

**DIRECTORATE FOR FINANCIAL AND ENTERPRISE AFFAIRS  
COMPETITION COMMITTEE**

**Cancels & replaces the same document of 1 December 2017**

**Global Forum on Competition**

**Challenges Faced by Small Agencies and those in Developing Economies**

**Contribution from Singapore**

**-- Session III --**

**7-8 December 2017**

This contribution is submitted by Singapore under Session III of the Global Forum on Competition to be held on 7-8 December 2017.

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**JT03424240**

## *Challenges Faced by Small Agencies and those in Developing Economies: Advocacy*

*-- Singapore\* --*

### **1. Introduction**

1. The Competition Commission of Singapore (“CCS”) is a statutory body that was established under the Competition Act (Cap. 50B) (“the Competition Act”) on 1 January 2005. Its core function is to administer and enforce the prohibitions under the Act. In its short history, CCS focused the first decade on building capacity in the fundamentals of competition enforcement, issuing a number of infringement decisions concerning the traditional repertoire of cartel cases (price fixing, bid rigging) as well as abuse of dominance (exclusive dealing).

2. Secondly, in order to create a competitive environment within Singapore, there is a need to influence both the public private sectors, which is why CCS relies on the twin pillars of effective competition advocacy and enforcement. CCS proactively engages relevant stakeholders, including the Government, businesses, consumers and practitioners, to promote the benefits of competition.

3. To this end, CCS has broadened its scope its competition tools including competition advisories to government agencies and the conduct of more market inquiries, to complement its enforcement activities.<sup>1</sup> However, CCS does not have legislative powers to implement the recommendations or proposals arising from its market inquiries. In circumstances where market players have not infringed the Competition Act, but where market imperfections have resulted in a less than ideal situation, it is necessary for CCS to work with government agencies and market participants to implement its recommendations. This working relationship often involves striking a delicate balance between competition policy and other public policy considerations.

4. As CCS enters its second decade in a rapidly evolving competition landscape. this has resulted in new technology-enabled business models, and the disruption of existing business models in various sectors. Market structures and business conduct are becoming increasingly complex with the advent of innovative disruptors, the digital economy and big data. CCS must keep up with the dynamic nature of the digital economy, and ensure that it has a nuanced understanding of the impact of these new business modalities and strategies on market structures.

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\* This contribution was prepared by Han Li TOH, Chief Executive, Competition Commission of Singapore.

<sup>1</sup> On 5 June 2017, the Straits Times published an [article](#) about the CCS’s increasing conduct of market inquiries after an interview with CCS’s Chief Executive.

## 2. Competition advocacy: Are they listening?

5. While enforcement is a key pillar of CCS's role, due to its modest staff strength, there is naturally a limit to the number of enforcement cases that it can take on. There is therefore a need to use existing enforcement cases to create a "multiplier effect", whereby other firms would think twice about engaging in anti-competitive conduct because of the possible consequences. CCS typically conducts a media briefing for its enforcement cases with key messages especially targeting at businesses and trade associations on the consequences of anti-competitive conduct. Through the years, CCS's educational resources have evolved from providing general information about the provisions of the Competition Act<sup>2</sup> to detailed information booklets about competition compliance, and CCS's leniency programme.<sup>3</sup> The detailed information booklets are targeted at specific stakeholder groups (businesses, consumers and government agencies), and were prepared with their specific needs in mind.

6. Further, government policies can have a significant impact on competition market place, hence the need for advocacy to government agencies in the public sector. In advocating pro-competition regulations to effectively balance policy objectives and competition that benefit both businesses and consumers, CCS proactively engages government agencies to help them understand competition issues, and urge them to give due consideration to competition issues arising from government policies. Established in December 2013, the Community of Practice for Competition and Economic Regulations ("COPCOMER") is an inter-agency platform for CCS, sectoral competition regulators and a few other government agencies to share best practices and experiences on competition and regulatory matters. Through this exchange, COPCOMER seeks to encourage the adoption of effective regulatory and competition policies based on local experiences and international best practices. CCS regularly organises COPCOMER events, with the most recent event taking place on 17 August 2017. A total of 40 senior management officials from various government agencies attended the COPCOMER Regulators Tea. In line with the Public Service Division's ongoing effort to strengthen the public service's capability in regulatory work, the topic of discussion at the tea session centred on Regulatory Impact Assessment.

