"We will still be confused!": Online shopping and trade mark law in the AI era
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This article discusses whether current trade mark law needs revisiting in order to reflect recent consumers' behavioural changes brought by the use of AI-technology in the purchasing decision-making process. The author concludes that the current trade mark concepts are still fit for purpose if minor adaptations are made to reflect consumer's behavioural changes. This strategy can be achieved by means of statutory interpretation rather than wholesale reform.

1. Introduction

This article attempts to begin a conversation to challenge the current concern that trade mark law is no longer fit for purpose due to the changes brought by the rapid use of AI (artificial intelligence) technology. The current concern raises the point that the common principles of trade mark law, such as the average consumer, likelihood of confusion[2] aural, visual and conceptual similarity, are developed based on the 19th century trade mark norms where AI evolution had not yet come to life[3], therefore updates might be necessary.

The author concludes that the current trade mark concepts are *still* fit for purpose if minor adaptations are made to reflect consumer's behavioural changes. This strategy can be achieved by means of statutory interpretation rather than wholesale reform. In this way, the law offers a technological neutral approach, which is robust and flexible enough to deal with unforeseeable changes brought by any technological advancement in the future. In order to facilitate the proposition submitted by the author, this article will provide a list of hypothetical situations so as to assess whether the 19th century originated trade mark law concepts can still be applicable.

2. Changes in consumer's purchasing behaviour's pattern post the Covid-19 pandemic

The Covid-19 pandemic has brought us a few significant changes in relation to the consumer purchasing behaviours, one of which is how the consumers shop and another is with whom they shop.

2.1 Where and how consumers shop:

According to a recent report[4], more consumers purchase products online than ever before. 62% of UK consumers shop online now than before the Covid-19 pandemic[5], and the number of consumers who shop online has increased by 129% in 2020 compared with 2019[6]. Moreover, according to Retail Gazette[7], 17.2 million consumers in UK out of 66.6 million are planning to switch permanently to online shopping. In other words, one fourth of the British consumers seems to consider online shopping as their main shopping preference.

Overall, online sales have reached €222 billion in 2020 in the United Kingdom[8] and such a high demand has led the UK e-commerce prediction to be amended from £73.6bn to £78.9bn[9]. An additional financial gain of £5.3 billion has been brought to the UK e-commerce industry as a result of the pandemic.

2.2 With whom the consumers shop

Amazon dominates the online retail sector (e-commerce) not only at the UK national level, but at the international level[10]. For example, almost 90% of UK shoppers are reported to use Amazon. Furthermore, the Covid-19 pandemic has provided Amazon unpredicted financial benefit of additional £2 billion in demand for online shopping in the UK, and it is predicted to reach the total of £31.1 billion by the end of 2020 against the initial prediction of £29.1 billion in 2020[11]. It is apparent that online shopping offers a dominant alternative to traditional retail shopping and it is expected to grow further.

It is, therefore, crucial to recognise and acknowledge the changes in the platforms that consumers use to make purchases and that of consumer's behaviour in the purchasing decision-making process. It is also essential that all those changes are reflected in trade mark law so that law is fit for purpose.

3. Trade mark concepts

By way of background, the trade mark concepts will be briefly explored. Section 5(2) of the Trade Marks Act 1994 prohibits any trade mark registration which causes likelihood of confusion on the part of the public due to the latter mark's similarity to the earlier marks for the similar goods or services. Section 10(2) gives registered trade mark owners a right to prevent unauthorised third parties, in the course of trade, from using a similar sign which causes a likelihood of confusion on the part of the public due to the latter mark's similarity to the earlier mark.

The global appreciation test, that is to assess whether the likelihood of confusion shall give rise, has been developed in a number of very established cases. In *Sabel*[12], the European Court held that "… the likelihood of confusion must be assessed globally… by considering all factors relevant to the circumstances of the case. An assessment of the visual, aural or conceptual similarity of the marks ….must be based on the overall impression given by the marks, bearing in mind their distinctive and dominant components"[13]. In addition, the court also stated that a mere conceptual similarity between two similar marks is not sufficient to give rise to the likelihood of confusion[14].

Further guidance on the global appreciation test was given in *Canon*[15] and *Lloyd*[16]. In *Canon*[17], it was held the distinctive character of an earlier trade mark shall be taken into account when assessing similarity of goods. The more distinctive the earlier mark is, the greater is the likelihood that confusion will arise[18]. In *Lloyd*, it was stated that the more similar the goods or services attached to the similar marks, the greater the likelihood of confusion. The court went on further to delineate the factors that needs to be taken into consideration in assessing the degree of the distinctiveness of the earlier mark[19].

