

# NDDM

Master Degree Program in **Data-Driven Marketing** 

# **Digital Marketing Strategies in a Neo bank**

Implementation of SEO & Sentiment Analysis

Adrià Camps Orihuela

Internship Report presented as partial requirement for obtaining the Master Degree Program in Data-Driven Marketing

NOVA Information Management School Instituto Superior de Estatística e Gestão de Informação

Universidade Nova de Lisboa

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Internship Report presented as the partial requirement for obtaining a Master's degree in Data-Driven Marketing, specialization in Digital Marketing and Analytics

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# **STATEMENT OF INTEGRITY**

I hereby declare having conducted this academic work with integrity. I confirm that I have not used plagiarism or any form of undue use of information or falsification of results along the process leading to its elaboration. I further declare that I have fully acknowledge the Rules of Conduct and Code of Honor from the NOVA Information Management School.

# DEDICATION

This report is dedicated to my parents, for always being by my side and placing their full trust in all my life projects. Also, thanks to them I have been able to study what I have been always interested in.

I would also like to thank the company MyInvestor for accepting the proposal to do the internship for 1 year in their offices in Madrid. I have been fortunate to be part of a beautiful moment of exponential growth in the Spanish market. Thank you for involving me in your company project.

Last but not least, I would like to make a special mention to my two supervisors: Prof. Doutor Nuno Miguel da Conceição António and Prof. Zélia De Jesus Calvário Raposo Dos Santos for having accompanied and guided me throughout the whole process.

# ABSTRACT

In the financial sector it is crucial to have a good SEO strategy due to the highly competitive nature and sensitivity of the information handled. In addition to providing brand visibility, it generates trust and credibility, capturing quality leads and positioning the brand as an expert in the sector, thus building long-lasting relationships with customers.

This Internship Report provides an overview of the strategies and techniques used to improve the SEO and Social Media statistics of MyInvestor, a Spanish digital banking company. The Internship took place in the Digital Marketing Department, between the dates September 5 2022, and July 31 2023.

The objective of the internship was to apply the knowledge learned in the first year of the master's degree, specifically, to perform an SEO and Sentiment Analysis audit to establish in order to create a marketing strategy.

This work has significant implications for the neo banking sector. By conducting a competitive analysis of companies operating in the Spanish digital banking market, strengths and weaknesses are identified in terms of web content, user experience, products and social media campaigns. In addition, collaboration with influencers is highlighted as a strategy to increase brand visibility and reach in the Spanish market. An analysis of online coverage, online sentiment, online engagement is also performed to understand public opinion about the brand and find new influencers. These strategies and techniques applied in the work aim to improve search engine rankings and increase brand visibility in the neobank sector. In conclusion, this work contributes to strengthen the company's presence and reputation in the neo banks market in Spain.

# **KEYWORDS**

Neo bank, On-Page SEO, Off-Page SEO, Sentiment Analysis

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# 1. INTRODUCTION

Technology is changing the world we live in. It always has and always will. In fact, if we take a look at the history of technological evolution, the changes and growth have been exponential. According to Moore's Law, the density of transistors and computing power doubles every two years (Powell, 2008). Following the words of Gordon Moor's law (Moore, 1965) created in 1965, the famous computer scientist Ray Kurzweil expanded that same law in 1999 with his book "The Age of Spiritual Machines". In his book, "The Law of Accelerating Returns" Kurzweil states that the fact that technological evolution is exponential means that in the 21st century, we will not experience a technological evolution of 100 years, but an evolution equivalent to 20.000, at today's rate (Kurzweil, 2004). It is crazy just to think about it.

We can appreciate this phenomenon in many of today's technologies. A clear example is the use of smartphones (Triggs, 2020). In 2007 Steve Jobs introduced the first iPhone, laying the foundations of what a smartphone should be (Mukherjee, 2022). Sixteen years later, its integration into our society and way of life has been extremely fast, to such an extent that it has become one more "limb" of our body. According to a study realized by Comparitech, worldwide people spend an average of 6 hours and 37 minutes a day looking at a screen, of which 2 hours and 31 minutes are scrolling through social media (Moody, 2023).

Digitalization has also had a significant impact on the financial sector, especially on competition between commercial banks and financial technology companies. FinTechs have entered the financial services sector and offer products that overlap with those offered by traditional banks (Mavlutova & Volkova, 2019). A Financial Technology, also known as Fintech, is used to help companies and consumers in their financial environment. These technologies are implemented in sectors like education, banking, investment management and cryptocurrencies, among others (Kagan, 2023). This growth is driven by several factors, including increasing adoption of digital technologies, growing demand for alternative financial services, and the desire for more convenient and efficient financial solutions for customers. According to Deloitte's report on Fintech published in 2020, Spain would rank third in Europe regarding the number of Fintech companies (Deloitte Financial Advisory Netherlands, 2020).

The number of hours we spend in front of a screen, together with the appearance of new technologies adapted to the new times, has made us permanently connected and more accessible. However, just because it is more accessible to reach people today does not mean it is an easy task. Competition is greater and more ferocious than ever. For this reason, it is crucial that companies not only have an online presence but also build a solid and clear strategy to stand out in the market. The growing importance of marketing is reflected in numbers according to a study by AMES (Marketing Association of Spain), investments in digital marketing in 2021 amounted to 3,188 million euros. Compared to the previous year, this was 9.8% and represented 11.2% of total marketing investment, so its weight increased from 2020 (10.9%). Digital advertising accounted for 18.7% of total advertising investment and 58.6% of total advertising investment in traditional media (Amkt & Infoadex, 2022).

