**Do Androids Dream of Trademarks? Revising the ‘Average Consumer’ Notion in the Artificial Intelligence Context**

**By Carolina Tobar – February 2019**

**Abstract:** Trademark Law seeks to help consumers avoid confusion when choosing products and correctly distinguish those they prefer from those produced by other manufacturers. Courts have constructed the notion of the ‘average consumer’, a fictional figure meant to represent the state of mind of the general public when buying a certain good or service. However, the said concept is not static: as means of purchase change throughout history due to technology, and depending on the characteristics of the specific good or service, so does the way in which the knowledge and attention of the average consumer is perceived, and therefore how the likelihood of confusion is assessed. With the introduction and popularization of Artificial Intelligence as an aid or new means of purchasing, even if the end consumer is still human, this notion is due for some revisiting, as the interaction with trademarks necessarily changes. This paper asks some questions relating to the effect of technological advances, specifically the Internet of Things (IoT) and purchase history analysis, in assessing the likelihood of confusion of trademarks.

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# Introduction

1. Trademarks serve the purpose of differentiating goods or services from one source from others and, consequently, one important goal of Trademark Law is to help consumers freely choose what to purchase, without being deceived into buying goods or services they would otherwise never buy. As some practices may lead to confusion regarding the origin of a good or service, and this can get in the way of rational decision-making, trademark law regards this type of confusion as undesirable and seeks, not to eradicate it, but to establish a set of protective measures, based on which judges and officials can intervene.
2. This approach is strongly influenced by a popular theory of economic analysis of intellectual property, which sees in trademarks an economizing advantage: by designating a specific product with a particular quality (Michelin tires or Perrier bottled water), they reduce consumer search costs and simplify the purchasing process[[1]](#footnote-2). In turn, companies investing in product quality, service, advertising and generally building a reputation for their brand will make greater profits thanks to repeat purchases and word-of-mouth recommendations. Consumers are therefore willing to pay higher prices in return for lower search costs and the assurance of consistent quality of goods and services. In this context, trademark law affords legal protection to both consumers and companies by creating a way of preventing free riders from potentially destroying the information capital embodied in the trademark and the incentive to develop a valuable trademark.
3. As a result, national trademark laws all over the world have specific provisions to prevent the registration of trademarks that could be confusing for consumers. Although there may be some variations between different legal systems, for registration to be prevented the international legal framework[[2]](#footnote-3) requires that there be an: i) identical or similar sign to a registered trademark; ii) for identical or similar goods and/or services. In addition, prohibition of the use of potentially confusing signs enables trademark rightsholders to file infringement claims to protect their intellectual property rights from unlawful imitation[[3]](#footnote-4).
4. Under both of the above provisions, judges and intellectual property office examiners are required to determine in which specific cases there is a *likelihood[[4]](#footnote-5)* of a trademark confusing a consumer, given a degree of identity or similarity with a previously registered trademark[[5]](#footnote-6). In order to do this, they must put themselves in the shoes of the ‘average’ or ‘reasonably prudent’ consumer, the fictional and abstract protagonist of trademark law, who is said to represent the state of mind of the general public when buying a certain good or service.
5. Determining the state of mind of consumers is essentially an interpretative process that can be accomplished by applying a set of rules, jurisprudentially and doctrinally conceived to establish how the consumer perceives, recalls and compares trademarks. Evidence from polls and market surveys investigating how consumers purchase items or what they think of a trademark may also be considered. However, as the question is whether there is a *risk* of consumers being confused, the actual use of such surveys, and any confusion they may indicate, is curiously not well received in all jurisdictions[[6]](#footnote-7).
6. The steps which judges and examiners take to try to figure out the state of mind of the consumer will be further elaborated on later. It is nevertheless important to mention at this point that the nature, type and function of the goods and services, and particularly the way in which consumers normally acquire them, have been deemed crucial for determining whether there could be likelihood of confusion.
7. As such, common sense tells us that the consumer of a luxury item, such as a fashionable bag, will probably approach such a purchase in a different way than if they were buying a mass-market product such as toothpaste. For starters, the two products would be found in completely different types of store. But what about purchases made online? Most of the principles of trademark law formulated to identify possible confusion pre-date the Internet era. In the meantime, a lot of retail sales have moved to the digital environment or are influenced by digital interaction, and although, arguably, some countries are experiencing the phenomenon more than others, worldwide e-commerce sales rose to 2,290 billion US dollars in 2017,[[7]](#footnote-8) showing a 20% annual increase and no sign of decline.
8. Once a consumer goes online, they are not alone in their purchasing process: e-commerce platforms now suggest products based on what people have previously bought, searched, added to their wish-list, saved for later purchasing, etcetera. Improving product recommendation software is on the agenda of the e-commerce giants, such as eBay, Amazon, Alibaba and others*,* with 50% of investment in Artificial Intelligence (AI) being channeled into digital marketing and marketing automation[[8]](#footnote-9). In this context, the trademark law notion of the average consumer needs to adjust not only to the possibility of finding all types of products on the same online shopping platform, but to the fact that AI will be assisting and sometimes even purchasing on humans behalf[[9]](#footnote-10). This paper asks the questions examiners and judges will have to consider when assessing confusion and the state of mind of the average digital consumer, and proposes a slight change in the definition of an online consumer, who, if not informed and reasonable by nature, may possibly become so with the help of AI.

# Who is the ‘average consumer’?

1. As previously mentioned, the first important fact about the ‘average consumer’ notion in trademark law is that it is a fiction. It is not meant to represent the mindset of every single individual consumer or of the general public but refers rather to a ‘relevant public’ of actual and potential consumers of a certain good or service.
2. Law, economics and other disciplines are no strangers to these fictions. As has been noted by various authors, the ‘average consumer’ or ‘reasonable consumer’ or ‘ordinarily prudent consumer’, as this fictitious figure is also known, is somewhat akin to the ‘reasonable person’ of tort law[[10]](#footnote-11). Other fields of intellectual property law are also plagued by fictional characters created by jurists, such as the ‘Person Having Ordinary Skill in the Art’ (PHOSITA) in the field of patents and the ‘informed user’ of industrial design, both important for assessing the registrability, validity or infringement of patent rights.
3. The ‘average consumer’, as a hypothetical person or legal construct[[11]](#footnote-12), provides a test for judges and examiners, forcing them to place themselves in the shoes of another, the consumer, in order to figure out the consumer’s state of mind in the light of all the relevant circumstances. As the question asked is whether there is a *probability*[[12]](#footnote-13) of consumers being confused – not evidence of actual confusion, as particularly in the examination context the burden of proof would be absurd –, the criterion for identifying the ‘average consumer’ functions as a set of rules provided *ex ante*[[13]](#footnote-14). And because the ‘average consumer’ is the benchmark in trademark law, there is a tendency to treat this person as static and monolithic[[14]](#footnote-15). The ‘average consumer’ may well tend to correspond to the judges and examiners themselves as they apply their personal experience to constructing the outline of what this average consumer looks like on a case-by-case basis.
4. In the following section of this paper, we provide a short summary of how the ‘average consumer’ has been interpreted by different legal systems. As the author prefers not to stray from familiar territory, the European Union, the United States and the Andean Community traditions are reviewed, in order to investigate who this mysterious consumer is, how ‘average’ and how ‘reasonable’, and what the criteria are for probing his/her state of mind.
5. One last note before delving further into the topic: although the notion of ‘average consumer’ is also utilized in trademark law to determine distinctiveness, descriptiveness and other characteristics or absolute grounds for (non-)registrability, these matters will not be considered on this occasion. This paper is concerned exclusively with likelihood of confusion, therefore only concretely substantive examination and infringement scenarios will be of relevance.

