

1 Intelligent Agents and Consumer Protection¹

Silvia Feliu²

¹ All my gratitude to Prof. Dr. Santiago CAVANILLAS MÚGICA for his collaboration and support.

² “Profesora ayudante” in Private International Law at the University of the Balearic Islands and collaborator in the ECLIP II project.

1.1 Preliminary Concepts

1.1.1 Definition of IA

It is generally accepted that an *IA* is an intelligent autonomous computing unit, which is able to interact with other agents and systems in order to communicate information in the form of data and knowledge.

In other words, an *IA* can be defined as an agent (an application operating on a server) that produces an automatic response on receipt of data previously introduced by a different party.

This general definition should not conceal the fact that there are very different kinds of *IAs* and that only some of them affect consumer protection. Moreover, it is often relevant for the consumer to know the nature of the *IA* in question. The *IA* must therefore be classified according to type, prior to entering into an analysis of their role in consumer protection.

1.1.2 The Classification of IAs

1.1.2.1 According to the response they produce

A) *Search IAs*. Some *IAs* receive words, subject matters or other similar items from users and, in response, produce a certain type of information. *Search IAs*³ are very common as navigation tools for locating webs or news containing specific information (e.g. texts, pictures, music files, etc.). A special kind of *Search IA* is the one designed to provide very precise *commercial* information (e.g. who is selling what and who is offering the cheapest product). We shall refer to this type as *Commercial Search IAs*. They are of a great interest, as regards consumer protection, because they work as brokers, encouraging consumer transactions.

B) *Decision IAs*⁴. The response automatically produced by these *IAs* is not so much the provision of information but other kinds of activities, such as sending an order to a warehouse or to a carrier in order for a product to be delivered, permitting the downloading of a video or pushing it in, changing the banners on a web page, modifying the customer's profile, etc. Consumer protection is especially concerned with those *Decision IAs* whose automatic response consists of words or actions which are legally binding: for

³ For example: *Yahoo*, *Olé*, *Fast Search*, *AltaVista Magallanes*. The role of these agents is to provide Internet users with tools for finding web sites where information they seek is located (identifying and indexing web sites or displaying a list of links to Web sites where the requested information is located).

⁴ An example is *Netsage*, available at: <http://www.netsage.com>

example, accepting an order, giving consent to an offer, acknowledging receipt of or cancelling an order.

1.1.2.2 According to their role.

A) *Independent IAs*. *Independent IAs* are intermediary agents which act between two other agents or between one agent and numerous sources of information. They could be said to be their own agents. *Search IAs* are usually *Independent IAs*, but this is not necessarily so: a *Search IA* could perform its task within the electronic trading pages of one supplier alone.

B) *Dependent IAs*. *Dependent IAs* act as one of the components or tools of a business. This is usually the case of the *Decision IA* used by commercial web pages to execute contracts or similar tasks automatically. But a *Decision IA* could also act independently, as an *IA* providing the tool for an electronic auction.

1.1.2.3 According to the way they work.

A) *Local IAs*⁵, that is, software containing the *IA* tool, which operates from the user's local PC. They are gaining ground and will probably become one of the tools contained in navigation software.

B) *Server IAs*, that is, *IAs* working for the user on a client-server basis. This is still the most common kind of *IA*.

C) *Push IAs*⁶: a sophisticated *IA* that automatically sends information or requests to the user, following previous instructions. Both *Local* and *Server IAs* could include this additional feature.

⁵ For example: Copernic 2000, available at: <http://www.agents-tech.com/technologies/index.html>

⁶ For example: My Yahoo (<http://www.edit.my.yahoo.com/conf/login>); firefly (<http://www.firefly.net>)

1.2 "Search IAs" and Consumer Protection

1.2.1 Regulation:

1.2.1.1 The Directive on Electronic Commerce⁷:

Search IAs and consumer protection are not contemplated by the Directive, neither as regards their function nor the parties involved.

Function: As automated search engines, IAs are considered to be on-line intermediaries but, in the context of the European Union, this on-line intermediary function is not addressed by the Directive on Electronic Commerce.

The parties involved: Although the Directive includes specific regulations regarding liability⁸, these only affect third parties (those whose rights, such as intellectual property rights, have been infringed) and it does not refer to consumers or users. There are no specific regulations to protect consumers and users from possible harm caused by the use of search IAs.

Although the Directive on Electronic Commerce has introduced an article (Art. 21) aimed at adapting its provisions to new developments (such as search engines), the current situation is that information location tool providers are becoming more and more available to users and the lack of regulations may result in a loss of confidentiality when using Internet. The result is that users will be subject to the existing, divergent Member State liability laws, with a lack of certainty as regards their scope of liability.