# **1.1. CONTEXT**

#### 1.1.1. The company: MyInvestor

The idea for this work stems from the student's experience in an Internship at MyInvestor: a 100% digital Spanish Neo bank founded in 2017 that does not reach 100 workers. MyInvestor is not just a conventional banking investment platform. It is an open architecture platform that commercializes funds, plans, portfolios, crowdfunding projects, mortgages, credits and loans. As of today, it only operates in the Spanish market.

In recent years, the business has grown with surprising numbers, reaching the end of 2022 with more than 150.000 customers and 2.300 million euros of turnover. Due to these incredible numbers, this year, 2023 MyInvestor has decided to become a full-fledged bank and be able to operate under its own license (MyInvestor, 2022b).

Among its offer of financial products, the "Paid bank Account at 2% (APR) up to  $50,000 \in$ " stands out as one of the Spanish bank accounts with the best conditions.

Also, it is worth mentioning its great offer of Investment funds, with more than 1,700 funds of active and indexed management, where it can be found prominent managers such as Vanguard, iShares, Amundi, Fidelity and NN (Goldman Sachs). Customers can access all these investment funds without added fees or minimum investment. It also offers a wide range of shares and ETFs, totalling more than 7,300. This offer is also accompanied by little commissions: 0.12% sales and 0.30% currency exchange (MyInvestor, 2022a).

Finally, one of its star products is its "robo advisor": an automated investment management tool with a minimum investment of 150€ and the lowest commissions in the Spanish market.

A Neo bank is a type of digital bank that operates exclusively online without any physical offices. This new type of bank offers financial services such as checking and savings accounts, loans, and credit cards through mobile apps and websites. They typically have lower operating costs than traditional banks, which allows them to offer more competitive interest rates and fees. Neo banks also tend to have a more user-friendly and personalized customer experience, with features such as budgeting tools and real-time spending notifications (Temelkov, 2020).

The term "Neo bank" has been around since about 2016 (Seon.io, 2023a). Still, the first digital banks, previously called challenger banks, began appearing the UK Fintech landscape after the 2008 financial crisis (Seon.io, 2023b).

#### 1.1.2. The Marketing Department

When the Internship started in September 2022, due to the profile of studies that I presented, I was assigned everything related to the SEO positioning of the company. Two other people covered the social media and SEM campaigns, but the SEO part was the most forgotten, and a backup was needed.

Upon this problem was detected, it was determined that the main objective of the Internship would be the initial evaluation of the company's SEO through an audit, the proposal of objectives to be achieved, the establishment strategies to achieve those objectives and continuous evaluation and control.

The Marketing Department consists of:

- A person who is dedicated to social networks, in tasks such as: creating and publishing posts, collecting information from customer feedback, maintenance of social networks.
- The Marketing Department Coordinator. The responsible does all kinds of tasks: from SEM campaigns, constant communication with other departments and creation of campaigns.
- SEO and Digital Marketing Technician: This has been the role I have played during the Internship. Responsible for the SEO of the company, as well as helping in creating content for social networks, competitor analysis and market analysis.

It should be added that the Marketing Department is closely linked with the communication department, formed by two people:

- One person responsible for creating blog content: articles, podcasts and interviews.
- One person responsible for media relations, as well as the creation of campaigns together with Marketing.

Finally, the department has direct contact with all departments, especially the IT department, which helps to implement technical changes to the website.

#### 1.1.3. Internship goals

The opportunity provided by the University to do an Internship in a company has been considered, among all, the most interesting option to complete the Master Thesis. In the Internship, the student has the opportunity to apply the concepts and skills learned during the first year of the master's degree in a company. In addition, the University offers the opportunity to start in the working world in a direct and immersive way, merging the academic with the professional environment.

The intention from the beginning was to do the Internship in one of the companies offered within the University's job board. The opportunity appeared to join the marketing team of MyInvestor and do the Internship in their offices in Madrid. Due to the good reputation of the company, the vertiginous growth it is having and the sector where it operates, I saw a wonderful opportunity to practice all the knowledge learned during the master's degree and, therefore, to do the Internship with the respective Master Report.

During these 11 months of Internship, the Neo bank MyInvestor was in a phase of growth through customer acquisition and brand positioning in the Spanish banking sector. It is deserving of attention that the company was created in 2017. At the time of joining, the company had about 60 employees, and by the end of the Internship, it already had more than 100. This demonstrates the rapid growth of the Neo bank.

At the time of joining the Marketing Department of MyInvestor, it was detected that certain aspects of Digital Marketing, specifically SEO, needed improvement, in addition to improving the content on the networks. Knowing the stage in which the company was, it is expected that these weaknesses were visible and needed improvement.

The objective of this Internship is to do an SEO audit of the company, as well as a Sentiment Analysis of the Social Networks to know what consumers think of the company, which products to promote more and establish a calendar of publications.

# 2. STATE OF THE ART & THEORETICAL FRAMEWORK

This chapter contains a theoretical contextualization necessary for a better and complete understanding of the theoretical part and implementation in the internship. Below, specific theoretical concepts from the world of Digital Marketing and Digital Banking are defined, which help to understand better the context.

