

Institution: Brunel University London		
Unit of Assessment: 17 Business and Management Studies		
Title of case study: Improving customer satisfaction and market regulation in the UK mobile telecom market		
Period when the underpinning research was undertaken: 2016 - 2019		
Details of staff conducting the underpinning research from the submitting unit:		
Name(s):	Role(s) (e.g. job title):	Period(s) employed by submitting HEI:
Bidit Dey	Reader	08/2014 - present
Wafi Al-Karaghoul	Senior Lecturer in Operations and Project Management	01/2010 - present
Angela Ayios	Lecturer	09/2003 - present
Period when the claimed impact occurred: 2016 - 2020		
Is this case study continued from a case study submitted in 2014? N		

1. Summary of the impact (indicative maximum 100 words)

Dr Dey's and Dr Al-Karaghoul's research on digital consumer culture, customers' satisfaction and service quality, has influenced the strategic decision-making and marketing communications environment at Three UK. The telecommunications and internet service provider which is ranked in the Top 4 of market share holders among mobile operators, had commissioned Dr Dey and Dr Al-Karaghoul to prepare a technical report on the impact of speed on consumers' switching intentions in the UK mobile telephone industry in September 2016. Three UK subsequently used the research to reinforce their own assessment of speed and to revamp their advertising campaigns which had a direct influence on the creation of their 2018 and 2019 television commercials for mobile phones.

2. Underpinning research (indicative maximum 500 words)

Dr Dey (then, Senior Lecturer) and Dr Al-Karaghoul of Brunel Business School have conducted extensive research on digital consumer culture, customers' satisfaction and service quality. (Ref. 2; Ref. 3; Ref. 4). Dr Dey's work conceptualised and theorised digital consumer culture (Ref.5) and explored and analysed consumers' interaction with and appropriation of digital technology (Ref.6)

Their most recent research project concentrated on the role speed plays for UK mobile telephone customers (Ref. 1).

Mobile telecom is a highly competitive industry where each operator's products are seen as only partial substitutes for other providers' products. Mobile operators try to retain and grow their customer base through differentiated products and services that have multiple attributes. As a result, a wide range of factors may influence customers' assessment of mobile telecom services and in turn influence their decision to remain or switch. It is important for operators and policy makers to know which factors influence a customer's decision to remain with and switch from

Impact case study (REF3)

their existing provider as the cumulative effect of this type of decision will have a major impact on competitive dynamics.

In addition to basic product features such as quality of voice calls and text messaging services, customers are likely to value other features such as data network coverage and speed of Internet access. However, it is not clear from the existing literature whether internet speed on mobile telephones has any influence on customers' service satisfaction and subsequent switching decision. This lack of clarity inhibited mobile telephone service providers' marketing strategies and endeavour to offer and promote appropriate service features. Even if they attempted to highlight speed as a decisive factor, due to a lack of academic research regulatory bodies such as Ofcom, did not properly recognise their claims. This was the case when Ofcom blocked Hutchison's (widely known as Three Mobile) campaign geared towards investigating whether in the changing market environment consumers take notice of speed which in turn affects their perception of the brand and value of the network provider.

After Ofcom's evaluation, Three UK commissioned Dr Dey and Dr Al-Karaghoul in September 2016 to produce independent academic research to test the impact of speed on consumers' switching decisions in the UK mobile telephone industry. Dr Dey and Dr Al-Karaghoul took a marketing perspective and developed a conceptual framework from critically analysing the extensive review of the relevant academic literature that selected on consumer behaviour, branding and electronics engineering (Ref. 1).

The research findings showed that customers rate speed as the second most significant component of service quality after call quality, when choosing a mobile telecom provider. Their data also confirmed that brand image is positively associated with speed and a significant driver in the creation and maintenance of a company's perceived value among mobile telephone customers.

3. References to the research (indicative maximum of six references)

Ref. 1 Dey, B. L., Al-Karaghoul, W., Minov, S., Mohiuddin Babu, M., **Ayios, A.,** Muhammad, S. S., & Binsardi, B. The Role of Speed on Customer Satisfaction and Switching Intention: A Study of the UK Mobile Telecom Market. *Information Systems Management* (2019). [10.1080/10580530.2020.1696526](https://doi.org/10.1080/10580530.2020.1696526)

Ref. 2 Muhammad, S.S., **Dey, B.L.** & Weerakkody, V. Analysis of Factors that Influence Customers' Willingness to Leave Big Data Digital Footprints on Social Media: A Systematic Review of Literature, *Information Systems Frontiers* (2018) 20: 559-576. [10.1007/s10796-017-9802-y](https://doi.org/10.1007/s10796-017-9802-y)

Ref. 3 Kizgin, H., Jamal, A., **Dey, B.L.** et al. The Impact of Social Media on Consumers' Acculturation and Purchase Intentions, *Information Systems Frontiers* (2018) 20: 503-514. [10.1007/s10796-017-9817-4](https://doi.org/10.1007/s10796-017-9817-4)