## European Union

1. The normative framework for the European Union Trademark (EUTM) consists mainly of Regulation No. 1001/2017, while European Parliament Directive no. 2436/2015 approximates the law of Member States relating to trademarks. In the European Union (EU), however, likelihood-of-confusion analysis and definition of the average consumer is mostly a matter of national substantive law.
2. Except in cases involving EU trademarks, the European Court of Justice (ECJ) does not actually judge whether a mark is confusingly similar to another, as its function is to interpret the law, not to apply it[[15]](#footnote-16). Nonetheless, in the spirit of harmonization, in some cases[[16]](#footnote-17) it will say that a country’s interpretation is too narrow or too broad and that the EU-level standards must be applied in order to avoid disparities in national legislation that disrupt competition and free movement of goods[[17]](#footnote-18).
3. Articles 5(1) and 10(2) of Directive No. 2436/2015 refer to the likelihood-of-confusion test, in cases of similarity. Meanwhile, Articles 8(1) and 9(2) of Regulation No. 1001/2017 specify that the likelihood of confusion must occur in the territory in which the earlier trademark is protected. In both cases, likelihood of association is included in the concept of likelihood of confusion. Even if the ‘average consumer’ is not specifically referred to in the normative framework, by introducing the concept of likelihood of confusion and the fact that it should affect “part of the public”, the ‘average consumer’ in the EU is normatively constructed and then jurisprudentially developed.
4. As expressed in the Lloyd Schufbrik case, the average consumer is regarded as someone reasonably well-informed, reasonably observant and circumspect, in accordance with national substantive laws and policies. Originally a concept introduced in unfair competition cases, the average consumer migrated to trademark law as a key element in assessing likelihood of confusion. The overall impression of a trademark must be considered, as “the average consumer normally perceives a mark as a whole and does not proceed to analyze its various details”[[18]](#footnote-19).
5. On the other hand, the European Union Intellectual Property Office (EUIPO), in its Guidelines for Examination of European Union Trademarks, refers to this concept in the following terms:

*The term ‘average consumer’ is a legal concept that is used in the sense of the ‘relevant consumer’ or ‘relevant public’. It should not be confused with the ‘general public’ or ‘public at large’, although the Courts sometimes use it in this sense. However, in the context of relative grounds, the term ‘average consumer’ must not be used as a synonym of ‘general public’ as it can refer to both, professional and general public. In this respect, in cases concerning the likelihood of confusion, the Court normally distinguishes between the general public (or public at large), and a professional or specialised public (or business customers), based on the goods and services in question* (pp. 4-5).

1. In addition, the EUIPO Opposition Guidelines elaborate on the concepts of general public and professional or specialized public. Depending on the type of good or service, the sophistication and degree of attention of the average consumer varies (and this applies *mutatis mutandis* to business customers). Therefore, the higher the degree of sophistication of the customer, the less likely it is that confusion will occur. Consequently, based on court judgements regarding certain type of products, the EUIPO has compiled and classified the different degrees of attention expected of consumers. For example, for mass-consumed goods and services, the degree of attention will be that of the *reasonably well-informed* consumer; in the case of technical goods or services, the degree of attention will depend on the level of education or knowledge required in relation to them; and, finally, regarding pharmaceutical goods, which are related to a fundamental right to health, the consumer will be more attentive regarding prescription pharmaceuticals, but not necessarily so with Over The Counter (OTC) medicines.

## United States

1. The main legal instrument of trademark law in the United States (US) is the Lanham Act, whereby trademark registration is a matter of federal law. Unregistered trademarks are also protected under the Lanham Act as common-law trademark rights acquired automatically by use, though such rights are enforceable only in State Courts. However, for matters of likelihood of confusion, federal and state law coincide.
2. The Lanham Act, section 22, § 1052 (d)[[19]](#footnote-20) stipulates that the USPTO must test whether a mark which is the subject of an application for registration is likely to cause confusion, or to cause mistake, or to deceive, as it resembles a previously used or registered mark. § 1125[[20]](#footnote-21), on the other hand, refers to civil actions, with a general provision against false or misleading signs; specifically, (1) (A) uses the same terms, adding that confusion may occur regarding the origin, sponsorship or approval of the goods and services concerned. However, what the Lanham Act does not provide are any statutory measures for determining the likelihood of confusion; such measures must therefore be provided exclusively by common law.
3. Regarding likelihood of confusion, US case law has emphasized that it extends only to the relevant types of buyers, not to the general public. It depends on the relevant class of customers, who may range from professional to specialized and include both actual and potential buyers of goods or services[[21]](#footnote-22).
4. Of the several steps involved in a likelihood-of-confusion assessment, the experience or attitude of the consumer is key to determining how they will perceive the trademark concerned (visual, aural and conceptual impression), whether they perceive the products or services to be related, whether they are likely to find them in the same stores and, most importantly, the consumer’s level of sophistication[[22]](#footnote-23).
5. US Trademark law does not usually refer to the concept of the ‘average consumer’ but is rather concerned with the concept of consumer sophistication and the ‘reasonably sophisticated buyer’. As there is no one definition of this sophisticated buyer, US Courts have attributed different degrees of care to buyers, depending on the types of goods or services concerned, on a case by case basis. The idea is that the consumer approaches a purchase with at least a minimum standard of care and that certain elements, such as the price, nature or channel of trade of the specific item or service, can influence the level of sophistication. Similarly, then, to the EU, consumers are deemed to be less attentive in the purchase of inexpensive, mass-produced goods, and engage with trademarks based on an imperfect recollection of them, as they cannot compare them directly.
6. However, all presumptions can be rebutted by evidence and empirical facts are a part of the analysis[[23]](#footnote-24). Nonetheless, determining the state of mind of the reasonable consumer remains an imperfect, interpretative process[[24]](#footnote-25), in which legal operators rely on their ability to understand market structures and consumer behavior[[25]](#footnote-26), often distrusting evidence such as surveys, as statistics are perceived to be easily manipulated.