The Directive's review, as established in Article 21, should contemplate the need for proposals regarding consumer protection rights, as well as third parties whose rights have been infringed.

⁷ Directive 2000/31/EC of the European Parliament and of the Council of 8th June 2000 on certain legal aspects of information society services, in particular electronic commerce in the Internal Market (Directive on Electronic Commerce).

⁸ The analysis of the liability laid down by Articles 12 to 15 of the Directive on Electronic Commerce (which contains liability exclusions and limitations) shall apply only to the following on-line intermediaries:

- a) mere conduit activity: those who provide the transmission of information and access to networks.
- b) caching activity: those who copy frequently-requested materials that normally reside on remote servers to local servers.
- c) hosting activity: those who provide storage space on web servers for third party users.

1.2.1.2 The Digital Millennium Copyright Act⁹ (DMCA):

The U.S.A. has included specific regulations in its DMCA regarding the indirect liability of search engines. It stipulates that, under certain conditions¹⁰, the information location tool provider cannot be held liable when dealing with web sites containing illegal material. However, these regulations only apply to indirect liability issues (links to pages with contents of an illegal nature), and do not relate to infringement risks resulting from the activities of the search engine itself. Like the Directive on Electronic Commerce, the DMCA ought also to take into consideration that consumer and user rights must be protected from harm caused by "search AIs", rather than just protecting third parties (such as copyright holders) whose rights have been infringed.

1.2.2 Defects of Quality:

A defect of quality means that consumers' expectations are frustrated regarding the reliability of an Intelligent agent's characteristics (its accuracy; ability to react, sense changes in its environment and respond in a timely manner, etc.).

1.2.2.1 Remedies

Contract Law Remedies

- a) If the "search IA" is a piece of software (*Local IA*), it can be deemed to be a **commercial product**.

E-commerce has no one particularity so that the laws used to implement *Directive 1999/44/EC of the European Parliament and of the Council of 25 May 1999 on certain aspects of the sale of consumer goods and associated guarantees* must be applied, since software is not excluded from the scope of the Directive.

In an attempt to ensure a high level of consumer protection, the Directive establishes that it is the seller's duty to deliver goods, which conform to the contract of sale¹¹.

⁹ Available at : <http://lcweb.loc.gov/copyright/legislation/hr 2281.pdf>

¹⁰ The service provider will not be held liable for referring to sites containing illegal materials or hosting illegal activities if the service provider:

- does not have an actual knowledge that the material or activity is infringing ; in the absence of such a knowledge, is not aware of facts or circumstances from which infringing activity is apparent ; upon obtaining such a knowledge or awareness, acts expeditiously to remove or disable access to the material (1);
- does not receive a financial benefit directly attributable to the infringing activity in a case in which the service provider has the right and ability to control such activity (2);
- on proper notification of claimed infringement, acts expeditiously to remove or disable access to the material (3);

¹¹ Article 2.1 "the seller must deliver goods to the consumer which are in conformity with the contract of sale" and Article 2.2: "Consumer goods are presumed to be in conformity with the contract if they: [...] d) show the

If the “search IA” is a free piece of software (a *Local IA*), the laws used to implement *Directive 1999/44/EC* may not be applied and the situation must be resolved by the application of good faith principles.

b) If the "search IA" is a **service** available on the Net (*Server IA*)

Taking into account that this is the most usual kind of "search IA", several aspects must be considered:

- good faith principles shall apply because regulations regarding this area are unclear and have not been standardised.
- it must be taken into account that compensation is difficult if it is a free service.

Tort Remedies

a) It is uncertain whether national legislations can be applied to software under the provisions of “*Council Directive 85/374/EEC of 25 July 1985 on the approximation of the laws, regulations and administrative provisions of the Member States concerning liability for defective products*” due to the limited kind of damages covered by the Directive¹². It is difficult to imagine that software could cause personal damages such as death or personal injuries. It is also difficult to imagine damages to any item of property.

b) Good faith principles shall also apply to "search AIs" when they take the form of a service (*Server IA*).

1.2.2.2 Disclaimers

Some search IA products and services are offered free of charge, whilst others are commercial products or services. In both cases, before installing or using the IA, you must agree to be bound by the terms of a License Agreement.

quality and performance which are normal in goods of the same type and which the consumer can reasonably expect, given the nature of the goods [...].

¹² Article 1: "The producer shall be liable for damage caused by a defect in his product."

Article 9: "For the purpose of Article 1, "damage" means:

(a) damage caused by death or by personal injuries;

(b) damage to, or the destruction of any item of property other than the faulty product itself,

with a threshold lower than 500 ECU, provided that the item of property:

(i) is of a type ordinarily intended for private use or consumption, and

(ii) was used by the injured person mainly for his own private use or consumption.