# **2.1. SEARCH ENGINE OPTIMIZATION (SEO)**

SEO stands for Search Engine Optimization. It is the activity dedicated to the process of continuous improvement of a website in order to increase its visibility on search engines (Goodwin, 2023). In other words, SEO consists of getting a web page to rank higher in the search results list of search engines (Cushman, 2018).

As mentioned above, search engines such as Google use an algorithm with a set of rules that determine which pages should be displayed in what order for a given query. Over the years, this algorithm has evolved to become increasingly complex and with a greater number of rules to determine the rankings in the SERP (Optimizely, 2023).

## 2.1.1. Search Engines

A Search Engine is a computer system that collects and stores data about websites (Yalçin & Köse, 2010). This computer system is able to return results immediately, thanks to the continuous "scanning" of Internet web pages (BDC.Ca, 2023). This scanning consists of collecting data from web pages and indexing and storing them in the database.

When a user enters one of these search engines and types in a search term, the search engine searches all the content and keywords it has previously "indexed" and, using specific criteria, returns the user a list of the most relevant websites according to those criteria.

#### Crawled-Based Search Engines

The most widely used and popular search engine in the world is Google. This engine is known as a Crawler-Based Search Engine (Sullivan, 2002). Crawler-based search engines are characterized by three characteristic elements (Figure 1):

- a) <u>Spiders</u>: Also known as crawlers, are "robots" that enter web pages to read and analyse them from top to bottom. Periodically, they repeat the process to see if there have been changes. This process is known as "crawling". Everything the spider finds on the web page is recorded in the Index(Sullivan, 2002).
- b) <u>Index (indexing)</u>: This process consists of collecting, organizing and storing the content previously crawled by the spiders in a central database: the Index (Morris, 2022).

c) <u>Search Engine Softwar</u>e: Once all the web page information is indexed in the software, the software examines and filters the millions of indexed pages to find matches for a search and ranks those searches in order of what is considered most relevant to the user performing the search (Sullivan, 2002).

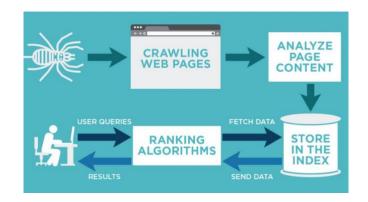


Figure 1. Crawling & Indexing process (Bergeron, 2019)

# 2.1.2. On-Page SEO

On-page SEO refers to optimizing individual web pages to rank higher and gain more relevant traffic on Search Engines. On-page optimization involves optimizing both the content and the HTML source code of a page, as opposed to off-page optimization, which refers to links and other external signals (Ghulam et al., 2017).

This process is important because it tells the Search Engine (Google) all the relevant information on our web page as well as optimizing the content for both humans and Search Engine robots.

The elements to consider are the following (Decker, 2022):

#### Content elements

a) <u>High-quality Page Content</u>: The content of a company website must tell both, search engines and customers (or potential customers) what are the company's products and services . Therefore, it is necessary to combine Content Marketing with SEO strategies so that the content can reach the target. It is crucial that the content is relevant and that, together with the appropriate SEO strategies, coherent content is achieved, made for humans and not for machines (McCoy, 2022).

#### HTML Elements

 a) <u>Page Titles</u>: Page titles must have a well-constructed title tag. A title tag is an HTML element that indicates what the title of the web page is. HTML code example:

Title tag from <u>https://myinvestor.es/</u>

This title tag appears in the Search Engines (SERP) as the clickable title. This title must be a concise and precise description of the content that will be found on the page, as well as include the keyword on which we want to position ourselves (MOZ, 2023). According to the SEO community, the title of the web page must have a length between 55 and 70 characters (Taher,2022).

b) <u>Headers</u>: Header tags or a webpage are HTML elements that identify key sections of a webpage. They help Search Engines more efficiently identify and understand what the content of the webpage is about, as well as the structure of the webpage (V. Patel & D. Gaharwar, 2018).

The Header tags are important to show the structure of the website (Aguilar, 2018).



Here in Figure 2 is a Header tags example:

Figure 2. Header Tag of a MyInvestor website

<H1> Headings should be used only once for the main headings. It must include the keyword on which we want to position ourselves.

<H2> Corresponds to the subheadings. In this one, must be indicated the words derived from the keyword. There can be several H2 in the same text.

<H3> Subtitles within the H2. They have little impact on SEO compared to the previous 2. They are not always necessary, but they help to further divide the content.

c) <u>Meta-Descriptions</u>: The Meta-Description is an HTML tag consisting of a short text summarizing the content of the web page (Toonen, 2023). It is

recommended that the Meta-Description should not exceed 160 characters (Fu et al., 2014); otherwise, the content in it will be displayed incompletely in Google.

Figure 3 is an example of a Meta-Description. In this case the Meta-Description text is:

"Somos el neobanco de la libertad: ni condiciones ni comisiones. Cuenta gratuita remunerada al 2% TAE el primer año hasta 50.000€".

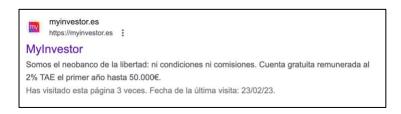


Figure 3. Meta description example MyInvestor.es

d) <u>Image Alt-text:</u> SEO strategies do not only apply to text but also to images. It is an HTML attribute consisting of a concise and descriptive text of the image. This text is not displayed by default and it only appears when the image cannot be loaded properly and therefore cannot be displayed. This text is essential both to give information about the image to Search Engines and improve SEO, also for blind people and when you want to link an image to another website (Olawanle, 2022).