## Andean Community

1. As it is a union of civil-law tradition countries[[26]](#footnote-27), the Andean Community normative framework for trademarks, mainly consisting of Decision 486 of 2000, closely resembles that of the EU. Article 136 (a) establishes a prohibition against the registration of trademarks similar or identical to ones previously registered or filed for registration of the same goods or services, or regarding goods or services that could cause a risk of confusion or association. Although the general thrust is the same as for the previously mentioned systems, the drafting is interesting as it emphasizes that likelihood of confusion is closely related to the goods and services concerned. On the other hand, Article 155 (a) allows rightsholders to exclude others from using identical or similar signs that may give rise to a risk of confusion or association.
2. The Andean Community Court of Justice, like the European Court of Justice, only interprets the law on these matters and does not directly apply it. In its case law, however, it has repeatedly identified the role of the ‘average consumer’ in assessing the likelihood of confusion between two trademarks. Moreover, it is the Court’s opinion that the reason for trademarks is to protect the consumer, i.e. the buyer who needs to identify the goods or services protected by the sign concerned[[27]](#footnote-28). In other words, trademarks would not exist if it were not for the consumer, who is therefore the protagonist and subject of Trademark Law. It is the consumer who is at risk[[28]](#footnote-29) of confusion and must endure, along with the trademark rightsholder, the damage resulting from any the lack of identification of the goods and services that a trademark protects.
3. In common with the EU and US authorities, the Andean Court has recognized that some consumers are less prone to be *induced* to this risk of confusion, in particular professional and specialized consumers who, due to their wide knowledge of a specific activity, can easily differentiate one trademark for another. The Court’s jurisprudence therefore takes into account how price can affect the consumer’s level of attention when making a purchase, and makes special provision for luxury goods and pharmaceuticals products.
4. Finally, the Court tends to quote its own decisions and tends not to stray from precedent. Regarding the ‘average consumer’, a concept that more commonly arises at the examination stage than when dealing with infringements[[29]](#footnote-30), it has reiterated jurisprudence from 1987, stating that:

*(…) The Court allows itself to precise -based on the predominant doctrine- that the consumer to be taken into account, in order to determine the well-known status of a trademark as well as for assessing the possible risk of confusion between two trademarks, is the so called ‘average consumer’, that is to say, the run-of-the-mill consumer of a certain class of products, who must be assumed to have a common knowledge and perception abilities. Of course that, regarding this fundamental reference point, be that the consumer public of a certain type of product, it must be distinguishes whether it is mass consumption goods or products or if, instead, they are goods of selective consumption, in which definitely the living standard and purchasing power of the involved human group intervenes, in other words, the one that usually requests, user or consumes a given product[[30]](#footnote-31).*

## Preliminary conclusions: Criticism of the ‘average consumer’ test

1. After reviewing the different legal systems and the authors who have written on the subject, our conclusion is that, although useful, there is clearly an inherent flaw in the concept of the ‘average consumer’. As it is a legal abstraction, and the identification of this fictional character requires an interpretative exercise from judges and examiners, the results tend to be highly subjective. The question, therefore, is whether the criterion accurately portrays the perception of the consumer and the way he or she behaves when faced with purchasing decisions.
2. Another common criticism, regardless of the jurisdiction, is that under the current system judges are prone to finding a likelihood of confusion[[31]](#footnote-32). Even though consumers are deemed to be informed and reasonably diligent, they are characterized as having a poor memory. Examiners and judges often tip the scales towards likelihood of confusion in cases of doubt, a tendency accentuated by the fact that actual evidence of confusion (or the lack of it) is not usually considered when ruling on such cases, particularly in legal traditions where the concept of “risk” is very prevalent. Arguably, judges and examiners have demonized all confusion and tried to eradicate it from purchase decision-making in an overly protective effort to safeguard this idealized, dazed and confused consumer. This approach may be well intentioned, but it is beyond the scope of trademark law. Confusion may not have any influence on decision-making; some confusion will not influence search costs for the consumer; and some confusion will not necessarily be attributable to trademark matters[[32]](#footnote-33).
3. On the other hand, courts and IPOs are sometimes criticized for not being aware that the purchasing process has changed over time. Surely, one hundred years ago, if a consumer wanted to buy clothing or food, they would have to go to a specialized store selling such goods. Now, not only is it possible to find different sorts of products in physical spaces such as department stores and superstores, but the Internet and e-commerce websites have in recent decades changed the channels of trade and the characteristics of the marketplace. For this reason, if the channels-of-trade criterion is still relevant, it makes no sense to keep assuming that the average consumer has remained unchanged over this period. The alternative view is that channels of trade are not particularly relevant nowadays in determining the type of consumer or likelihood of confusion, given that the market has expanded and several channels now converge.
4. So, if humans are not very good at putting themselves in another’s shoes, can machines do it better? More importantly, can they be expected to perceive trademarks in the same way as humans do, imperfect recollection and all? Could they make the purchasing process less prone to confusion, and what role could they play in trademark law? In addition, how have interactions between consumers and trademarks changed due to these technological changes? These are the core questions raised in this paper, and no doubt they will continue to be asked for years to come, but – spoiler alert – there is not necessarily one answer to all of them right now.

# Artificial Intelligence and trademarks

1. It is not the purpose of this paper to delve too deeply into the technical aspects of artificial intelligence (AI). Nevertheless, some sort of definition is required, especially one that considers its relevance to trademark law. Intelligence, defined as “the ability to learn and understand, to solve problems and to make decisions”[[33]](#footnote-34), is not necessarily confined to humans. In accepting this, we accept not only that machines are able to ‘think’, but also that, as with humans, some machines are smarter than others. The goal of AI in its broad sense, then, is to make machines do things that would require intelligence if they were done by humans. Therefore, not only are there different types of actions and perceptions that can be regarded as intelligent, but there are also different types of artificially intelligent machines (or software): some are designed to act or think like humans, while others could be designed to think or act even more rationally than human beings. Although it might seem that trademark law would be more interested in the first kind of AI, as it is the kind that seeks to emulate human thought, flaws and all, new AI-driven purchasing systems, which will be briefly summarized hereafter, seek to imitate logical human thinking, in order to help humans towards better decision-making.
2. However, for a narrower definition, and considering the history of the development of AI technology and the very high expectations placed on it, the World Intellectual Property Organization’s (WIPO) approach to the definition of AI systems seems a little more practical and less likely to lead us attorneys into an endless debate about terminology. In the recently published Technology Trends Report 2019, which analyzes patent applications to identify the main trends in artificial intelligence, AI systems are defined as “learning systems; that is, machines that can become better at a task typically performed by humans with limited or no human interaction”[[34]](#footnote-35). In a way, even if some AI systems are more centered on the learning element than others[[35]](#footnote-36), the learning element is essential, as is the aspiration to perform tasks more efficiently than humans, and with the least human interaction possible. Moreover, while AI is predominantly influencing more patent-strong industries, such as transportation and telecommunication, its effects on retail are heavily felt. Some of the ways in which artificial intelligence is changing retail are briefly summarized below.