We have seen some development in the assessment of the likelihood of confusion whilst there has been less development as to when the likelihood of confusion amongst consumers may arise. This discussion is very relevant in relation to trade mark infringement cases.

3.1 Confusion

Generally speaking, confusion can arise in three different stages: first before consumers make a payment, which is called initial sale confusion (pre-sale confusion); second, at the point when consumers make a payment, which is called point-of-sale confusion. This means the consumer is confused when they execute the payment; and last, after consumers make purchase, which is called post-sale confusion.

Under the current established approach, the likelihood of confusion is assessed at the point of sale[20], and therefore, the notions of initial confusion and post-sale confusion are not included in the interpretation of section of 10(2) TMA 1994[21].

It is, however claimed that confusion can occur at any stage of the transaction, including pre-sale, point of sale, and post-sale[22]. Furthermore, the author submits that the notion of post-sale confusion has become very relevant under the current situation where AI has become an integral part of consumer's decision-making process. The author, thus, argues that AI's interaction with consumers' purchasing decision-making processes, has led us to challenge the current interpretation that the existence of likelihood of confusion is assessed at point of sale.

3.2 initial interest confusion

It is useful to provide a very brief explanation of initial interest confusion, though this is beyond the scope of this article. Very simply speaking, initial interest confusion occurs where the consumers see the product, they may be confused as to the source of trade origin, but when they reach the payment, they are no longer confused. The UK court in *Och-Ziff* defined the initial interest confusion as "confusion on the part of the public as to the trade origin of the goods or services in relation to which the impugned sign has been used arising from use of the sign prior to purchase of those goods or services"[23]. Most importantly, recognition of initial interest confusion has been rejected as part of actionable confusion in section 10(2) in the UK[24].

3.3 post-sale confusion

Post-sale confusion, on the other hand, occurs after the consumer has purchased the product or service. In *Datacard,* post-sale confusion is defined as "confusion on the part of public as to the trade origin of goods or services after the goods and services have been purchased"[25]. The post-sale confusion is understood to happen because it 'involves the loss in prestige a senior user suffers as a result of the junior user's branded product.[26] The post-sale confusion is also said to damage the reputation of the earlier mark because consumers' experiences with the inferior product tarnish their image of the legitimate product[27].

4. The hypothetical examples: How we shop now

In order to support the first part of argumentation submitted by the author that the 19 century original concepts can still be applicable, the hypothetical examples will be provided. The purpose of using these examples is to understand the mechanisms of AI-assisted online shopping, and to demonstrate how AI has been an integral part of, and influential to consumers' decision-making process.

As has been noted earlier, the current dominant platform for online shopping is Amazon. The business model employed by Amazon as well as other online retailers, is known as the 'shopping-then shipping' model: a consumer places an order and the product gets delivered/shipped to the consumer[28].

The number of the hypothetical examples are illustrated as follows:

(A) I go to the Amazon website. AI anticipates which products I would like to buy based on my browsing history, an amount of time being spent by myself on looking at an item/a page, my purchase history…etc. AI, then, makes the *targeted* recommendation. After looking at the list of the targeted recommendation, my next step will be that: (i) I buy one from the recommended list; (ii) I buy the item not from the recommended list; or (iii) I decide not to buy any items: this is known as the 'shopping then shipping' model.

(B) I speak to Alexa[29]: "Alexa get me a bottle of water". Alexa searches and finds a selection of bottles of water, at a certain price. Alexa then asks if I am happy to go ahead with the order. If I say "yes", she orders the item for me.

(C) I speak to Alexa: "Alexa get me a bottle of water". Alexa searches and orders me the bottle of water.

(D) Alexa predicts products I might like to buy; and sends/delivers me a selection of products (without me directly asking Alexa to order). I then decide which one to keep (or not to keep). This model is called 'Shipping then Shopping' or 'anticipatory shopping'.

Each example will be analysed in order to demonstrate the potential validity of the author's arguments.

In Example A, although AI is involved and gives me a targeted recommended list of items, it is still a human who makes the purchasing decision. AI has not yet taken over the purchasing decision-making process. In consequence, if two very similar marks attached to a similar item are presented to the consumer when she/he is about to place an order, it is likely that she/he can still get confused. In this case, the current approach trade mark concepts can still be applicable in Example A.