In Figure 4, there is an example of an Alt text, extracted from an image in MyInvestor's webpage:

It is writed in Spanish:

alt ="hombre con americana sonríe y muestra la pantalla de una Tablet a una mujer"

In English means:

alt="man in blazer smiles and shows a tablet screen to a woman"

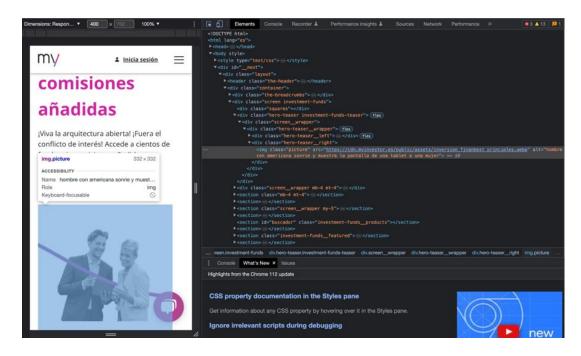


Figure 4. Image alt-text Example

#### Site Architecture Elements

a) <u>Page URLs:</u> An URL means Uniform Resource Locator and is the location of any website or file on the internet (Hughes, 2022). URL is built in different parts, as it can be seen in the example of Figure 5:



Figure 5. Parts of an URL

An URL with a good SEO, has to be simple, easy to read and it includes keywords in order to describe the content of the webpage. Simple URLs are user-friendly and help Search Engines better to understand the page content (Krause, 2022).

b) <u>Internal Linking</u>: This term refers to internally linking web pages of the same domain. When the user clicks on an internal link, it redirects to another web page. These internal links can be words, phrases, or images. They are important both to help the user find the information they are looking for

and to help Search Engines understand the structure and hierarchy of the website faster (Clark, 2023).

- c) <u>Mobile Responsiveness</u>: Searches through mobile phones is increasing, so companies not only need to optimize their content for SEO and position themselves in search engine results but also that the website adapted to the mobile format. (Howard, 2018).
- d) <u>Site Speed</u>: It is the metric that measures how long it takes to load the content of a web page (Faw, 2020). From an SEO point of view, the speed of a website is essential and should be checked constantly. If our website has fast loading times, it will make Google rank us higher.

When we talk about site speed, we do not refer to a single metric but as a general term since there are many ways to measure it (Camarena, 2023). The most common speed metrics are:

- Time to First Byte (TTFB): How long the page takes to load.
- *First Contentful Paint (FCP):* How long it takes for the user to see a page element, such as an image.
- Onload time: The time it takes for the web page to load its content.

Other important metrics to optimize site speed are the Core Web Vitals:

- *Largest Contentful Paint (LCP)*: How long it takes to load the main content of the page. It should not exceed 2.5 seconds.
- *First Input Delay (FID):* How long it takes for the user to interact with the page. It should be less than 100 milliseconds.
- *Cumulative Layout Shift (CLS):* Measures the frequency at which users experience changes in the page layout. It should be less than 0.1 seconds.

In Figure 6, it can seen the Core Web Vitals put in order and their acceptable load ranges:

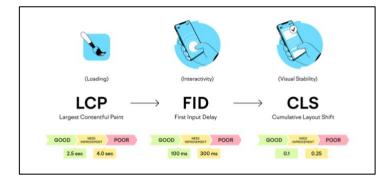


Figure 6. Core Web vitals (Camarena, 2023)

# 2.1.3. Off-Page SEO

Off-page SEO is a search engine optimization strategy focusing on the actions taken outside the website to improve its positioning in search engine results. In other words, all the strategies carried out to get inbound links or backlinks are known as link building (Lopezosa et al., 2019).

The main objective of Off-page SEO is to increase the authority and relevance of a web page in search engines, achieved through high quality link building and creating a network of links pointing to the page in question.

According to the study on the different SEO techniques that exist (Muley & Hande, 2022), it is mentioned that the most common off-page techniques that have the greatest impact on search engines are:

- 1. <u>Link building</u>: It consists of getting quality links from other websites to your site. This can include creating quality content that other websites want to link to, participating in link directories, and collaborating with other websites to exchange links.
- 2. <u>Social media marketing</u>: This is about promoting your website and content on social media to increase visibility and traffic. This can include creating profiles on social networks, publishing relevant and attractive content, and participating in groups and communities, among others.
- 3. <u>Influencer outreach</u>: Collaborate with influencers in your niche to promote your website and content. This can include identifying influencers in your niche, building relationships with them, and collaborating on joint projects.
- 4. <u>Guest blogging</u>: writing content for other websites in exchange for a link back to your site, and this can help increase visibility and traffic to your website.
- 5. <u>Commenting on blogs and forums</u>: This consists of participating in relevant conversations on blogs and forums to increase visibility and traffic to your website. This can include posting useful and relevant comments and building relationships with other users.

# 2.1.4. White Hat Strategy

White Hat SEO refers to the ethical and legitimate techniques used to improve a website's search engine rankings. These techniques follow the guidelines and rules set by search engines, such as Google, to ensure that the website provides high-quality content and a positive user experience (Dixit & Agarwal, 2015).

Some of the most popular techniques used in White Hat SEO include creating quality content, using structural markup to separate content from presentation, optimizing titles and meta tags, building quality inbound links, and conducting effective keyword research and use.