7. CCS also works closely with various ministries and statutory boards to gain a better understanding of the markets they regulate, and to provide advice on competition issues covering a wide range of activities within these markets. As of 31 October 2017, CCS has issued a total of 155 competition advisories to various government agencies. Some recent examples include the provision of advice to the Singapore Tourism Board on a proposal to improve the timeliness in the publication of hotel industry information, and to the Early Childhood Development Agency on a Partner Operator scheme to support

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<sup>2</sup> CCS published a four-part manga (Japanese style comics) about the three prohibitions under the Competition Act and CCS's leniency programme.

<sup>3</sup> In 2015, CCS revamped its collaterals to cater to the needs of different stakeholder groups (businesses, consumers and government agencies) to help them better understand the Competition Act. The collaterals consist of four booklets – (1) Competition Act at a Glance; (2) Key Prohibitions under the Competition Act Explained; (3) What You Can Do to Protect Your Business; and (4) Competition Act and Government Agencies. The collaterals are available in hard copies, as well as on CCS's [website](#).

mid-sized and smaller child care operators to keep fees affordable, build capabilities to raise quality, and improve career prospect for early childhood professionals.<sup>4</sup>

8. Despite the abovementioned efforts, raising general awareness of CCS and the Competition Act, as well as ensuring effectiveness of its outreach and advocacy activities remains a challenge. According to a stakeholder perception survey conducted in 2017, awareness of CCS or the Competition Act had risen across businesses, practitioners and Government. However, awareness of CCS and competition law had fallen among consumers since the last survey in 2014. With respect to effective advocacy, the same survey found that the effectiveness of CCS's outreach and advocacy efforts to consumers had improved, although that to businesses had generally fallen. In addition, only 8% of businesses surveyed have in place a compliance programme. There is thus a need for CCS to continue to engage its stakeholders to cultivate a robust competition culture and improve consumer education.<sup>5</sup>

### 3. A success story of using competition tools to change government policies: A story about formula milk

9. Market studies are a useful tool within CCS's arsenal, to perform a deep-dive examination of the structure and dynamics of specific markets. They can be used to identify areas where competition can be improved to the benefit of both consumers and businesses. Through the years, CCS has conducted a total of 20 studies on various markets in Singapore, including the retail mall rental space market, the airline market, the retail petrol market, and the industrial property market.

10. Under the Competition Act, CCS does not have powers to implement remedies at the conclusion of its market studies. It is thus necessary for CCS to work with government agencies and/or market participants to implement its recommendations. Oftentimes, government agencies have other public interest considerations, aside from competition policy, in mind when formulating policies or regulations. It is important for CCS to understand these interests, and persuade government agencies to adopt policies which balance competition policy with public interest considerations. This represents an ongoing challenge for CCS to manage, as it embarks on an increasing number of market studies.

11. A recent example of this would be CCS's market inquiry into the supply of formula milk<sup>6</sup> in Singapore.<sup>7</sup> CCS started a market inquiry into the supply of formula milk in Singapore in late 2015 to understand the significant increase in prices of formula

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<sup>4</sup> For more details on these competition advisories, please refer to page 30 of CCS's [FY2016 Annual Report](#).

<sup>5</sup> On 5 September 2017, it was [announced](#) that CCS will take over the Standards, Productivity and Innovation Board's oversight of consumer protection, as part of a government agency restructure. With effect from 1 April 2018, CCS will be taking on consumer protection powers under the Consumer Protection (Fair Trading) Act. This expanded mandate will allow CCS to reach out to consumers more effectively.

<sup>6</sup> The inquiry focused on formula milk products for babies, infants and young children up to six years old.

<sup>7</sup> On 10 May 2017, CCS released its [findings](#) from its market inquiry into the supply of formula milk in Singapore.

milk in Singapore in recent years. CCS studied the formula milk supply chain in order to assess the nature of competition at each level.