## New ways of purchasing

1. **• Product recommendation.** E-commerce platforms like Amazon, eBay and Alibaba, and some smaller ones, are investing in product recommendation software. Although some people argue that this is not a real AI technique and consider it mere data mining, some platforms go beyond the simple gathering of data, using content and collaborative systems to influence customers’ decision-making[[36]](#footnote-37). Recommendations are based on the buyer’s own personal shopping history, background and location, as well as other buyers’ experiences. Although it is not clear how effective or accurate these product-suggestion systems are, Alibaba, for example, reported a 20% increase in conversion rate during a 24-hour shopping event in 2016[[37]](#footnote-38). Others argue that AI can accurately predict sales only 5% of the time. Whatever its (disputed) success, everyone is using some sort of recommendation technology and companies are investing in software in order to get better at it, in a sort of race to probe consumers’ mind more accurately and predict sales.
2. **• Shopping assistants.** Based on preferences, shopping history and other criteria used for making product suggestions, AI shopping assistants aid consumers in a more personalized way than simple product-suggestion software. Examples of this are Alexa and the smart speakers and hubs by which users can communicate with ‘her’, such as Echo and Echo-plus. They include the recently launched Echo Look, described as a hands-free camera and Alexa-related style assistant, targeting the fashion consumer[[38]](#footnote-39). Shopping assistants can either suggest what to buy, thus working as product suggestion software, or, if appropriately programmed and used along with IoT technology, can also make purchases on humans’ behalf, in order to maintain stocks of certain products.
3. **• Internet of Things (IoT).** This refers to networks of objects that communicate with other objects and with computers through the Internet. ‘Things’ may include virtually any object for which remote communication, data-collection or control might be useful, such as vehicles, appliances, medical devices, electricity grids, transportation infrastructure, manufacturing equipment and building systems[[39]](#footnote-40). For retail, this means that appliances such as refrigerators and washing machines, having a connection to the Internet and equipped with sensors, can purchase products based on a set of conditions. Amazon Dash button technology is an example of this[[40]](#footnote-41). The hope for this technology is that if prediction technologies get better at doing their job, a point could be reached where it would be cheaper for Amazon to simply send out products based on such predictions and, if customers want to return something, allow them to return it without extra costs (a shipping-then-shopping system)[[41]](#footnote-42).
4. These new ways of purchasing goods and services on the Internet imply that, at least in some instances, AI will have a strong influence on the acquisition process and this, in turn, will affect the way in which trademarks are used and perceived in commerce. Already, the traditional notion that trademarks are affixed to physical goods has long been re-evaluated, not just since the dawn of the Internet, but since the advent of comparative advertising[[42]](#footnote-43). The provision that owners of trademarks can stop others from using them “in relation to goods and services”, contained in most laws, has been interpreted to include the use of a trademark on the internet via keywords and product-suggestion software. In addition, celebrated keyword advertisement infringement cases[[43]](#footnote-44) have found that the use of keywords can affect the main function of the trademark (as indicator of source), as well as the advertising and quality functions.
5. Even though “AI systems are not specifically designed to infringe IP rights, [but] are designed to make consumers lives easier and the product-purchasing process easier”[[44]](#footnote-45), it is naive to think AI exists only to help in consumer decision-making; it may well confuse consumers even more. AI-driven recommendation software can i) suggest products originating from the trademark owner, ii) suggest products originating from competitors of the trademark owner, or iii) suggest products not related to those of the trademark owner[[45]](#footnote-46). Most brands will try to capitalize on AI technology in retail, expecting it to recommend products originating from the legitimate trademark owner, as it presents them with the opportunity to strengthen ties with consumers and deepen brand loyalty. A clear example of this is Amazon’s use of IoT buttons, a technology that has become deeply intertwined with trademarks, enabling users to restock specifically with one brand of soap, coffee or bottled water. However, this does not preclude the misuse of trademarks, with third parties wanting to freeride on another’s reputation, just as in traditional commerce. Therefore, anyone trying to intervene between the brand and the consumer, as the keyword infringement cases have illustrated, is likely to be taken to court on infringement grounds and, quite probably, an algorithm somewhere will be able to provide proof of actual confusion[[46]](#footnote-47).
6. All these new ways of assisted or automatic acquisition of goods and services imply that, with AI intervention, there is now a different relationship between users and trademarks. However, this may not be in the way some people think. To affirm that because an intelligent software application, not a person, is doing the choosing, then trademarks are no longer relevant would be too extreme. Since software does not comply with the most basic definition of a consumer, as it does not buy for itself, nor is a “person” in legal sense, the consumer is still a human being[[47]](#footnote-48) and that is not likely to change soon. Therefore, trademarks will remain a consideration in the process of recommending or buying products for humans, simply because humans still care about them. The consumer remains human, even though the consumer’s interaction with trademarks will be permeated by a new “player”[[48]](#footnote-49) in the market.
7. In addition, it is not the case that one channel is now being chosen over the other, i.e. that online purchasing is now the only way in which, today and in the future, consumers will acquire goods and services. On the contrary, traditional physical shop sales still prevail over online shopping (brick-and-mortar or B&M, as the physical presence of a business or organization is known), which means that online purchasing coexists with traditional retail and a consumer expects to be able to have a harmonious, seamless shopping experience, whether they buy online, via their mobile, from anywhere in the world or in a traditional physical store[[49]](#footnote-50). Today, the acquisition of goods and services takes place in a “global omnichannel marketplace” in which all these channels interact, e.g. a customer might buy online and pick up in store. This convergence of brick-and-mortar and online buying is beginning to be known as ‘digital influence in retail’ or ‘phygital’ sales[[50]](#footnote-51). However, it is not necessarily the case that all shopping is directly influenced by AI. Back in 2016, a Deloitte study of digital shopping estimated that 56 cents of every dollar spent in a brick-and-mortar store was influenced by a digital interaction[[51]](#footnote-52). Although Forrester Research, which argued that only half of retail sales were digitally impacted in 2018, contested this figure, it still estimated that 58% of sales would be digitally influenced by 2020[[52]](#footnote-53).