One of the key benefits of White Hat SEO is that it is a long-term investment in a website's success. By following ethical practices and providing high-quality content, a website can establish itself as a reliable and trustworthy source of information for users. This can lead to increased traffic, higher search engine rankings, and ultimately, more conversions and revenue.

On the other hand, Black Hat SEO are those SEO techniques considered unethical in order to improve the ranking of a website in search engines. These techniques, unlike White SEO, are not "approved" by the Search Engines. It is worth considering that Black Hat techniques are done on purpose to increase the authority of a website, but they can also occur because of bad technical practices (Morris, 2023).

# 2.2. SOCIAL MEDIA

To get a better understanding of the concept "Social Media" let's see how different authors define this term:

According to Caleb T. Carr and Rebecca A. (2015), Social media are Internet-based, distrained, and persistent channels of mass personal communication facilitating perceptions of interactions among users, deriving value primarily from user-generated content (Carr & Hayes, 2015).

Kaur Kapoor et al. (2017) defines Social Media as comprised of various user-driven platforms that facilitate the diffusion of compelling content, dialogue creation, and communication to a broader audience. It is essentially a digital space created by the people and for the people, and it provides an environment that is conducive for interactions and networking to occur at different levels (for instance, personal, professional, business, marketing, political, and societal).

For a shorter and more concise definition, Jonna Leyrer-Jackson and Ashley Kay Wilson define Social Media as websites and technological applications allowing users to share content and/or participate in social networking (Leyrer-Jackson & Wilson, 2018).

There are different types of Social Media, according to Weinberg & Pehlivan (2011):

- a) <u>Online Social Networking</u> → Web and apps focused on person-to-person conversations (Kudumula, 2022). These sites are focused on offering a service that allows users and communities to connect among them. An example of Online Social Networking is LinkedIn and Facebook.
- b) <u>Communities</u>  $\rightarrow$  Social Media communities are defined as online properties where people come together to share common interests or experiences (Douma, 2007).
- c) <u>Blogs</u> → A blog is a journal-like website that is regularly updated and can be used for personal use or business needs (Forsey, 2020). WordPress is one of the most popular tools for creating blogs.

d) <u>Microblogging</u> → Microblogging is understood as the act of writing short content to attract interactions from a particular audience. Microblogging is a combination of instant messaging and content production. This category includes companies such as Twitter (Sprout Social, 2023).

# 2.2.1. Social Media Analytics

Social Media Analytics is defined as the process of examining, extracting and studying data from Social Media applications to understand and use it to improve performance (Qualtrics, 2023). Social Media Analytics is based on accessing data, analysing it to obtain valuable data to make the best decisions in Social Media (Sumer & Parilti, 2023).

## 2.2.2. Sentiment Analysis

Sentiment Analysis is a field of study that involves using natural language processing, data mining, and text retrieval tools to extract opinions and emotions from the text. It is also known as subjectivity analysis, opinion mining, and appraisal extraction. The field usually studies subjective elements, defined as "linguistic expressions of private states in context". Sentiment Analysis can be used for various purposes, such as brand tracking, market perception, and opinion tracking. However, it is still a relatively young field, with many open research directions to explore (Mejova, 2009).

Sentiment analysis categorizes opinions into positive, negative, or neutral sentiments. It is an evolving research field in machine learning, natural language processing, and computational linguistics. Sentiment analysis can be used in various fields, such as politics, business, and marketing, to forecast election outcomes, analyse online sentiments for stock market prediction, and estimate sales of specific products (Saberi & Saad, 2017).

#### 2.2.3. Social Media Listening tools

Social media listening tools are software programs or platforms that allow companies to monitor and analyse social media conversations and activities related to their brand, products, or services. These tools help companies gather feedback, understand its meaning, and respond appropriately, enhancing their brand as a whole. Social media listening tools can be free or paid, using different technologies for monitoring and measurement. They provide valuable insights into consumer attitudes, opinions, and behaviours, which can help companies to develop effective social media strategies and achieve a competitive edge (Kaleynska, 2015).

## 2.2.4. Natural Language processing

Natural Language Processing (NLP) is a branch of artificial intelligence focusing on the interaction between computers and human language. The main goal of NLP is to enable computers to effectively understand, process and generate human language (Kihal et al., 2020).

Natural language processing involves a number of tasks, such as morphological, syntactic and semantic analysis, entity identification and information extraction. These tasks are performed using machine learning algorithms and techniques that enable computers to analyze large amounts of text and extract useful information.

NLP is used in a wide variety of applications, such as machine translation, summary generation, text classification, sentiment detection and automatic question-answering. It is also used in data analysis applications, such as text mining and fraud detection.

# 3. METHODOLOGY

# 3.1. TOOLS & TECHNOLOGY

During the Internship and the realization of this work, concrete tools have been used for specific needs, whether the initial audit or the implementation of strategies. It should be noted that the company itself has provided all the premium (paid) versions of the tools used to develop this work.

In order to have an overview of the current SEO situation of the company and to keep constant control of the domain throughout the Internship, it was decided to use the paid tool SEMrush. After comparing different SEO tools and reading the opinions of professionals in the field, SEMrush has been considered the most appropriate tool, of the highest quality and the one that best suits the needs of this work, according to the opinion of the SEO community and professionals (Ferreira, 2022). This tool allows the development of functionalities such as domain analysis, domain error and warnings, and backlink audit, among other features (SEMrush, 2023).

