Artificial Intelligence initiatives in a Spanish International Law Firm: Cuatrecasas

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Abstract. This position paper describes how Cuatrecasas, as a leader and innovative Law Firm in Spain, understands Artificial Intelligence, and how it will impact on and disrupt its current business. In this workshop, Cuatrecasas will share the strategy, their vision and some of the most relevant projects and IT initiatives related to Artificial Intelligence, Machine Learning and Natural Language Processing from a generic abroad spectrum solution to much more specific ad-hoc solutions.

Keywords: Natural Language Processing · Contract and Document Review · Contract Automation · Due Diligence · Compliance

1 Introduction

Cuatrecasas is a law firm present in 12 countries with a strong focus on Spain, Portugal and Latin America. It represents companies that are leaders in their sectors, advising them on their investments in the major markets. Some relevant information about Cuatrecasas is:

- **Multidisciplinary team** with 1,000 lawyers, organized by business and industry-specific practice areas, who provide the knowledge and experience of the business law specialities applicable in each case.
- **Clients and experience**. Cuatrecasas maintains close, long-standing relationships with leading companies in every sector. We are honoured to have gained their trust and in-depth knowledge of their businesses. Thanks to these companies, we have acquired invaluable experience advising on the most complex aspects of every specialty area, both in recurring matters as well as in transactions.
- **Value**. Cuatrecasas works with a new approach to client service, combining collective knowledge with innovation and the latest technologies to offer contemporary, efficient advice and to provide solutions to the most complex situations, creating value for the client, the team and the wider community.
- **Geographical capacity**. We connect regions through our client-tailored model that offers the best team for each particular case, depending on the jurisdiction, specialty area and complexity required.
- **Our network** consists of 16 offices on the Iberian Peninsula that are coordinated with our teams in Beijing, Bogotá, Brussels, Casablanca, London, Luanda, Maputo, Mexico City, New York, São Paulo and Shanghai, thus

optimizing efficiency of resources and client proximity, and benefiting from the different time zones. Our international desks (covering Latin America, Asia, France, Germanic countries and the Middle East) and over 20 country-specific groups guarantee the comprehensive approach of our legal advice from Spain and Portugal.

– **Services and specialty areas**. Cuatrecasas advises on all areas of business law, applying a sectoral approach and covering all types of business. Our law firm also combines maximum technical expertise with business vision to provide responsible and innovative legal advice for practical solutions. Figure 1 shows the main specialty areas in Cuatrecasas.
– **Awards**. Figure 2 depicts some of the most relevant awards that Cuatrecasas has won regarding innovation and leadership in the main areas of Law.

- **Specialty areas**
  - Agriculture and Food & Beverage
  - Arbitration
  - Capital Markets
  - Competition and EU Law
  - Construction
  - Corporate and Commercial
  - Corporate Compliance
  - Data Protection
  - Energy
  - Environment
  - Family Business
  - Finance
  - Financial Institutions
  - Financial Regulatory
  - Foundations and Non-profit Organizations
  - Hotels, Tourism and Leisure
  - Infrastructure and PPP
  - Insurance and Complementary Social Welfare
  - Intellectual and Industrial Property
  - Labor and Employment
  - Litigation
  - Logistics and Transport
  - Mediation
  - Mergers and Acquisitions
  - Pharmacy, Health Products and Biotechnology (Life Sciences)
  - Private Client
  - Private Equity
  - Public Law
  - Real Estate
  - Restructuring and Insolvency
  - Retail and Consumer
  - Sports
  - Tax
  - Technology, Media and Telecommunications (TMT)
  - Town Planning
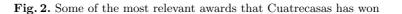 - White Collar Crime

Fig. 1. Some of the most relevant awards that Cuatrecasas has won

2 Artificial Intelligence in the Legal Sector

Artificial Intelligence (AI) is taking the legal world by storm and lawyers are embracing the change, despite their traditional resistance to technology. In today's world, data is growing explosively. While that massive store of data contains correspondingly voluminous and useful information–especially for the practice

Fig. 2. Some of the most relevant awards that Cuatrecasas has won

of law–it also takes massive time to analyse. Thankfully, computers are evolving just as quickly as the data boom, and theyre here to save us from ourselves. These programs can quickly learn to complete data-intensive tasks that were previously relegated to bored and weary humans. By recognizing patterns in the relationships between words or data points, computers learn how to identify relevant information, recognize mistakes, and spot inconsistencies–all faster, and usually better, than humans do.

The primary areas where AI is being applied in the law, so far, include the following broad categories:

– review of documents for discoverable or otherwise relevant information, generally referred to as technology-assisted review (TAR)
– legal research through automated searches of a universe of case law and statutes
– contract and legal document analysis
– proofreading, error correction, and document organization

The benefits provided by the application of AI in the law firms field are:

– AI Saves Time
– AI Allows Earlier (and more accurate) Risk Assessment
– AI Produces Higher-Quality Work
– AI Improves Organizational and Logical Structure
– AI Enhances Creative Analysis and Identification of Persuasive Precedents
– AI Reduces Attorney Stress and Frustration
– AI Improves Client Relations

All these benefits are interrelated, with each type of benefit leading to and fostering additional benefits. That interrelationship also harnesses the power of momentum. Just as an early mistake can rapidly spiral into more (and more serious) later mistakes, high-quality work also builds on itself and supports the production of more good quality work.