## Average online consumer

1. These applications of AI will lead to new ways of assessing similarity and to changes in the concept of the average consumer. We may not yet know to what extent, but we can say (and hope) that in infringement cases special attention be paid to whether the purchase is assisted or not. On the other hand, categories and types of products will acquire even greater importance, rather than the channel through which they are acquired determining the level of attention. Perhaps shipping-then-shopping makes sense for basic consumer goods, and some clothing, but not for luxury goods. As Deloitte discovered: “Consumers clearly use digital tools very differently based on the product type for which they are shopping”[[53]](#footnote-54).
2. The Interflora[[54]](#footnote-55), L’Oréal and Others, Google France[[55]](#footnote-56), and Lush v. Amazon cases, relating to keywords, and the latter specifically to product recommendation, have been significant in defining the use of trademarks in a digital context and the notion of the average online consumer. In the first three, the ECJ and the High Court of Justice of the UK refer to “reasonably observant internet users” and “reasonably attentive internet users”. Even so, in the Lush v. Amazon case, in which one of the claims was that the drop-down menu including terms like “lush bath bombs” was a use of a trademark, the High Court made an interesting judgement, considering the average consumer’s point of view regarding basic forms of product suggestion will help in deciding future cases. “In my judgment, the average consumer is unlikely to know how the drop down menu has the content which it displays, but is likely to believe that it is intended to be helpful to him and is some consequence of other searches that have been carried out. In my judgment it would inform the average consumer that if he were looking for Lush Bath Bombs on Amazon, he would find them by clicking on that menu item. I reject the contention that the average consumer who was typing Lush into the search box would think that the drop down menu reference to Lush Bath Bombs was a reference merely to products which were similar to or competitive with the Lush product”[[56]](#footnote-57).
3. Ironically, even though no (or less) human interaction is taking place during the purchasing process, services are now more personalized than ever. By learning consumer habits, interacting with social media, analyzing their likes, follows and posts, and using face recognition technologies to predict behavior, brands hope to meet their consumers’ needs and create brand loyalty more effectively than ever. A term that has been commonly adopted to refer to this new type of consumer is the ‘dynamic digital consumer’, a consumer who not only uses digital tools to acquire goods and services, but also uses these tools to get and provide information before engaging or deciding on a purchase.
4. The dynamic digital consumer is less passive than ever, according to a Microsoft report on retail in the digital age: “Spoonfed marketing and advertising messages hold infinitely less sway, as consumers turn to online customer reviews, the opinions of their peers on social networks, and influencers that include self-made YouTube stars for product recommendations.”[[57]](#footnote-58). Yet, while the world and the market are now using adjectives such as ‘dynamic’, ‘conscious’, ‘informed’ and ‘connected’ to describe the modern consumer, and while reports on retail trends emphasize that customer experience, personalization and brand loyalty are more important than ever, trademark law risks lagging dangerously behind[[58]](#footnote-59).

# Conclusions

1. Artificial intelligence is changing many fields, among them the world of retail. This, in turn, will change consumer relations with brands and, therefore, the way we regard certain principles of trademark law. Nonetheless, for the foreseeable future, the consumer will remain human and AI a tool at the consumer’s service in the decision-making process. It is too soon to talk about an ‘AI consumer’ or get into Blade Runner scenarios with replicants going on Amazon to buy for themselves. Therefore, the principles governing trademarks are not likely to change substantially. However, this might be an opportunity to revisit how judges and examiners are interpreting key concepts, such as the characterization of the ‘average consumer’, and consider whether mere coincidence on channels of trade can still be used as a criterion in the likelihood-of-confusion analysis.
2. It might be possible to achieve a better balance between the ‘protectionist’ approach to trademark law, in which the consumer is the vulnerable target of brands, and the opportunity to build closer relations to such brands. The fact that judges have assumed that their goal is to rid the consumer of search costs sets an impossible objective for trademark law, as McKenna has pointed out[[59]](#footnote-60), and this has led to a contradictory characterization of what counts as an ‘average consumer’. If it is true that the consumer is rational, and if we accept that it is beyond the reach of trademark law to rid the world of all confusion in the decision-making process, then we can focus on stopping those misleading behaviors that lead to confusion relating to the origin of goods or services. Clearly, AI is not the magical solution to making search costs and confusion disappear, and there is no evidence to support this view, as researchers cannot even agree whether use of the Internet and shopping on mobile devices reduces search costs[[60]](#footnote-61). However, by shifting the focus away from the search costs theory, legal operators might be able to recognize that: a) the shopping experience is changing, due to AI systems influencing the purchasing process; b) consumers are ‘conscious’ and have other aids for informing and protecting themselves; and, therefore, c) new technologies can be an aid for processing potentially deceptive information.
3. Consequently, if (human) consumer intelligence when buying products is not acknowledged, then legal operators in infringement cases should perhaps consider whether the purchases concerned are AI-assisted and re-evaluate the position of the consumer in the online context. Among the pressing questions that will need to be asked is whether the average online consumer is in a better position to discern between potentially confusing trademarks, given the new approach to shopping and the tools at the consumer’s disposal. Although ‘better’ is a subjective word, in some cases AI will be indisputably more efficient. To name one example, AI will be less likely to buy water instead of tea (a typical and somewhat exaggerated example of direct confusion) or assume they have the same origin, as it does not suffer from imperfect memory, thus eliminating direct confusion and perhaps reducing indirect confusion or likelihood of association. It is too soon to tell how the use of trademarks in infringement cases relating to AI will be decided, but at a time when everyone is talking about this issue, it is important to acknowledge that trends in AI technology affect not only patents, copyright and trade secrets. Trademark law is also in the process of adapting, as AI systems become an everyday part of the marketplace, which is why many new and interesting challenges await intellectual property professionals.

