally placed to launch a social network. It has significant financial resources, unrivalled expertise in terms of human resources for programming, large amounts of data on individuals to understand their target market, one of the most visited web portals in the world through which they can advertise their product and an established and respected brand in Information Services. However, their foray into social networks, in the form of Google+, was a failure⁴¹ and has been shut down.⁴² This is despite the fact that they used tactics such as requiring users to hold a Google+ account to be able to use their exceptionally successful online video platform; YouTube.⁴³ While the exact reason Google+ failed is subject to

³⁵ OFT, 'Anticipated acquisition by Facebook Inc of Instagram Inc' (2012) ME/5525/12, para 15

³⁶ OFT, 'Anticipated acquisition by Facebook Inc of Instagram Inc' (2012) ME/5525/12, para 22

³⁷ OFT, 'Anticipated acquisition by Facebook Inc of Instagram Inc' (2012) ME/5525/12, para 43-44

³⁸ Maija Palmer, Are there any viable alternatives to Facebook? The difficulties of leaving a social media platform with two billion users (Financial Times 25 April 2018) CHECK OSCOLA

³⁹ OFT, 'Anticipated acquisition by Facebook Inc of Instagram Inc' (2012) ME/5525/12, para 28

⁴⁰ OFT, 'Anticipated acquisition by Facebook Inc of Instagram Inc' (2012) ME/5525/12, para 34

⁴¹ <<https://www.theverge.com/2019/4/2/18290637/google-plus-shutdown-consumer-personal-account-delete>> (accessed on 12/06/2019)

⁴² <<https://support.google.com/plus/answer/9217723?hl=en-GB>> (accessed on 12/06/2019)

⁴³ <<https://www.theverge.com/2019/4/2/18290637/google-plus-shutdown-consumer-personal-account-delete>> (accessed on 12/06/2019)

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speculation⁴⁴ what is useful to note is that a new entrant, with established services and access to astonishing resources to support their new social network can still fail, in a way that can be fairly described as, catastrophically. Therefore, if the OFT considered Google+ as an example of a how Instagram was not uniquely placed to compete against Facebook in the social network space, this assumption appears flawed.

Why the OFT considered there is be an abundance of potential competitors to Facebook's social network is not explained explicitly in the decision, however it appears that the same mistake was made as has already been explained in relation to Whatsapp. This mistake is to believe that because apps expand extremely quickly, because up take of apps can reach hundreds of millions of users within months, that competition can also develop within that timeframe. Take for example the following statement in the Instagram decision:

'In terms of whether other apps or social networks could replicate Instagram's success, it is relevant that Instagram grew rapidly from having 1.4 million users in January 2011 to around 24 million users in February 2012. Whilst this indicates the strength of Instagram's product, it also indicates that barriers to expansion are relatively low and that the attractiveness of apps can be "faddish"'.⁴⁵

The implication is clear, Instagram added 22.6 million users in a single year, there is no reason why the OFT should not allow the acquisition, because if Instagram can grow that quick, so can a competitor. The problem here is clear: there is a 'virgin soil' effect in apps with strong network effects. Apps are indeed extremely easy to download and with sufficient social momentum they can grow user groups that companies would traditionally take decades to accrue, but this is not a constant. An imperfect analogy could be drawn with a pioneer settling a new country. Initially the acquisition of land, once the process of discovery has been completed, is almost cost free. However, once land is claimed then any settlers coming after the initial pioneer will then have to pay for the land driving up costs and slowing down any intended expansion.

Only app markets that are on virgin soil either geographically or in terms of product scope are conducive to rapid expansion. So for example a messaging app might not be new in terms of product scope, there may be other messaging apps in the world, but if they are relatively unknown in a particular geographic market then an app may spread quickly. Equally if there a geographic market with many different types of apps available, if a new app is developed that provides a new function, clearly distinct from the other apps that are available, then this too may spread very quickly. Once this is done however any app coming after that, which performs a similar function, even if it does so better, will be subject to significant barriers to entry due to the network effects caused by the earlier entrant. This is a first mover advantage, a concept well established in economic literature,⁴⁶ which suggests that those who first enter a market, tend to have higher market share.⁴⁷ This *ipso facto* tends to mean that those first movers also tend to have higher profitability.⁴⁸ However what is of greater

⁴⁴ <<https://www.businessinsider.com/what-happened-to-google-plus-2015-4?r=US&IR=T>> (Accessed 12/06/2019)

<<https://economictimes.indiatimes.com/news/et-explains/heres-why-google-failed/>> (Accessed 12/06/2019)

<<https://www.forbes.com/sites/stevedenning/2015/04/17/five-reasons-why-google-died/>> (Accessed 12/06/2019)

⁴⁵ OFT, 'Anticipated acquisition by Facebook Inc of Instagram Inc' (2012) ME/5525/12, para 36

⁴⁶ Consider early empirical study of such advantages present in 1977; Ronald Bond, David Lean, 'Sales, promotion and product differentiation in two prescription drug markets' (1977) Staff Report to the Federal Trade Commission, economic report. Consider further study and comment such as: Robinson, kalyanaram, Urban, 'First-mover advantages from pioneering new markets: A survey of empirical evidence' (1994) 9 Review of Industrial Organisation 1; Reiko Aoki, 'Strategic complements with first mover advantage' (1998) 49(3) Metroeconomica 284; David Lean, 'First-mover advantages from pioneering new markets: comment' (1994) 9 Review of Industrial Organization 177; F. Scherer, 'First-mover advantages from pioneering new markets: comment' (1994) 9 Review of Industrial Organization 173; Peter Tufano, 'Financial Innovation and first-mover advantages' (1989) 25 Journal of Financial Economics 213; Esther Gal-Or, 'First mover and second mover advantages' (1985) 26(3) International Economics Review 649.