12. At the wholesale level, CCS found that formula milk manufacturers engage mainly in non-price competition rather than price competition. They adopt strategies which seek to build a premium image for their products, and to entrench consumer brand loyalty instead of competing aggressively on price. Manufacturers also invest in a broad range of marketing activities to expose their brands to consumers, communicate the benefits of their products and encourage early adoption and/or switching by a minority of consumers at the margins. These include providing sponsorship and/or payments to the private hospitals for participation in their milk rotation systems. This helps manufacturers gain a ‘first-mover’ advantage, as the majority of parents who use formula milk in hospitals do not have a preferred brand and tend not to switch brands of formula milk after leaving the hospital. Such features of the formula milk market can present significant barriers to entry for new brands or barriers to expansion for existing brands which do not engage in such efforts. It may be challenging for a new entrant to gain traction among consumers in a short period of time as awareness and trust in a brand takes time to build up. The new entrant must devote significant resources to convince consumers of the ‘premium’ status of their products through a combination of marketing and innovation.

13. At the retail level, CCS found that retailers such as supermarkets and pharmacies are keen to stock mainly what consumers demand, further reinforcing the brand loyalty displayed by consumers, exacerbate information asymmetry and present significant barriers to entry for new brands or expansion for existing brands. Major retailers prefer to obtain their formula milk supply only from the local authorised distributors of the formula milk manufacturers, and do not consider parallel importing as a viable alternative. Given that they do not have alternative sources of supply, these major retailers tend to be price takers and have limited ability to counter the price increases by the manufacturers and/or distributors. There is a negligible presence of parallel imports in Singapore – this could be due to the labelling and import documentation requirements, for which compliance is challenging for parallel importers.

14. At the consumer level, CCS found that parents in Singapore exhibit strong brand loyalty when purchasing formula milk. Word of mouth and the brand of formula milk that is used in the hospital’s maternity ward are important ways by which parents are influenced in their choice of the brand of formula milk. Information asymmetry on the nutritional content and requirements of infants and young children has also led to parents perceiving premium products to be of better quality and, therefore, better for their children. The resulting brand loyalty and the limited effectiveness of price competition in encouraging parents to switch to a new brand could pose as a formidable barrier to entry for new formula milk brands.

15. CCS made three broad recommendations to lower barriers to entry and improve the level of price competition, particularly between manufacturers. The recommendations complement each other as a wider pool of formula milk suppliers will provide more options to consumers, while more informed consumers who are able to exercise their choices wisely will incentivise suppliers to price competitively and improve price competition in the market. The recommendations are as follows:

- Educate consumers on the nutritional content of formula milk and the nutritional requirements of infants and young children, and to improve consumer awareness of the availability of a variety of formula milk products at different price points.

This will allow consumers to understand the choices available in the market and to make more informed decisions rather than relying on perceptions such as “more is better” or “more expensive means better quality”. This would help to increase price competition over time.

- Encourage price competition (i) within the same brands by reviewing parallel importation rules while still maintaining food safety and security, as well as (ii) between brands through exploring the introduction of private labels. Both measures will help to widen the pool of formula milk suppliers in Singapore.
- The sponsorships and payments that formula milk manufacturers provide and their impact on the milk rotation programmes in the hospitals could be reviewed. This can help to reduce a barrier to entry and expansion for new and existing brands.

16. These recommendations were considered and broadly accepted by the Ministry of Health, the Health Promotion Board and the Agri-Food & Veterinary Authority of Singapore.<sup>8</sup> It was announced that guidelines and regulations on advertising, labelling and import of formula milk will be adjusted; that public education on the nutritional needs of children will be strengthened; and that the provision of formula milk at public hospitals will be relooked to ensure that the options are affordable. Further, a ministerial task force was set up to implement CCS’s recommendations.<sup>9</sup> The task force is presently looking into tightening regulations on formula milk labelling and advertising, facilitating imports of more formula milk options and launching a 5-year education campaign on the nutritional needs of children. The task force expects to complete its work by the end of this year.

17. The formula milk market inquiry represents a successful incidence wherein CCS overcame the challenge of balancing competition policy with other policy considerations. The relevant regulators and policymakers in this matter are particularly concerned about the safety and nutritional aspects of formula milk, as it is consumed by a highly vulnerable segment of the population. Drinking tainted formula milk will likely result in dire or fatal consequences for infants and children. As such, there is a need to ensure that the formula milk available in the market is of a suitable quality and obtained from a reliable source. Other policy considerations (such as improving the national birth rate, and encouraging breastfeeding over the use of formula milk) also weigh on the minds of the regulators and policymakers when formulating policies. It is thus encouraging that these government agencies were able and willing to consider the impact of their regulations and policies on competition in the formula milk market, and take this into account when achieving their objectives.