Also, to capture information about the performance of the domain URLs, it has been decided to use the Google Search Console tool, one of the most basic and best tools to study the performance, an overview of the Web Performance Optimization, the experience on the site through metrics, the indexing and how the Technical SEO strategies are working (Sunny Staff, 2020).

To implement specific strategies and control content management, it has been decided to use two top-rated Content Management tools: WordPress to control the content and improve the SEO of the blogs and Strapi CMS for the rest of the website content.

WordPress is a well-known CMS in the SEO community, combining front and backend of a website into a single, controllable application code base (McCoy Julia, 2020). On the other hand, Strapi is a next-generation, open-source, JavaScript-based, headless CMS that allows users to create, manage and expose content experiences to any digital device (CloudAPPi, 2022).

To conclude, it has been chosen to use the best Listening tool of 2022 by the prestigious platform Influencers Marketing Hub: Brandwatch (Geyser Werner, 2023). Brandwatch is a paid social media listening tool recommended for extensive advertising, public relations agencies, and consumer-facing brands. It provides deep insights and analytics, making its interface easy to use (Kaleynska, 2015). Thanks to the access provided by NOVA IMS, it was possible to access the platform's tools for a more rigorous and in-depth analysis. Along with this powerful tool, Google Play Console and App Store Connect have been used to know what people think of our app and services and thus have a much more complete Sentiment Analysis.

As it can be seen in the previous point where it is explained what the White Hat Seo strategy consists of, the marketing department as a whole has decided to use this strategy. This is because it has been considered the most effective and ethical strategy, without using techniques that deceive the search engines or directly harm the strategies of the competitors. This technique is one of the most powerful, and well-known SEO strategies. It involves using the appropriate strategies and tactics to raise a webpage's Search Enines rankings. White Hat SEO strictly adheres to the standards and recommendations offered by search engines. High-quality content creation, website restructure, optimization, keyword research and analysis, and site-map submission are some of the methods. The White SEO strategy has been divided into two main parts: SEO Off-Page techniques and SEO On-page techniques. Choosing a White Hat SEO strategy demands slow, long-lasting improvement in search engine ranking that will definitely take some time, but the results would take long-lasting results.

In order to implement the White Hat techniques with the indicated tools, a roadmap has been followed where all the steps are meticulously determined from beginning to end (Figure 7).



Figure 7. Roadmap

# 3.2. AUDIT SEO

Before using techniques, strategies and tools to improve the company's SEO, a SEO Audit of the website was carried out. In order to have a broad view of the company's SEO situation, the SEMrush tool was used. At the same time, the Google Search Console Tool was used to see both the main web metrics on mobile devices and computers and to know the experience on the page. In addition, Brandwatch has been used in order to make a Sentiment Analysis and thus make synergies with the SEO strategy.

# 3.2.1. SEMrush

This software tool allows access to multiple metrics and actions of both digital presence and content marketing. The most important metrics for our project can be divided into three main groups: Domain Analysis, Site Audit and Backlink Audit.

It should be noted that, as mentioned above, SEMrush offers a wide variety of tools, but in this work, it has been focused on the most important and those that most affect the domain's

SEO. Also, metrics are normally updated one time per month, but the software can be forced to upload as many times as required.

a) In the Domain Analysis it can be found five metrics:

<u>Authority Score</u>: It tells us what the quality of the SEO of the website is. The score of this metric is based on three main data: organic traffic received by the website, the number and quality of backlinks and the naturalness of the site's content. The maximum Authority Score is 100 points. As it is shown in Figure 8, the SEO score of the MyInvestor domain (<u>https://myinvestor.es/</u>) at the beginning of the Internship (September 4, 2022) was 43 points.

Análisis de dominio 🧯			🗖 Spain 🗸 🔤	Desktop V 04 sept 2022
Authority Score i	Tráfico orgánico i 50.8K -0.11%	Palabras clave orgánicas i	Palabras clave de pago i	Dominios de ref. i ☺ 736 -2.13%
Ranking de Semrush † 6.6K			Tráfico de pago 🕴 1	Backlinks ↓ 11.3K

Figure 8. Analysis of the https://myinvestor.es/ domain in September 2022

- <u>Organic Traffic</u>: This metric indicates the number of users expected to visit the website during the current month. It will also indicate the percentage change from the previous month.
- Organic Keywords: This is the number of keywords that attract users to our domain through the first 100 organic Google search results, i.e., not paid keywords.
- <u>Paid keywords</u>: Those keywords that attract users through paid searches.
- <u>Referrer domains</u>: Those domains that have at least one link pointing to our domain.
- b) In the Site Audit it can be known the errors, problems that our domain and its URLs have, as well as the health of the site. This "health" will depend on the number of errors or warnings that the domain has. In Figure 9 it can be seen that, out of 100 crawled pages, the software has detected a Site health of 76%, with 89 errors and 194 warnings. The difference between errors and warnings is the severity of the problem, being errors those problems that should be prioritized for resolution.