⁴⁷ Robinson, W. T. and C. Fomell 'Sources of Market Pioneer Advantages in Consumer Goods Industries' (1985) 22 Journal of Marketing Research 305; Robinson, W. T. 'Sources of Market Pioneer Advantages: The Case of Industrial Goods Industries'(1988) 25 Journal of Marketing Research 87

⁴⁸ Yigang Pan, Shaomin Li and David K. Tse, 'The Impact of Order and Mode of Market Entry on Profitability and Market Share' (1999) 30(1) Journal of International Business Studies 81; W. Shepherd, 'The Elements of Market Structure' (1972) CMA109con

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contention is how the first mover advantage applies internet related markets. There is much literature on the subject⁴⁹ but one particularly useful paper is that of Varadarajan *et al.*⁵⁰ This paper suggest that when considering internet enabled markets, the importance of various aspects of first mover advantages, when compared to traditional markets, alters. They break down first mover advantage into a number of elements and analyse which elements become less important, others become more important when comparing internet enabled markets with traditional markets. The result; compared to traditional markets, first mover advantages in internet enabled markets are less important in relation to consumers' choice behaviour under conditions of information and consumption experience asymmetry, spatial resource positions and installed capacity. While aspects of first mover advantages such as network effects, consumers' non-contractual switching costs, and technological leadership and innovations take on much greater significance.⁵¹ It is these very market characteristics, in particular network effects and consumers' non-contractual switching costs that are so important in determining the error made in the Whatsapp and Instagram decisions.

Conclusion

The analysis above leads to a number of conclusions. First, the functionality of an app or digital service should not replace the traditional rigorous assessment of interchangeability of a service from the perspective of a customer or user. If this is not undertaken then a competition authority may confuse Twitter and Facebook as competitors, when in fact, they are not due to the way their similar features target dissimilar social interactions. Second, rapid growth of a service, app or product should not be confused with low barriers to entry for competitors, this is particularly the case when a market is subject to strong network effects. Where a market is likely to be subject to network effects once settled, competition authorities **must** look beyond the experience of first movers (whether in new product markets or new geographic markets) in order to evaluate potential strategic advantages (such as network effects) that could make later entry more difficult for potential competitors. This is because contrary to intuitive thinking, rapid growth of first movers in digitally disrupted markets may actually make secondary entry more difficult, because the window of opportunity for

54 Review of Economics and Statistics 25; D. Ravenscraft, 'Structure-Profit Relationships at the Line of Business and Industry Level',

(1983) 65 Review of Economics and Statistics 22

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imitators to enter the market before the market is dominated and network effects make entry more difficult may be smaller.

Proposal for reform

In light of the above the following recommendations are made:

1. In relation to the above the MAGs requires very little change. This is because the concepts and points that needs to be implemented are already present in the Guidance. The difficulty is that authorities appear to have been slightly overawed in the past by the incredible rate of change the digital market has brought to the economy and seemingly assumed that this astonishing rate of change and disruption was going to be a permanent or at least persistent feature of the digital economy. This is understandable authorities cannot be expected to prophetically work out how a change as great as a digital revolution is likely to unfold. Nonetheless, now with hindsight the competition authorities are improving their approach. It can now be seen that digital markets require the same thorough analysis regardless or the rate of dynamism being displayed at any one time. This is related to the second point:
2. A rapid rate of growth in first mover companies does not indicate a market will remain competitive or contestable once one or two dominant undertakings have been established. Once a market is settled, where it is subject to strong networks effects, the market can stagnate and become very difficult for competitors to enter. In light of this it is proposed that the MAGs incorporate the following, either attached to or just below paragraph 5.8.7 (new material in italics):

5.8.7 In assessing tipping, the Authorities will consider whether or not customers would be willing to switch to a new supplier. Customers' willingness will depend on the costs and benefits to them of switching. To assess these, the Authorities may take into account: the (actual or perceived) cost of switching, brand loyalty, the length of existing contracts and the closeness of relationships between suppliers and customers. In addition, customers may be willing to sponsor and/or facilitate new entry.

In markets characterised (or upon maturity likely to be characterised) by network effects, exceptionally rapid growth of first movers should not necessarily be taken as indicative of low barriers to entry or an absence of strategic advantages. Such growth is likely to benefit only the first mover in a particular product or geographic market. Once the market has matured network effects are likely to prevent later entrants from obtaining the same rapid growth, even when supplying a desirable product.