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<sup>8</sup> On 10 May 2017, shortly after the release of CCS’s findings from its market inquiry into the supply of formula milk in Singapore, the Ministry of Health issued its [response](#) to state its acceptance of CCS’s recommendations.

<sup>9</sup> For more information about the ministerial task force which was set up to address the rising prices of formula milk by implementing CCS’s recommendations, please refer to the news articles [here](#) and [here](#).

#### 4. The Age of Disruptive technologies and Big Data: New wine in old wineskins?

18. In February 2017, the Committee on Future Economy (“CFE”) outlined Singapore’s key strategies to stay ahead in a challenging global climate.<sup>10</sup> The CFE report noted that the world is in “era of rapid technological change”, wherein the entry of disruptive innovation can change and challenge incumbents by leveraging technology and adopting new business models. The vision for Singapore’s economy is rooted in the deepening and diversifying of Singapore’s international connections, the continued support of free and open markets and the deepening of digital capabilities. To capitalise on the opportunities from the digital economy for the Singapore economy and society, the Government has been actively promoting the adoption of digital technologies as part of the strategy for Singapore’s next stage of growth and development.

19. Naturally, the growth of the digital economy brings about new regulatory challenges for competition authorities and regulators. Competition authorities and sectorial regulators must move rapidly with the times to be perceptive, anticipative and adaptive. Its policies and practices must not be seen as stumbling blocks to innovative new entrants with the potential to disrupt entire industries. We only need to look at the various governments’ responses to Uber’s disruptive entry around the world to see government are able to respond to this new market entrant. With this background in mind, CCS has done work in keeping up to date with dynamic market developments.

20. It should be noted that data is a recurring theme in the CFE report, and that the strategies set out in the CFE report include building capabilities in data analytics and cybersecurity, harnessing data as an asset, and building strong digital capabilities in the economy. Aligned with the Whole-of-Government’s efforts to promote the adoption of data analytics and data sharing, CCS embarked on a research project to understand the data landscape in Singapore. As part of its research project, CCS commissioned KPMG Services Pte. Ltd. (“KPMG”) to conduct a study to map out the Big Data and data analytics landscape in Singapore. This study includes the identification of opportunities and challenges for businesses arising from the proliferation of data analytics, as well as data sharing and monetisation of data. Further, in collaboration with the Personal Data Protection Commission, Singapore (“PDPC”), and the Intellectual Property Office of Singapore (“IPOS”), CCS also considered the implications of data analytics and data sharing on competition policy and law, personal data protection and intellectual property rights. CCS’s report titled “Data: Engine for Growth – Implications for Competition Law, Personal Data Protection and Intellectual Property Rights” was published on 16 August 2017.<sup>11</sup>

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<sup>10</sup> On 7 February 2017, the Committee on the Future Economy published its [report](#) after conducting its review of Singapore’s economic strategies.

<sup>11</sup> On 16 August 2017, CCS published its [research paper](#) on the data landscape in Singapore, titled “Data: Engine for Growth – Implications for Competition Law, Personal Data Protection and Intellectual Property Rights”

21. The KPMG study examined six sectors – digital media<sup>12</sup>, finance<sup>13</sup>, healthcare<sup>14</sup>, consumer retail<sup>15</sup>, land transport<sup>16</sup> and logistics<sup>17</sup>. It found that the maturity of adoption of data analytics varied across the sectors, and among businesses within the same sector. In Singapore, the digital media sector and ride booking companies in the land transport sector were found to have the highest levels of maturity in its use of data analytics, whilst brick-and-mortar stores, public and private transport services and logistics sector were at lower levels of maturity.

22. With respect to the implications on competition law, CCS concluded that the compilation of large data sets and proliferation of data analytics may be fresh developments, the existing analytical framework for competition assessment remains sufficient flexible and robust to deal with competition issues which might arise in data-driven industries. A summary of how business practices may be assessed under the Competition Act can be seen in Annex A.

23. CCS also concluded that issues in competition policy and law, personal data protection and intellectual property rights are expected to overlap in the context of data-driven industries. One area with potential overlap would be data portability. Data portability seeks to enhance competition between businesses by reducing switching costs and facilitating the switching from one service provider to another. At the same time, it will also create a more user-friendly environment and builds trust, potentially leading to a virtuous cycle of users being more willing to provide personal data to companies.