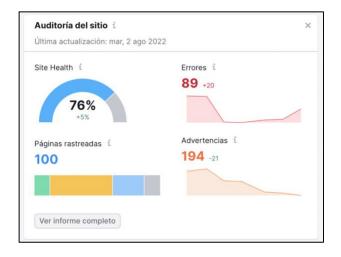


Figure 9. "Site Audit" of https://myinvestor.es/ in August 2022.

c) The Backlink Audit makes an analysis of all those backlinks that receive the URLs of our domain. In this section, it is found out:

<u>General toxicity score</u>: the toxicity of the referring domains that have backlinks pointing to our domain is analyzed. They are distinguished by colors: red ones are toxic and should be removed; orange ones are domains that should be reviewed; and green ones are good domains (Figure 10).

	Backlinks más tóxicos 1		
708	URL de origen Puntuació	ón de toxicidad	
nuevos rotos perdidos 50 2 8	idyler.com/webs	57	
5.111	articlement.com	56	
	webscountry.co	56	
3615 eliminar desautorizar revisar	zoacum.com/we	53	
0 0 3615	vivachiclana.es/	51	
	nuevos rotos perdidos 50 2 8 Backlinks analizados i <b>3615</b> eliminar desautorizar revisar	nuevos rotos perdidos 50 2 8 idyler.com/webs Backlinks analizados i 3615 eliminar desautorizar revisar 2020	

Figure 10. Backlink Audit of https://myinvestor.es/ in September 2022

## 3.2.2. Google Search Console

This free service is offered by Google free of charge to all users, and it is a tool that helps the user to monitor and solve the problems that a website has when appearing in Google Search results (N. Patel, 2023).

From a Digital Marketing and SEO perspective, this tool helps to optimize the positioning of the website with technical decisions based on the data it offers. This tool allows to detect problems that affect the loading speed of URLs, pages indexed in Google, control the loading speed and also deauthorize those backlinks that are considered as toxic.

It has been decided to use this tool in the SEO audit to perform a more technical analysis of the website:

- How is the experience on the different URLs, both on mobile and on computers.
- To know how the main web metrics are working.
- Know which URLs are "bad" or if they need improvement, i.e., with loading problems.

To access the tool, it is only needed to enter the domain property and verify that, as a user, we are the "owners" of it. When the domain is verified, there is an access to a menu with different sections:

- a) *Overview*: This is where This is where the summary and shortcuts to all other sections are located. A brief summary of the current status of the website (Indexing, Experience).
- b) Indexing: This section provides information on which URLs are indexed and which are not. In the case of pages that are not indexed, the reason why they are not indexed is indicated. It also indicates the pages with video and if it is indexed. This section also contains the Sitemap section: it informs Google of the pages that we want to index and to facilitate the search engine's indexing of the URLs. Finally, this section also allows requesting the removal of URLs, both temporary and for obsolete content.
- c) *Experience*: This part provides information on whether the performance of the URLs, on mobile and desktop, is good or whether they have any errors, as well as the total number of impressions and the percentage of good URLs. For more precision, information is given on URLs with errors, URLs that need errors and good URLs.

#### 3.2.3. Brandwatch

First of all, it is important define what this tool is: Brandwatch is a Social Media Analysis tool that analyzes and tracks billions of conversations that occur daily in news, blogs, forums, social networks, newscasts and more, allowing companies to understand what the needs of consumers are, what trends are there, how people perceive your company, etc. (Wu, 2017).

The reason why it has been decided to use this tool, both for the Internship report and for the work, has been to know what people's opinion of our brand is. With this, it is possible to identify more directly those problems that are not easy to detect as a company but are easy to detect as a consumer. Also, to avoid the leakage of dissatisfied customers, as well as to know what topics are being talked about, in order to create Content Marketing strategies focused on those products that are most liked and that generate more interactions.

Of all the possibilities offered by Brandwatch, it has focused on the Consumer Research tool to perform a Sentiment Analysis.

#### a) Project creation:

First of all, a project has been created with the name: "Master Thesis Adrià", to differentiate it from the rest of the projects, since the access provided by Professor Nuno Antonio is the same as the one used in the classes, so it is shared and only one project can be done at a time.

#### b) Writing the Query:

In order to start with the analysis, a "Query" must be created. Queries are the data sources of the Brandwatch tool. To create a Query, go to the Costumer Research menu and select the "Data" section, where it can be found, as shown in Figure 11, the menu to create a personalized "Query".

G	Consumer Research ←	Project Master Thesis Adria V Europe/Madrid (UTC+02.00)						
	Home							
	Data	Cueries Channels Groups Social Panels 🚥						
	Dashboards	Queries *						
	Tools	Available are the data services in Record with Theories the service and the theories and then theories are been as you and them. Use do you task at all						
	Reports	Queries are the data sources in Brandwatch. They're like saved searches that you set up once and then they keep running as long as you need them. How do you look at all that data? Simply click "Explore" or customise your own Dashboard!						
	Alerts	Active Drafts Deactivated						
		AF CONTRACTOR						
		CO QUERY NAME IN GROUP(S) SAMPLED AT COLLECTED MODIFIED						
		You don't have any Queries. Create one now?						

Figure 11 . Brandwatch Menu: Queries

When starting to create a Query, the tool gives two options: Create a Query from scratch or adapt a query already created by the tool for the brand. The second option has been considered to be the most complete. As can be seen in Figure 12, the tool has been instructed to focus on the brand name: MyInvestor. It should be noted that it is common for people to write the name separately, i.e.: My Investor, that is why it has also been indicated in the Query. In addition, the Twitter, Instagram and YouTube profiles have been added, which are the social networks where the brand is most active. To further deepen the analysis, the MyInvestor hashtag #MyInvestor has been added, as well as the website.