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1. The source if this argument is W. Landes and R. Posner. Please see reference for more information. [↑](#footnote-ref-2)
2. Article 10*bis* of the Paris Convention generally affords protection against confusion in the context of unfair competition. However, it is Article 16 of TRIPS, referring to the rights conferred by a trademark, that elaborates further on what the owner of a trademark can prevent third parties from doing. Specifically, they can be prevented from: “using in the course of trade identical or similar signs for goods or services which are identical or similar to those in respect of which the trademark is registered where such use would result in a likelihood of confusion”. [↑](#footnote-ref-3)
3. Not all imitation is penalized by trademark law, as is the case with legislation on unfair competition. Following the leader is a common market practice and evoking a successful trademark (by using similar color schemes, fonts, structure) is part of the system. What is not allowed is for such imitation to reach the point where it will probably mislead consumers, disrupting purchasers’ decision-making or enabling free-riders to unjustifiably benefit from the reputation built by another manufacturer. [↑](#footnote-ref-4)
4. It is important to note the analysis is not of actual confusion in the marketplace, but of the probability of such confusion arising, considering the degree of similarity of the signs and of the goods/services. [↑](#footnote-ref-5)
5. Although the general rule for protection is that the trademark should be registered, there are some systems that still protect unregistered trademarks. In addition, well-known trademarks enjoy special protection on account of their reputation, which prevents others from using similar confusing signs, without having to be registered within a territory (see article 6*bis* of the Paris Convention and 16(2) of the TRIPS Agreement). [↑](#footnote-ref-6)
6. Most authors are aware of skepticism on the part of courts regarding empirical evidence when assessing trademark confusion, based on rulings in trademark infringement cases. For example, in the relatively recent case of *Interflora v. Marks*, the UK Courts of Appeals was very reluctant to accept surveys as a way of identifying the ‘average consumer’ and what their attitude towards confusion would be. However, the Court concluded that some surveys would be admissible, as long as they complied with certain reliability criteria. Even though this was a judicial matter, it is still curious that, when asked about what their attitude to factual evidence in likelihood-of-confusion assessment, IPOs tended to overstate what evidence they would be willing to admit, especially surveys, most taking the same approach as the UK Courts of Appeals. See the INTA’s sub-committee report “Types of evidence used to establish likelihood of confusion. Word Survey” <https://www.inta.org/Advocacy/Documents/INTATypesofEvidence2009.pdf> [↑](#footnote-ref-7)
7. Statistics taken from Amasty. See <https://amasty.com/blog/global-e-commerce-trends-and-statistics-2017-2018/> [↑](#footnote-ref-8)
8. According to a study by Cowen and Company. See <https://www.forbes.com/sites/louiscolumbus/2017/06/11/how-artificial-intelligence-is-revolutionizing-enterprise-software-in-2017/#7825eb8b2463> [↑](#footnote-ref-9)
9. This is case with AI shopping assistants such as Amazon Echo, as identified by L. Curtis & R. Platts, *AI is coming and it will change trademark law* in Managingip.com 2017. [↑](#footnote-ref-10)
10. On this matter, L.A. Heyman and G.W. Austin (also quoted by the previous author) expand on the similarities and differences between the reasonable person of tort law and the average consumer of trademark law. *“Whereas tort law's reasonable person is recognized as an analytical tool, trademark law's ordinarily prudent consumer is a proxy for real people - the actual consumers who might be confused by the defendant's use of a contested symbol.”* (p. 832). [↑](#footnote-ref-11)
11. As Lewison LJ described him in Interflora (CA I) at [44] and [73] and the Court of Appeals says in Interflora III. [↑](#footnote-ref-12)
12. Both the EU and the US agree that no actual confusion is required, but rather the probability (not just the possibility) of confusion arising. [↑](#footnote-ref-13)
13. L. Kaplow, [*Rules versus Standards: An Economic Analysis*](https://dash.harvard.edu/bitstream/handle/1/10611784/Kaplow_RulesStandards.pdf?sequence=2) in Duke Law Journal 42, 23, 1992, also quoted by L.A. Heyman, says: “(…) the only distinction between rules and standards is the extent to which efforts to give content to the law are undertaken before or after individuals act” (p. 560). Therefore, even if the judge in an infringement case is required to rule on the conduct of a third party, and evidence of actual confusion can be considered, the fact that the law tells him to look for the likelihood of confusion, and that even potential customers may be considered in defining it, leads to the conclusion that the ‘average consumer’ notion works more like a rule than a standard. [↑](#footnote-ref-14)
14. The word ‘monolithic’ is used by L.A. Heyman to refer to the fact that it is functionally necessary to have a fixed set of characteristics for this ‘reasonable consumer’, as a trademark cannot be confusing, and therefore infringing, for some consumers and not infringing for others. [↑](#footnote-ref-15)
15. Based on the Treaty on the Functioning of the European Union. But also, Preamble No. 11 of Directive 2008/85 directly states that the way of determining likelihood of confusion *should* be a matter of national law: “The ways in which likelihood of confusion may be established, and in particular the onus of proof, should be a matter for national procedural rules which should not be prejudiced by this Directive”. [↑](#footnote-ref-16)
16. i.e. Case C-119/75, Terrapin v. Terranova, 1976. [↑](#footnote-ref-17)
17. J. Hannerstig elaborates more on this. [↑](#footnote-ref-18)
18. C-251/95, Sabel Bv v. Puma Ag, 1997. [↑](#footnote-ref-19)
19. “(d) Consists of or comprises a mark which so resembles a mark registered in the Patent and Trademark Office, or a mark or trade name previously used in the United States by another and not abandoned, as to be likely, when used on or in connection with the goods of the applicant, to cause confusion, or to cause mistake, or to deceive: Provided, That if the Director determines that confusion, mistake, or deception is not likely to result from the continued use by more than one person of the same or similar marks under conditions and limitations as to the mode or place of use of the marks or the goods on or in connection with which such marks are used, concurrent registrations may be issued to such persons when they have become entitled to use such marks as a result of their concurrent lawful use in commerce (…)”. [↑](#footnote-ref-20)