In short, deploying an AI solution can create a positive momentum throughout a law firm. As attorneys come to trust AI software, they can relax and let the computers attend to the monotonous details. As a consequence, the AI

adoption is increasing, CBRE[1] published a summary from a survey carried out in London among 100 law firms [1]. This survey reveals that 48% are already using AI and a further 41% will start to do so in the near future. The most common uses of AI apparently include legal documentation generation and review (mentioned by 63% of firms), e-discovery (63%), due diligence (47%), research (42%), compliance and administrative support (both 32%).

A frequently expressed concern is that increased reliance on AI will lead to job cuts in the sector, particularly amongst junior lawyers and support roles. According to CBRE's research, 45% of firms surveyed expect to see headcount fall at these levels. However, only 7% expect AI to lead to a reduction in headcount at a senior level.

3 Artificial Intelligence in Cuatrecasas

Cuatrecasas has been actively following for many years, piloting and searching for applications of AI and Machine Learning (ML) within the firm. Currently our lines of work revolve around two large blocks / lines of generic work: the first focuses on the **Automating Low Value Tasks** and the second aimed at complementing and supporting the lawyer in the **Resolution of Simple Legal Issues**. All this plus a third line of Advanced Business Analytics incorporating predictive analytics into our production, commercial and compliance processes.

This current situation is part of a long history around AI and ML. It all started after the appearance in the press of IBM Watson in the Jeopardy contest in 2011 and materialized (after many efforts) in a workshop and a POC of possible IBM Watson applications in Cuatrecasas at the end of 2015. In this period, Cuatrecasas focused on analysing technology and the state of the art. After ruling out the approach proposed by IBM with Watson as expensive and slow, Cuatrecasas decided to evaluate and finally bet on other more affordable solutions. It was at the end of 2015 that SEMANTI-K was acquired, a solution from a small Spanish company named ISOCO specialized in technology based on Semantics and the recognition of natural language (NLP). ISOCO was lately acquired by Expert System and Cuatrecasas technologically decided to migrate to the Expert System's product Cogito Discover [2].

In parallel and during the following years the IA and the ML has been consolidating within the legal sector and nice solutions have appeared, especially oriented to the Anglo-Saxon market (trained in English), focusing initially on the analysis and automatic classification of documents in the field of Due Diligence. In Cuatrecasas we decided to bet on Kira [3] (after evaluating many similar

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[1] CBRE Group, Inc. is the world's largest commercial real estate services and investment firm. Home Page available at: https://www.cbre.co.uk/about-cbre/corporate-information

[2] https://www.expertsystem.com/products/text-analytics-software-cogito-discover/

[3] https://kirasystems.com/

solutions like eBrevia [4], RAVN [5] and later Luminance [6]) to pilot and start training with documents in Spanish.

This line of solutions aimed at support in operations and document / contract review was complemented in 2017 with the Doxray [7] collaboration, a Dutch start-up that championed a general solution based on Deep Learning and that wanted to enter the legal sector for non-English speaking. Doxray, unlike the previous solutions, allows to customize and adapt the solution to specific use cases and on them we are continuously working creating "specific products" for operations and recurring problems of our lawyers. On this platform we have created a solution for real estate transactions (massive analysis of real estate assets in transactions of purchase and sale of companies and / or assets, starting from the simple notes of the property registry but integrating with commercial register, cadastre, ...).

And also integrating the advances in training in the analysis of frequent contracts in due diligence of M & A, such as Lease Agreements and Distribution Contracts, where the simple notes associated with the properties usually appear or are also provided.

And many more things, we analyze and test the different cognitive service providers to integrate them in our projects / solutions, from the Cognitive Services of Azure, IBM Bluemix through the Google Cloud Platform or the SAP Hana Cloud Platform.

Currently, Cuatrecases has several initiatives and projects around these technologies in the office, which we will explain and show in the workshop:

- Analysis of Simple Notes with Doxray (solution and case of success)
- Experiences and advances in Contract Review with KIRA and Luminance
- Automatic document classification
- Cuatrecasas WORD INTELLIGENCE as an integrating front-end tool and facilitator of the lawyer's work in the process of creating legal documents
- Use case of Cuatrecasas Labour Law within the LYNX H2020 project [2]
- and other pilot experiences related to BOTS and the concept of the VIRTUAL ATTORNEY

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[4] https://ebrevia.com/

[5] https://imanage.com/product/ravn/

[6] https://www.luminance.com/

[7] https://doxray.com/