This Article shall be without prejudice to national provisions relating to non-material damage."

The problem is that License Agreements often contain conditions regarding no warranty and the limitation of liability, and these must be taken into account in any analysis of consumer protection ¹³.

The applicability of national legislations under the provisions of *Council Directive 93/13/EEC of 5 April 1993 on unfair terms in consumer contracts* could imply that some of these terms might be considered unfair terms for the consumer.

1.2.2.3 Could “deep linking” be considered a defect of quality?

a) What is "deep linking"?

The two main activities of an intelligent agent as a search engine are to index new web sites or to display a list of links to web sites where the information requested by an Internet user is located. Both activities could mean that the user goes directly to an internal part of the Web site (called “deep linking”), so that the home page is not seen. In the context of European Law, this might violate moral rights such as copyright law, but the most important point, as regards consumer protection, is that the General Terms & Conditions could be omitted by using deep links.

b) Could deep linking harm the consumer?

The use of deep links might mean that the consumer will not be affected by the negative aspects of the General Terms & Conditions cited on the home page, but it also means that positive aspects may not apply either because the consumer is unaware of them. Deep linking could result in failing to take advantage of offers that are available on the home page.

c) Should the consumer bear the risk of the negative consequences of deep linking?

It is difficult to consider that deep linking is a quality defect, because it is an automated search, meaning that the search IA has control of its own actions.

¹³Some examples:

- "They do not warrant, guarantee or make any representations that the functions contained in the software will meet licensees' (users') requirements or that the operation of the software will be uninterrupted or error-free."

- "The software is provided "as is" without a warranty of any kind, neither expressed or implied, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose, or of any other type, whether expressed or implied."

- " no warranty with respect to the accuracy, correctness, timeliness or suitability of the content of any service or information provided by any search engine or directory, and take no responsibility therefore".

1.2.3 Defects of Neutrality

1.2.3.1 What is a defect of neutrality?

A defect of neutrality refers to the impartiality of the content of any service or information provided by search engines. In most cases, it affects *Commercial Search IAs*.

1.2.3.2 An analysis of the conduct of an IA

- a) Could a defect of neutrality be considered the same as misleading advertising?

If neutrality is advertised as being a characteristic of the IA and this is not so, it is obvious that it could be considered to be misleading advertising.

This could be the result of the application of *Directive 97/55/EC of the European Parliament and of the Council of October 6th 1997. This directive amended Directive 84/450/EEC, which dealt with the topic of misleading advertising, so as to include the question of comparative advertising.*

What is open to discussion is whether, when neutrality is not advertised as being a feature of the IA, it could be considered to be an implicit characteristic.

- b) Could a defect of neutrality be considered a defect of quality?

If a defect of quality signifies that consumers' expectations are frustrated regarding the reliability of the intelligent agent's characteristics (e.g. neutrality), it is clear that this non-compliance could imply a defect of quality¹⁴.

1.2.3.3 An analysis of the conduct of the company advertised.

Can *unfair competition* be understood to happen when a search engine operates for some companies, giving information about them alone, and not about other companies that might equally well satisfy the user's request?. The answer is unclear.

¹⁴ See 1.2.2 Defects of Quality

1.3 “Decision IAs” and Consumer Protection

1.3.1 The legally binding condition of contracts executed by means of decision IAs

- a) An overview of the problem.

The validity of contracts executed by means of IAs is questionable.¹⁵

If classic contract law theory is applied, contracts concluded by intelligent agents could be not valid¹⁶. However, new rulings could provide other possible points of view.

Different solutions must be looked into: for example, to give IAs the status of legal persons; to consider that the contract concluded by an IA is a result of programmed consent; or to apply the appearance theory.¹⁷

Clause n°34¹⁸ and Article 9.1¹⁹ of the Directive on Electronic Commerce are on the way towards making contracts executed electronically workable.

- b) The viewpoint of the consumer

Can both the aforementioned legal references help us to defend the fact that contracts concluded by electronic agents are valid? .

¹⁵ For further information: Emily M. Weitzenboeck, Draft Report on Legal Aspects of Electronic Agents, pp.29

¹⁶ For further information: S. Cavanillas Múgica and A. Martínez Nadal, Research paper on Contract Law, see site: (www.jura.uni-muenster.de/eclip)

¹⁷ “La conclusion du contrat par un agent électronique”, Ives Poulet ; Cahiers du CRID-n°17, pp. 137

The first solution is to recognise electronic agents as legal persons, so that a contract concluded by them could be valid because the electronic agent is able to issue autonomous consent. This solution has the advantage that it does not affect the theory of contractual freedom.