20. “(a) Civil action. (1) Any person who, on or in connection with any goods or services, or any container for goods, uses in commerce any word, term, name, symbol, or device, or any combination thereof, or any false designation of origin, false or misleading description of fact, or false or misleading representation of fact, which— (A) is likely to cause confusion, or to cause mistake, or to deceive as to the affiliation, connection, or association of such person with another person, or as to the origin, sponsorship, or approval of his or her goods, services, or commercial activities by another person (…)”. [↑](#footnote-ref-21)
21. As determined in *Estee Lauder, Inc. v. The Gap, Inc.*, 108 F.3d 1503, 42 U.S.P.Q.2d 1228 (2d Cir. 1997). [↑](#footnote-ref-22)
22. In Polaroid Corp v. Polarad Electronics Corp., 287 F.2d 492, 495 (2d Cir. 1961), the court considered; (1) strength of plaintiff’s mark, (2) degree of similarity between marks, (3) competitive proximity of litigant’s products, (4) any actual confusion, (5) likelihood that plaintiff “will bridge the gap” separating the two markets, (6) whether defendant acted in good faith in adopting its mark, (7) quality of defendant’s product, and (8) purchaser sophistication. In E.I. Du Pont de Nemours & Co., 467 F.2d 1357, 177 U.S.P.Q. 563 (C.C.P.A. 1973), (nine) additional factors for performing the overall analysis were listed. [↑](#footnote-ref-23)
23. On this matter, Hannerstig says, “The concept of likelihood of confusion is generally regarded as a factual matter, not legal, and it is reviewed upon appeal under a deferential “clearly erroneous” standard. In contrast to CTM, where the risk of confusion is evaluated from point of registration, the risk of confusion with regard to U.S. trademarks is evaluated with respect to concurrent use” (p. 30). Although it is important to point out that this opinion may not correspond with the general feeling of US authors regarding infringement, rulings are more often based on a judge’s opinions and personal experiences than on evidence of actual of probable confusion. [↑](#footnote-ref-24)
24. In DREAMWERKS PRODUCTION GROUP INC v. SKG STUDIO SKG, interestingly, the judge compared the process of delving into the mind of the “reasonably prudent consumer” to the “Vulcan mind meld” (a pop culture reference to Star Trek), a touch technique which enabled a Vulcan (like Dr. Spock) to merge his mind with another’s. [↑](#footnote-ref-25)
25. Hannerstig, p. 33. [↑](#footnote-ref-26)
26. Bolivia, Colombia, Ecuador and Peru, as former Spanish colonies, follow Spain’s legal tradition. At one point in history, they even shared virtually the same civil code, based on the Chilean (Chile was a Member of the Andean Community from 1969 to 1976 but withdrew during Augusto Pinochet’s dictatorship) Civil Code drafted by Andrés Bello, who drew on the Napoleonic Code, the Seven-Part Code of King Alfonso X, Canonical Law in family matters, and other European Codes of the time. [↑](#footnote-ref-27)
27. In Prejudicial Interpretation 305-IP-2014, quoting their favorite Spanish author, Fernández-Nóvoa and his *Treaty on Trademark Law* (2001). [↑](#footnote-ref-28)
28. The concept of risk, rather than likelihood, is more used in Spanish. However, there is not a significant conceptual difference between the two notions, which are also used in English. The opinion of the author is that the choice of terminology in Spanish shows a more protectionist view of the consumer; ‘risk’ sounds more dangerous than ‘likelihood’ and, therefore, it is more important to protect the consumer against such danger. [↑](#footnote-ref-29)
29. Mostly due to the sheer volume of cases. Administrative courts are obliged to consult the Andean Court of Justice in all validity cases and these are more common than infringement ones. [↑](#footnote-ref-30)
30. The author’s translation of the Court ruling on 7-VIII-95, Process 04-IP-94, Trademark: EDEN FOR MAN. [↑](#footnote-ref-31)
31. On this point, Hannerstig says, “If judiciaries normatively assume consumers make intelligent decisions, why are judiciaries prone to find confusion so easily? Part of the answer may relate to the fact that although Community trademark law “supposedly” recognizes consumer intelligence, it simultaneously asserts this intelligence to be severely limited. It is more likely that the inconsistency and illogic of the aforementioned is evidence of treating the average consumer as rule like, instead as a matter of fact, does not work. The rule merely reflects an empty promise, which in reality does not correlate with the actual interest of consumers; rather it correlates with the judiciaries’ own perception of what the consumers “supposedly” see as confusingly similar. However, you may categorize it, the contradiction purports an uncertainty for proprietors, since arguably it lacks precision.” (p. 63). [↑](#footnote-ref-32)
32. Trademark theory in these cases assumes that trademarks exists to reduce search costs in purchase decision-making by helping consumers identify those goods and services whose origin and quality is desirable; according to this theory, confusion raises search costs and is undesirable. For a critique of the search-cost theory and its excessive influence on trademark law, see McKenna, [*A Consumer Decision-Making Theory of Trademark Law*](https://scholarship.law.nd.edu/cgi/viewcontent.cgi?article=2119&context=law_faculty_scholarship)in Virginia Law Review 98, 2012. [↑](#footnote-ref-33)
33. M. Negnevitsky, [*Artificial Intelligence. A guide to intelligent systems*](http://www.academia.dk/BiologiskAntropologi/Epidemiologi/DataMining/Artificial_Intelligence-A_Guide_to_Intelligent_Systems.pdf), Addison Wesley, London, 2nd ed., 2005, p. 2. [↑](#footnote-ref-34)
34. World Intellectual Property Organization, [*Technology Trends 2019*](https://www.wipo.int/edocs/pubdocs/en/wipo_pub_1055.pdf), Artificial Intelligence, 2019, p. 19. [↑](#footnote-ref-35)
35. AI is not to be confused with machine learning, which, according to WIPO, is the dominant AI technique in patent applications, accounting for one third of AI-related inventions. For a short explanation of the difference, see: <https://www.wired.co.uk/article/machine-learning-ai-explained> [↑](#footnote-ref-36)
36. For a more detailed explanation and classification of recommendation engines, see: <https://towardsdatascience.com/what-are-product-recommendation-engines-and-the-various-versions-of-them-9dcab4ee26d5> [↑](#footnote-ref-37)
37. See D. Faggella in Martech: <https://martechtoday.com/ecommerce-giants-using-ai-marketing-part-1-207259> [↑](#footnote-ref-38)
38. <https://www.amazon.com/Amazon-Echo-Look-Camera-Style-Assistant/dp/B0186JAEWK?ref_=pe_9525340_378035380_grep_lps_deal_r1_img> [↑](#footnote-ref-39)
39. <https://digitalstrategy.nl/wp-content/uploads/The-Internet-of-Things-Frequently-Asked-Questions-by-CRS-Oct-2015.pdf> [↑](#footnote-ref-40)
40. <https://aws.amazon.com/iotbutton/?nc1=h_ls> [↑](#footnote-ref-41)
41. For a brief explanation of the change to the shipping-then-shopping model, see A. Agrawal, J. Gans & A. Goldfarb, [*How AI Will Change Strategy: A Thought Experiment*](https://hbr.org/2017/10/how-ai-will-change-strategy-a-thought-experiment) in *Harvard Business Review*, October 03, 2017. [↑](#footnote-ref-42)