24. Apart from the rise of Big Data and data analytics, e-commerce has become an indispensable element of the global economy. The rise of e-commerce has generated dynamic market developments and created both opportunities and challenges for businesses. E-commerce lowers the barriers to entry and expansion for businesses into markets, and enables businesses to overcome traditional limitations in Singapore such as rental costs, manpower shortages and a small market size. E-commerce also brings about challenges for incumbent businesses, as they have to transform their business models to respond to keener competitions. In the face of such developments, a robust and adaptable competition policy and law regime is essential to ensure a level playing field for such businesses. In this regard, CCS had commissioned a study to better understand the development and characteristics of e-commerce, the specific competition issues which e-commerce activities can give rise to, as well as the implications for competition policy and law in Singapore.

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<sup>12</sup> The digital media sector refers to advertising platforms and other advertising technology companies.

<sup>13</sup> The finance sector refers to the banking sector and the insurance sector.

<sup>14</sup> The healthcare sector refers to public and private healthcare providers and research institutions.

<sup>15</sup> The consumer retail sector refers to online retailers as well as brick-and-mortar retailers, with some businesses present in both segments.

<sup>16</sup> The land transport sector includes a variety of services ranging from ride booking companies (for example, Grab and Uber), to public transport operators and private bus hiring companies.

<sup>17</sup> The logistics sector includes both logistic service providers, which operate the delivery networks and collect data on customers' transactions, and e-commerce retailers, which generate delivery demand through end-customers' purchases.

25. The study had identified several features and issues which are likely to be more prevalent in online markets which may require particular attention when CCS conducts its assessments.<sup>18</sup> For example:

- **Online price information could facilitate collusion.** While online shopping websites make it easier for consumers to compare prices between suppliers at their own convenience, it is possible that such price information could make it easier for companies to collude and fix prices. For instance, companies may use sophisticated systems to monitor their competitor's online prices to ensure that they do not undercut their rivals. This could result in consumers paying higher prices and diluting the benefits of searching for competitive prices online.
- **Customer data may become an important source of market power** as new entrants may find it difficult to replicate information collected by incumbents in the course of their normal business activities, thereby creating a barrier to entry and expansion. Online sales data enables a business to gather and analyse more detailed information about consumer demand patterns. While this can benefit companies in providing more targeted product and service offerings, it may encourage anti-competitive conduct. For example, it is possible that customer information collected by incumbents in some circumstances may constitute an "essential facility", if there is no alternative information available, and may thus be considered as a significant entry barrier.
- **The market may "tip" in favour of a small number of large e-commerce platforms.** While there are benefits from having large online platforms, the strong network effects may mean that competition becomes for the market. This means that the most successful online platform is rewarded as the market tips in its favour, making it difficult or even impossible for new entrants to compete against the incumbent. However, the study noted that if consumers frequently use a number of different platforms or alternatives, this could facilitate the entry and expansion of competing platforms.

26. Given the dynamic nature of e-commerce markets, the study concluded that there were no clear rules on whether, how, and when a competition authority ought to intervene. For example, in rapidly changing markets, any market power gained may be temporary. Interventions by competition authorities may risk stifling long-term innovation and investment. Interventions should be targeted and made on a case-by-case basis, balancing potential competition concerns with efficiency benefits and the risk of creating market distortions.

27. These studies form part of CCS's effort to understand key market developments, and their implications on Singapore's competition law and assessment frameworks, in the face of the rapidly evolving regulatory landscape.

28. In addition, CCS recognises the importance of collaborating with competition authorities from other jurisdictions to exchange expertise and experiences in dealing with competition issues in digital markets, particularly within the Association of Southeast Asian Nations ("ASEAN"). Consistent rules and enforcement among ASEAN Member States when dealing with identified growth sectors such as e-commerce will increase certainty for businesses across ASEAN, enhance intra-ASEAN trade and investment, and

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<sup>18</sup> On 2 December 2015, CCS published its [research paper](#) on e-commerce in Singapore, titled "E-commerce in Singapore – How it affects the nature of competition and what it means for competition policy".