Ref. 4 Alzahrani, L., **Al-Karaghoul W.,** Weerakkody, V. Analysing the critical factors influencing trust in e-government adoption from citizens' perspective: A systematic review and a conceptual framework, *International Business Review*, (2017) 26: 164-175. [10.1016/j.ibusrev.2016.06.004](https://doi.org/10.1016/j.ibusrev.2016.06.004)

Ref. 5 **Dey, B.L.,** Yen, D. and Samuel, L. (2019) 'Digital consumer culture and digital acculturation'. *International Journal of Information Management*, 51. pp. 102057 – 102057. [10.1016/j.ijinfomgt.2019.102057](https://doi.org/10.1016/j.ijinfomgt.2019.102057)

Impact case study (REF3)

Ref. 6. Dey, B.L., Balmer, JMT., Pandit, A. and Saren, M. (2018) 'Selfie appropriation by young British South Asian adults: reifying, endorsing and reinforcing dual cultural identity in social media'. *Information Technology and People*, 31 (2). pp. 482 – 506. [10.1108/ITP-08-2016-0178](https://doi.org/10.1108/ITP-08-2016-0178)

4. Details of the impact (indicative maximum 750 words)

Meeting the high competitions and the rapid consumers' demand for the wide use of smartphones and increasing subscription to high speed data networks, there is a predictive trajectory of customers' growing reliance on Internet-mediated services and facilities. A 2016 Ofcom report on 'Coping in the connected world' suggests that 9 in 10 adults in the UK go online every day and indicates that smartphones and tablets offer the most convenient means for being connected with the Internet world. A 2020 'UK Mobile Phones Market Report' from Mintel, one of the largest market intelligence agencies globally, estimates that the UK smartphone market was worth GBP6,520,000,000 in 2019. Providers within the UK mobile telephone industry therefore continually determine how consumers choose providers (e.g. based on speed and coverage) in order to keep up in a competitive market and growing userbase. The measures are required to stay ahead of competitors, acquire new customers and retain existing customer base by achieving customer satisfaction through high quality products and services.

Three UK carries 36% of the UK's mobile data traffic and is the fastest growing network in the country which covers more than 97% of the population. With approximately 10,100,000 active customers who use over 3.5 times more mobile data than the industry average, they are one of the most popular mobile telephone providers in the UK.

Dr Dey's and Dr Al-Karaghoul's research outputs in the form of the project report and published article were submitted to Ofcom to reconsider their initial decision of blocking Three's campaign. Although the outputs did not make significant changes in Ofcom's position, the documents were widely used by the Three management.

Dr Dey's and Dr Al-Karaghoul's research findings informed the ways in which Three engages with regulators. The Senior Strategy Manager of Three confirms, that the report "validated our initial assumptions that in the changing market environment consumers pay increasing attention to speed which in turn contributes to their perceptions of the brand and value of a network provider" (E1).

Three subsequently used the document as a point of reference for their current and future strategies, which increasingly recognise the importance of speed. While remaining compliant to Ofcom, the report produced by Dr Dey and Dr Al-Karaghoul has improved the quality of discussion at Three. Prior to the report, Three was unsure whether their own assessment, which showed that it is worthwhile putting speed to the forefront, was accurate. However, the research "reinforces and concurs with our own assessment of speed," says the Senior Strategy Manager, and it has convinced them to stick to their existing operational strategy (E1). Importantly, it also influenced their decision to make speed a core part of their strategic decision-making and marketing communications.

Three used the research findings to enhance their brand image and customers' perceived value, and discourage them from switching to a competitor. For example, they have made both call quality and speed key aspects of their marketing communications in order to grow their position in the UK mobile telecom industry.

Three's recent advertising campaigns highlight the importance of customers' perceived value underpinned by the call quality, brand image and network speed. Their 2018 TV ad 'Phone History #PhonesAreGood' "for instance has strong indication that speed has significant impact

Impact case study (REF3)

on consumption experience” (E1). It also comically depicts how major historical events could have been alleviated if only the people at the time had had a good smartphone with excellent speed by their side (such as the Captain of the Titanic successfully circumnavigating the iceberg and Henry VIII averting any unfortunate marriages with the means of a dating app). Likewise, the 2019 TV ad ‘The Switch | Switch to Three’ advertises the high influence of call quality on consumers when depicting a customer at sea with perfect reception on her mobile phone.

Dr Dey’s and Dr Al-Karaghoulis’ research have informed the strategic decision-making process and marketing communications at Three UK, a company that ranks in the top 4 mobile operators that hold the biggest market share in the country. Three UK confirms that they “plan to make further progress with our partnership with Dr Dey, Dr Al-Karaghoulis and Brunel University London to explore and apply further implications of the research” (E1).

5. Sources to corroborate the impact (indicative maximum of 10 references)

E1 Corroborating email from Three UK, 13 January 2020