In a similar vein, in the case of Example D, if two similar marks are attached to similar goods, a likelihood of confusion may give rise as it is a human who makes the

purchasing decision. The difference with Example A is that AI predicts what the consumer wishes to purchase, and the items will be delivered to the consumer without placing the order. This is called the Shipping then Shopping model (also known as the 'anticipatory shipping')[30].

Example B shares similarities with example A that AI/Alexa gives us the targeted recommended list for us to choose from. Therefore, If two very similar marks attached to similar goods in the targeted list are presented to the consumer, a likelihood of confusion is likely to give rise, and the trade mark concepts are to be employed.

The chief difference between A and B is, however, the manner in which the human interaction is achieved in the product selection process. When I order a bottle of water on Amazon, it is most probable that I am 'looking' at the bottle of water on the screen of a personal computer device including, a laptop, smart phone or a tablet. I am, thus, visually involved in the purchasing decision-making process. I can 'see' what I buy; I rely mainly on my visual and conceptual recollection of the name of the product.

In contrast, it is unlikely that I 'see' the bottle of water when Alexa tells me she has found one and she places an order on my behalf. Instead, I 'hear' the name of the bottle of water' when Alexa tells me she found the bottle. I rely on my phonetic recollection of the sound of the product in the case of B.

Example C illustrates a very interesting situation where any human intervention in the purchasing decision-making process has, *de facto,* been removed and replaced by AI. The only possible human interaction occurs at an initial stage: to speak to Alexa asking to order me a bottle of water. She then orders the bottle of water for the consumer. In the case of Example C, the trade mark concepts are no longer applicable as it is very certain that Alexa does not render any likelihood of confusion.

To summarise, it is argued that the traditional trade mark concepts (the average consumer, the likelihood of confusion, similarities) can be applicable so long as a human is *somewhat* involved in the purchasing decision-making process. The only situation where such trade mark concepts may not be applicable is, as demonstrated in Example C, where human interaction in the purchasing decision-making process is, *de facto,* removed. AI is very unlikely to be confused when AI places an order for the bottle of water. Having said that, a likelihood of confusion may still arise when the bottle of water is delivered to the hands of a human and it is not what the human expected.

5. Future prediction

So far, we have discussed whether 19th century originated trade mark concepts are still fit for purpose with the current mode of the consumer's purchasing behaviour. It is concluded that the applicability of the original trade mark concepts remains unchallenged, so long as the human is involved in some way with the decision-making process.

Now we will explore whether the second stem of argumentation that the notion of post-sale confusion needs revisiting is valid. We will also examine whether the19 century original trade mark concepts can still remain fit for purpose for the unforeseeable future. In order to do so, the author makes an assumption that ways in which we make the purchasing decision-making process will be greatly influenced by AI, and ways in which we shop might be different from the current model of shopping. For instance, Amazon successfully filed a patent in US[31] for a shipping system: AI on Amazon anticipates what a consumer wishes to buy, and the products selected by AI are shipped/delivered to the consumer without the consumer placing the order.

Below examples will be discussed in order to assess whether, and to what extent, the trade mark concepts are still applicable in the future form of shopping.

(E) I say to Alexa: 'buy me a bottle of water'. Alexa then finds a bottle of water available on Amazon, which includes the counterfeited product, and makes a purchase on my behalf. The product she chooses is a counterfeited product of Volvic.

(F) Alexa predicts and chooses the products I may wish to buy and ships those to me. The selection of products, which Alexa sent me, include counterfeited products and others to which confusingly similar marks are attached. As a result of my being confused between Volvik and Volvic (the original product), I finalise my purchase and buy Volvik.

Both Examples E and F do not involve any human intervention in the purchasing decision-making process; Alexa takes over the whole process and makes a purchase on the human's behalf. Therefore, it is suggested that the trade mark concepts become irrelevant as AI is not programmed to suffer any likelihood of confusion. This does not lead to the conclusion that the current trade mark purpose is not fit for purpose. Therefore, the assessment of likelihood of confusion at the point of sale needs re-examination.

A likelihood of confusion, however, in the view of this author, may arise when the product(s) reach(es) the consumer. Both examples illustrate possible situations where the likelihood of confusion may still occur to the consumer not at the point of sale but after the sale. This is where the notion of 'post-sale confusion' becomes hugely relevant. It is therefore argued that the concept of 'post-sale confusion requires revisiting and this may need to be encapsulated in the doctrine of confusion.