improve ASEAN's competitiveness on a global scale. CCS's efforts include the development of a regional handbook on e-commerce and competition<sup>19</sup> that serves as a reference for ASEAN member states, on identifying and addressing potential challenges on competition law enforcement relating to e-commerce. The handbook incorporates contributions from various ASEAN competition authorities, on their expertise and experiences in dealing with competition issues in the e-commerce sector. The handbook aims to provide guidance and support in competition policy and law to businesses engaged in e-commerce across ASEAN so as to foster an e-level playing field for businesses, particularly those operating across borders. A Roundtable Discussion for senior officials of competition authorities in ASEAN to share their experiences and challenges in handling e-commerce related competition cases, and to explore potential areas for cooperation among ASEAN competition authorities in the area of e-commerce.<sup>20</sup>

## 5. The Road Ahead

29. Competition is a key enabler in Singapore's economic ecosystem. Competition ensures choice and value for consumers. It motivates businesses to differentiate themselves through innovation and capabilities. Competition makes for a more efficient and productive economy.

30. With effect from 1 April 2018, CCS will be taking on consumer protection powers under the Consumer Protection (Fair Trading) Act.<sup>21</sup> This represents an exciting and new development for CCS, and will reinforce CCS's focus on ensuring that Singapore's markets function well, with robust and fair market practices that benefit both business and consumers.

31. Notwithstanding the challenges identified above, CCS will continue to strive to achieve its vision of a vibrant economy with well-functioning markets and innovative businesses, and to make markets work well to create opportunities and choices for businesses and consumers in Singapore.

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<sup>19</sup> On 16 August 2017, Minister for Trade and Industry (Trade) Mr. Lim Hng Kiang launched the [Handbook on Competition & E-commerce in ASEAN](#). The handbook highlights how E-Commerce impacts traditional competition dynamics, as well as outlines policy considerations and advocacy strategies to address the challenges of enforcing competition law with the rise of E-Commerce activities.

<sup>20</sup> On 17 August 2017, CCS organised a [Roundtable Discussion](#) on "E-commerce and Competition in ASEAN".

<sup>21</sup> On 5 September 2017, it was [announced](#) that CCS will take over the Standards, Productivity and Innovation Board's oversight of consumer protection, as part of a government agency restructure.

## Annex A.

### Summary of Findings from “Data: Engine for Growth – Implications for Competition Law, Personal Data Protection and Intellectual Property Rights”.

Summary of Findings from “Data: Engine for Growth – Implications for Competition Law, Personal Data Protection and Intellectual Property Rights” Section 34 prohibition: Anti-competitive agreements and concerted practices	
<p><b>The sharing of data within the framework of existing rules can be pro-competitive.</b></p>	<p>There are generally no competition concerns when the data shared is historical; sufficiently aggregated and not attributable to a particular business; and not commercially sensitive, strategic or confidential.</p> <p>In contrast, an appreciable adverse effect on competition is more likely where there exist only a few companies operating in the market; where data sharing is frequent; where the data shared is commercially sensitive; and where the sharing is limited to certain participating companies in the market to the exclusion of their competitors and buyers. Unless the sharing of data under such situations can result in net economic benefits, it is likely to raise competition concerns.</p> <p>Another dimension of data sharing relates to the stakeholders involved in the sharing. There are unlikely to be competition concerns when businesses share data with consumers or government agencies. The sharing of commercially sensitive data such as current or future pricing or production capacity with competitors is likely to raise competition concerns unless such sharing gives rise to net economic benefits. Sharing of data with businesses in other markets and industries is unlikely to be problematic.</p>
<p><b>The use of algorithms by businesses can bring about efficiency gains; but where algorithms are used to implement or facilitate collusive outcomes or anti-competitive agreements, this would likely infringe the Competition Act.</b></p>	<p>The use of algorithms allows businesses to make predictions and decisions more efficiently and achieve greater customisation in their products.</p> <p>However, algorithms have the potential of providing new and enhanced means to foster collusion, particularly because algorithms can enhance market transparency and the frequency of interactions between firms.</p> <p>Where the use of algorithms is in furtherance of, or to support or facilitate any pre-existing or intended anti-competitive agreement or concerted practice, such cases are likely to infringe the Competition Act as they fall squarely within the existing enforcement framework. Similarly, where algorithms are used in classic ‘hub-and-spoke’ scenarios which involve competitors colluding through a third-party intermediary, this would be anti-competitive.</p> <p>There has been lively discussion about whether the existing competition enforcement framework is adequately equipped to deal with possible future developments involving algorithms. There are currently no settled positions on these issues and as the increasing use of algorithms in the Big Data environment is currently an evolving field, it is perhaps too early for anyone to have the last word on the matter.</p>
Section 47 prohibition: Abuse of a dominant position	
<p><b>The assessment of dominance needs to take into consideration the unique features of data-driven industries.</b></p> <p><b>The accumulation of a large data set in and of itself does not equate to a firm being dominant.</b></p>	<p>Two key questions when assessing market power in data-driven industries are (i) whether the data could be replicated under reasonable conditions by competitors; and (ii) whether the use of data is likely to result in a significant competitive advantage.</p> <p>To answer these two questions, features of data-driven industries need to be taken into consideration. In general, market power may be strengthened by network effects, but can be weakened due to the existence of multi-homing, ease of access and substitutability of data, and market dynamics.</p>