The second solution could consider that the conclusion of a contract by means of electronic agents is the result of programmed consent. (the solution adopted by the most French authors). The legal entity uses the programme as a means of communication, like a telephone or fax. This solution does not take into consideration that intelligent agents are autonomous, and thus have control of their own actions. Neither does it consider that AIs are able to react. Intelligent agents sense changes in their environment and respond in a timely manner. In this respect, the comparison is not correct.

The appearance theory: the messages issued by an electronic agent are the implicit expression of the users will.

¹⁸ “Each Member State is to amend its legislation containing requirements, and in particular, requirements as to form, which are likely to curb the use of contracts by electronic means. [...]. The result of this amendment should be to make contracts concluded electronically workable. [...].

¹⁹ Article 9.1: “Member States shall ensure that their legal system allows contracts to be concluded by electronic means. [...].

In any event, the consumer deserves to receive an affirmative answer because the supplier must assume the consequences of his chosen method of negotiation. If negotiation via the web depends upon an IA, the supplier cannot question the contract's legally-binding nature.

1.3.2 Mistakes by Decision IAs when concluding a contract

- a) An overview of the problem

For some authors, like S. Cavanillas Múgica²⁰, the general validity of contracts concluded by electronic agents is not a real problem, but rather the result of an out-of-date vision of civil and commercial law. The real problem is how to deal with mistakes by electronic agents.

Must the salesman or the supplier bear the risk if the IA does not work or works badly, as a consumer right?

- b) The viewpoint of the consumer.

There are two possible alternatives:

- a) To apply the rules of contractual mistakes analogically: contractors who use an electronic agent would not be liable if they could prove that a technical mistake had occurred that was not due to negligence on their part.
- b) Or to apply the rules of agency to solve this problem: a strict rule based on the relationship between risk and confidence, so that contractors using an electronic agent would quite simply bear the risk of its mistakes. But the argument is not so simple that one can apply the rules of agency to electronic agents as if they were people. The idea is that the risk/benefit analysis of the legal principle is similar in the case of intelligent agents, (e.g. the risk of the IA acting beyond its scope of authorisation versus the benefits of the shop-owner not having to stay permanently in his shop), as is the legal approach to the question, (e.g. the potential reliance of the buyer on the invulnerability of the shop's contracts, the probability and costs for the principal of unwanted contracts).

A possible consequence is that the cost of the probability of unwanted contracts being concluded by mistake and the cost of the technical tools and procedures needed to reduce the probability of mistakes would be governed by the *principle of good faith*. Therefore, electronic suppliers would share the payment of the cost of confidence in electronic commerce.²¹

²⁰ Santiago Cavanillas Múgica and Apol-lonia Martínez Nadal, Research Paper on Contract Law: available at www.jura.uni-muenster.de/eclip

²¹ An example in February 2000: the on-line shop Buy.com must indemnify to consumers because of a mistake in the price of the product, available at www.buy.com

1.3.3 Decision IAs whose role is to check availability

a) An overview of the problem

One of the possible functions of an AI is to inform consumers about the availability of the product that they are interested in. The transaction might be completed and, then, the consumer might find that the product is unavailable. In this sense, the IA might work as a programme linking the commercial web pages to information regarding stock, in such a way that the consumer is only allowed to reach the end of the process if the product to be purchased is in stock.

b) Is it a consumer right to know if the product is available then and there?

The Directive on Electronic Commerce does not address that right, whilst Directive 97/7/EC of the European Parliament and of the Council of 20 May 1997 on the protection of consumers in respect of distance contracts regulates that the consumer must be informed about the availability of the product and must be able to obtain a refund of any sums he has paid as soon as possible and in any case within 30 days²².

c) Should the consumer, at least, be informed that the shop in which he is buying products includes AIs, which check availability in a synchronic way before he actually makes a purchase?

The electronic trading operations should be synchronic. In other words, the products offered and acceptance by the consumer should be simultaneous, because the technical means are already possible and consumers prefer this kind of sales operation. As electronic commerce is a very competitive market, it is easy to predict that commercial web pages will adopt this synchronic design. Once these synchronic systems become the “standard practice”, electronic trading pages which do not provide this model must inform the consumer “clearly, comprehensively and unambiguously”²³. It could be said that it is the duty of every electronic sales company, as a consumer right, to provide this type of IAs.

²² See article 7.2:

"Where a supplier fails to perform his side of the contract on the grounds that the goods or services ordered are unavailable, the consumer must be informed of this situation and must be able to obtain a refund of any sums he has paid as soon as possible and in any case within 30 days"

²³ Unpublished conference speech by Santiago Cavanillas Múgica.