6. Conclusion

This article has examined whether current trade mark law needs revisiting in order to reflect recent consumers' behavioural changes in the purchasing decision-making process. The observation that ways in which consumers buy products has changed was clearly made. This article has also suggested that the law needs to take a technologically neutral approach to prepare for the unpredictable nature of future technological advancement. A number of hypothetical examples have been given with a view to demonstrating the proposition that the trade mark concept is, *in fact,*

still appliable, and therefore should be unchallenged. What might be required, nonetheless, is a reappraisal of the doctrine of confusion.

Examples E and D have demonstrated two potential situations where any human interaction is omitted from the purchasing process and are completely replaced by AI. It has been argued that there may be the likelihood of confusion when the consumer receives the product.   Above all, the author has concluded that courts need to re-examine the concept of post-sale confusion in order to recognise and acknowledge a different way that the likelihood of confusion could arise due to changes in the ways which consumers purchase products/services.

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[1] Senior Lecturer in Law. I would like to thank greatly Prof. Wynn for his invaluable comments on the earlier draft.

[2] Sections 5(2) and 10 of the Trade Marks Act 1994 (TMA 1994) and Articles 5(1)(b) and 10(2)(b) of European Trade Mark Directive 2015/2346.

[3] See, for example, L. Curtis and R. Palatts., 'AI is coming and it will change trade mark law' Trade Mark Artificial Intelligence (2017) *Trade Mark Artificial Intelligence* 9-13.

[4] See Deborah William, UK online shopping spend to grow 30% by 2024. https://www.retail-insight-network.com/features/uk-online-shopping-growth/ [Accessed 15 December 2020].

[5] See https://www.emarketer.com/content/pandemic-pushes-uk-retail-ecommerce-past-30-of-total-retail-sales-2020 [Accessed 15 December 2020].

[6] See https://internetretailing.net/covid-19/covid-19/online-shopping-surges-by-129-across-uk-and-europe-and-ushers-in-new-customer-expectations-of-etail-21286 [Accessed 15 December 2020].

[7] Retail Gazette News. See https://www.retailgazette.co.uk/blog/2020/07/17-2m-brits-plan-to-switch-to-online-shopping-permanently/ [Accessed 15 December 2020].

[8] See https://ecommercenews.eu/ecommerce-in-uk-to-reach-e222-billion-in-2020/ [Accessed 15 December 2020].

[9] https://www.prnewswire.com/news-releases/covid-19-to-add-5-3bn-to-uk-ecommerce-in-2020--301080427.html [Accessed 15 December 2020].

[10] Amazon in the United Kingdom (UK) - Statistics & Facts. https://www.statista.com/topics/5592/amazon-in-the-uk/ [Accessed 15 December 2020].

[11] See https://www.theguardian.com/technology/2020/oct/29/amazon-profits-latest-earnings-report-third-quarter-pandemic [Accessed 15 December 2020].

[12] Case C-251/95 *Sabel BV v Puma AG* [1997] ECR I-6124.

[13] *ibid* at [23].

[14] *supra* 11 at [25].

[15] Case C-39/97 *Canon Kabushiki Kaisha v Metro-Goldwyn-Mayer Inc*., [1998] ECR I-5525

[16] Case C-342/97 *Lloyd Schuhfabrik Meyer & Co. GmbH v Klijsen Handel BV* [1999] ECR I-3819.

[17] *Canon* at [21].

[18] *ibid* at [18].

[19] *Lloyd* at [23].

[20] For general discussion, see, A. Blythe, Initial interest confusion: attempting to define its statutes within European Trade mark law [2016] 38 *EIPR* 4 201-207.

[21] Corresponding to Article 10(2)(b) of EUTMD.

[22] S. Morris, 'Guess What Gucci: Post-Sale Confusion exists in Europe' [2012] 47 *Val UL Rev* 1-62 at page 7.

[23] *Och-Ziff Management Europe Ltd v OCH Capital Ltd* [2010] EWHC 2599 (Ch) at [87].

[24] See *Interflora Inc v Marks & Spencer plc* [2014] EWCA Civ 1403; Alexandra Allen-Franks 'Justifications for reconsidering initial interest confusion after Interflora' (2019) 14 JIPLP 5, 387-400.

[25] *Datacard v Egle* [2011] EWHC (Pat) 244 at [279]-[289].

[26] *supra* 21 at 31.

[27] *ibid* at 32.

[28] *supra* 2 at 10.

[29] Alexa, similar to Apple Siri and Google Nest, is a virtual assistant AI technology and a voice recognition software programmed which is embedded in Amazon Echo device.

[30] |R. Grandinetti 'How Artificial Intelligence Can Change the Core of Marketing Theory' [2020] 16 *Innovative Marketing* 2 91-102 at 93.

[31] US Patent number US8615473B2.