<p><b>Even if a firm is found to be dominant, competition concerns will only arise when the firm engages in exclusionary conduct that has, or is likely to have, an adverse effect on the competitive process.</b></p>	<p>Even if a firm is assessed to be dominant, competition concerns will only arise when the firm engages in exclusionary conduct that has, or is likely to have, an adverse effect on the process of competition. Examples of exclusionary conduct that could arise in the context of data-driven industries are:</p> <p><i>Discriminatory access</i> – where a dominant firm discriminates access to critical data for competitors. Discriminatory access may also be achieved through vertical integration, for example, where a firm discriminates against downstream competitors; or by engaging in bundling/tying.</p> <p><i>Exclusive dealing</i> – where a firm abuses its dominance by entering into exclusive contracts with customers. This forecloses the entry of new competitors.</p> <p><i>Refusal to supply</i> – under limited circumstances where the data cannot be replicated and no alternative solution is available, a refusal to supply access to data to competitors by a dominant firm may constitute an abuse of dominance.</p>
<p>Section 54 prohibition: Mergers that substantially lessen competition</p>	
<p><b>The analytical framework for merger assessment remains relevant for mergers that lead to data concentration.</b></p>	<p>The focus of CCS's merger assessment is on evaluating how the competitive constraints on the merger parties and their competitors might change as a result of the merger. When reviewing a merger between firms which leads to the consolidation of two previously separate data sets, CCS will assess whether the concentration of data could substantially lessen competition in the affected markets.</p> <p>As shown in past merger cases assessed by CCS<sup>22</sup> and other overseas competition authorities,<sup>23</sup> the current analytical framework for merger assessment is sufficiently flexible and robust, and remains relevant.</p>
<p><b>Protection of privacy is not a competition issue. However, where data protection is a non-price factor of competition, the treatment of personal data may affect how CCS considers and assesses the competitive dynamics of market.</b></p>	<p>While there have been calls for competition law to be applied to promote data protection and privacy policy, this approach does not appear to be consistent with the role or function of CCS. The objective of competition law is to promote the efficient functioning of markets towards enhancing the competitiveness of the Singapore economy. However, where data protection is a non-price factor of competition, the treatment of personal data may affect how CCS considers and assesses the competitive dynamics of a market.</p> <p>CCS's current analytical framework already takes into account competition on the basis of non-price factors, thereby enabling CCS to consider data protection as a non-price factor of competition within its assessment.<sup>24</sup></p>

<sup>22</sup> For example, CCS 400/004/14, [Notification for Decision of the proposed acquisition of SEEK Asia Investments Pte. Ltd. of the JobStreet Business in Singapore pursuant to section 57 of the Competition Act](#) (13 November 2014); and CCS 400/007/07, [Notification for Decision: Merger between the Thomson Corporation and Reuters Group PLC](#), (23 May 2008).

<sup>23</sup> For example, Case No. COMP/M.4731, [Google/DoubleClick](#), Commission Decision (11 March 2008); and Case No. COMP/M.7217, [Facebook/Whatsapp](#), Commission Decision (3 October 2014).

<sup>24</sup> [CCS Guidelines on the Substantive Assessment of Mergers 2016](#), para 2.4 states that “CCS will assess the above factors when assessing the non-coordinated effects of the merger situation, which arise when there is a loss of competition between the merger parties and the merged entity finds it profitable to raise prices and/or reduce output or quality. In so doing, CCS will consider the extent to which the merger parties are close competitors. The above factors are also considered in assessing whether a merger situation raises or leads to increased scope for “coordinated effects”, which arise if the merger situation raises the possibility of firms in the market coordinating their behaviour to raise prices, reduce quality or output.”