42. See [*O2 Holdings Limited and O2 (UK) Limited v Hutchison 3G UK Limited*](http://curia.europa.eu/juris/document/document.jsf?text=&docid=69019&pageIndex=0&doclang=en&mode=lst&dir=&occ=first&part=1&cid=375189), paragraphs 35, 36 and 42, and [*L’Oréal SA and Others v eBay International AG and Others*](http://curia.europa.eu/juris/document/document.jsf?text=&docid=107261&pageIndex=0&doclang=en&mode=lst&dir=&occ=first&part=1&cid=375718), paragraphs 52 and 53. [↑](#footnote-ref-43)
43. Interflora, Google France, L’Oréal and Others, and Lush v. Amazon cases. [↑](#footnote-ref-44)
44. L. Curtis & R. Platts, [*AI is coming and it will change trademark law*](http://www.hgf.com/media/1173564/09-13-AI.PDF) in Managingip.com 2017, p. 13. [↑](#footnote-ref-45)
45. On this point, D. Arcidiacono says: *“L’“uso” del marchio, nell’ambito del commercio elettronico, da parte delle intelligenze artificiali, può assumere un significato differente per il titolare del segno a seconda che il sistema di intelligenza artificiale, a seguito dell’uso del marchio medesimo: i) suggerisca l’acquisto di prodotti provenienti (esclusivamente) dal titolare o, al contrario, ii) suggerisca l’acquisto di prodotti provenienti (anche o soltanto) da concorrenti del titolare del marchio o iii) suggerisca l’acquisto di prodotti che (almeno apparentemente) non sono per nulla (o soltanto lontanamente) collegati ai prodotti del titolare del marchio ma che risultano correlati sulla base dell’analisi dei giacimenti di dati. Nei casi sub ii) e iii), inoltre, è ben possibile che il marchio sia del tutto assente all’interno dell’annuncio pubblicitario dei concorrenti o degli imprenditori terzi. Nei casi considerati possono naturalmente aver luogo sia atti di contraffazione del marchio sia importazioni da Paesi terzi in violazione delle regole sull’esaurimento. Di qui la legittimità dell’avvio di un’indagine circa l’interferenza dell’uso del marchio, da parte di gestori di servizi di suggerimenti mirati (o acquisti automatizzati) che si avvalgano di forme di intelligenza artificiale, con le funzioni protette del marchio d’impresa.”* [↑](#footnote-ref-46)
46. The confidentiality of algorithms is a major issue in itself and very much outside the scope of this paper. During the last two years, there has been extensive discussion as to whether algorithms should be protected, and whether they should be disclosed. See for example: <https://en.unesco.org/news/privacy-expert-argues-algorithmic-transparency-crucial-online-freedoms-unesco-knowledge-cafe> or <https://www.wired.com/story/what-does-a-fair-algorithm-look-like/> [↑](#footnote-ref-47)
47. And here the author disagrees with Curtis & Platts and the idea of AI becoming the ‘average consumer’. AI may well be taking purchase decisions, but it is nowhere near becoming a consumer itself, as it purchases these goods or services for the use and enjoyment of humans and based on their instructions. However, it is worth considering whether it could be regarded a sort of specialized consumer, and if an analogy could be made between an AI shopping assistant and a pharmacist or doctor prescribing a medicine for which the patient is the final consumer. [↑](#footnote-ref-48)
48. This word is included with the intention of being controversial. As explained in the previous lines, it may be too soon to consider AI systems as “players” in the market. AI is, at the very minimum, a tool; eventually, it could become an intermediary or a kind of consumer. To date, the consumer and the intermediary are required to be a person, legal or natural, in most legislations. [↑](#footnote-ref-49)
49. Characterizing customers and their behavior, a Microsoft report examining changes in retail in the digital age says that of consumers of this type are: “(…) channel agnostic, and expect a seamless, curated shopping journey that reflects their purchasing behavior and preferences, whether they’re buying online, from a mobile device, in-store, or some combination of the three”. Microsoft Corporation, [*Reimagining retail in the digital age*](https://info.microsoft.com/ww-landing-Reimagining-retail-in-the-digital-age-eBook.html?lcid=en-us), White Paper, 2018. [↑](#footnote-ref-50)
50. Defined as the convergence of brick-and-mortar stores and online buying, as it has been referred to in this publication since 2016: <https://www.forbes.com/sites/barbarathau/2016/10/05/amazon-to-dominate-digital-but-shoppers-still-set-for-a-phygital-holiday-selling-season/#7eda69c2766f> [↑](#footnote-ref-51)
51. J. Simpson, L. Ohri & K. M. Lobaugh, [*The New Digital Divide*](https://www2.deloitte.com/insights/us/en/industry/retail-distribution/digital-divide-changing-consumer-behavior.html), Deloitte, 2016. [↑](#footnote-ref-52)
52. S. Kodali, F. Swerdlow & S. Wolken, [*Digitally Impacted Retail Sales In 2018: Still Only Half of Retail*](https://www.forrester.com/report/Digitally+Impacted+Retail+Sales+In+2018+Still+Only+Half+Of+Retail/-/E-RES122907), Forrester Research, March 26, 2018. [↑](#footnote-ref-53)
53. Deloitte Digital, [*Navigating the New Digital Divide. A global summary of findings from nine countries on digital influence in retail*](https://www2.deloitte.com/za/en/pages/consumer-business/articles/digital-influence-in-retail.html), 2016. [↑](#footnote-ref-54)
54. European Court of Justice 22 September, 2011, Case C-323/09, Interflora Inc. and Interflora British Unit v Marks & Spencer plc and Flowers Direct Online Ltd., ECR (2011, I), 8625 ff., case “Interflora v Marks & Spencer”. [↑](#footnote-ref-55)
55. [European Court of Justice March 23, 2010, joined cases C-236/08, C-237/08 and C/238/08, Google France SARL and Google Inc. v Louis Vuitton Malletier SA, ECR (2010, I), 2417 ff., case «Google France».](http://curia.europa.eu/juris/document/document.jsf;jsessionid=F5BD8C828CA5B37E154ED89126B8AB29?text=&docid=83961&pageIndex=0&doclang=EN&mode=lst&dir=&occ=first&part=1&cid=432520) [↑](#footnote-ref-56)
56. High Court of Justice of the United Kingdom, Mr John Baldwin QC, Cosmetic Warriors Limited and Lush Limited v Amazon.co.uk Limited and Amazon EU SARL [2014] EWHC 181 Paragraph 60. [↑](#footnote-ref-57)
57. Microsoft Corporation, [*Reimagining retail in the digital age*](https://info.microsoft.com/ww-landing-Reimagining-retail-in-the-digital-age-eBook.html?lcid=en-us), White Paper, 2018, p. 2. [↑](#footnote-ref-58)
58. KPMG, [*Global Retail Trends 2018*](https://assets.kpmg/content/dam/kpmg/xx/pdf/2018/03/global-retail-trends-2018.pdf). [↑](#footnote-ref-59)
59. “Courts for too long have been convinced that their job is to rid the world of search costs. This is the wrong goal because many search costs are irrelevant to consumers and some search costs even increase consumer welfare. Focusing on search costs has had serious negative effects on trademark doctrine: courts have accepted virtually any argument sounding in consumer confusion terms, and the result has been nearly unbridled expansion. It is time for courts to put consumer decision making back at the center of their analysis and to start treating consumers like they are capable of processing non-deceptive information” (p. 141). [↑](#footnote-ref-60)
60. On this matter, some authors argue either that mobile shopping does not diminish search costs, or that it does not diminish them significantly, or even that it actually increases them. See J.D. Levin; A. GHOSE, A. GOLDFARB & S. P. HAN; and D. Ershov. [↑](#footnote-ref-61)