Figure 112. Query creation for brand monitoring

Once ready, all that remains is to name the Query and select the time range to be analyzed. As mentioned above, Brandwatch is a very powerful tool, and an example is that it allows researchers to analyze in depth data up to 12 years and ten months old, as seen in Figure 13. For this Report, it has only been needed data from 2017, which is the year where when the company was founded.

Query name						
Mylnvestor						
Mynivestor						
Description		Optional				
Created for educational purposition	es					
Date search						
Choose how far back your query coll	ects data.					
January 2017 🗸 🗸						
Current limit is 12 years 10 months -	Current limit is 12 years 10 months - Talk to your Account Manager to request more.					
Sentiment version						
This query will use the latest sentime	ent classification model.					
Sampling						
Don't worry if the number of mention	s ever increases. Your sample rate will stay the same.					
Sample Rate	Estimated Mentions					
100% Change your sample rate	<b>791</b> (per month)					
Change your sample rate						
Query limit						
	ur client query limit of 10.					

Figure 13. Brandwatch: Final Query set up

#### c) Dashboard:

With the Query ready to be used, the "Dashboards" section has been selected from the menu, as shown in Figure 14. The next step is to add a Dashboard.

0	Consumer Research ←I	Project Master Thesis Adria	Europe/Madrid (UTC+02.00)			
ш	Home Data	Dashboards Analyze your data using a range	of charts and other visualizations.			ADD DASHEOARD
	Dashboards					
	Tools	All			Q. Search	= #
	Reports	Your dashboards 0				
	Alerts	Shared with you 0 Shared with others 0		Sharing Owned by	Modified V	
		LABELS 🕤 🔍 🔍				
		No labels You don't have any labels yet.		No Dashboa You don't have any dash Ado DASHBOA	boards yet.	
0						
鐐		Brandwatch			Help	Resources
0		Copyright © 2023 Brandwatch. All Rig	hts.Reserved.		Help Center Contact Support	Blog Guides

Figure 14. Brandwatch Menu: Dashboard

The tool offers different types of templates, depending on the analysis that the user wants to do. Select the type of template that is most suitable for the analysis, in this case: Brand Analysis (Figure 15). The data source is also added, i.e., the Query that has been previously created.

New das	shboard	×
	Data source  Mylnvestor	Selected template
BACK	Template > Se	t up CANCEL CREATE DASHBOARD

Figure 15. Brandwatch Dashboard Menu: Query Selection

## d) Analyzing the Dashboard:

Once finished, click "Create Dashboard" and the software collects all the information requested in the Query. When the data collection is finished, the Dashboard displays a large amount of Data classified in different Tabs: Conversation Overview, Trending Topics, Online Coverage, Online Sentiment, Online Engagement and Authors & Demographics.

- Conversation Overview: Here it can be found the total number of mentions within the selected period, the total reach of the brand, a line graph with the days where most mentions are made as well as the days of the week and the hours of the day with the highest volume of mentions.
- Trending topics: What is being talked about together with the brand name, whether hashtags, keywords, emojis,... This can be used to get ideas on what keywords to use both in Social Networks and in the SEO of the website.
- Online Coverage: In which Social Networks the brand is being mentioned, either in Twitter, News, Forums, Blogs, etc.
- Online Sentiment: In this Tab it is found information about the sentiment expressed about the brand: whether it is positive, negative or neutral. In addition, the tool creates a cluster with the most used negative and neutral words in the mentions of the brand.
- Online Engagement: Here it can be found information on how people interact in the conversation about the brand, i.e., if they comment, share, like or like.
- Authors & Demographics: Specific information on who is talking about the brand, how many times they do it, as well as their gender, profession and country. This Tab can be interesting to find new influencers to promote the brand.

To find out what people think of MyInvestor, first the time period has to be chosen, in this case: from January 2022 to September 2022. This will make it possible to know the public's opinion about the brand, and how many times the company has been mentioned during this period and in which social networks there is more presence.

# **3.3.** ANALYSIS & TECHNIQUES SELECTION

The objective of having performed an SEO Audit has been to have a broad vision of the MyInvestor website in order to subsequently diagnose problems that affect the positioning in search engines.

In this point it is explained the different techniques that have been used specifically for each problem. The techniques are grouped into two strategies: On-page SEO strategies and Offpage SEO strategies.

# 3.3.1. Problems detected

#### 3.3.1.1. Points to improve on SEMrush

Next, those problems and points to be improved are mentioned in the following point

1. <u>Increase the Authority Score</u>: The tool also allows access to different metrics of competitors. The company's Authority Score was not among the lowest, but the most direct competitors had better scores, so improving this metric is essential. It is noteworthy that the Authority Score shows a reference number of the SEO situation of the website; that is, having a lower score in A.S. than the competitors does not mean having better SEO. Since we are dealing with multiple factors and different situations, strategies and content, we can compare ourselves with the competition to a certain point. The reference point should be the analyzed domain itself.

At the beginning of the Internship, the Authority Score was 43 points. The intention throughout the Internship was to improve the score, but no minimum mark was set, as it is not quantifiable to a certain extent and SEO improvement techniques take a long time to pay off.

2. <u>Improve the Site Health score</u>: When doing an SEO audit, it is customary to find errors in all domains, it is not a bad thing per se. However, it should be checked periodically check for new errors, as the company is constantly adding new content to the website or simply modifying existing content, creating new URLs, among others.

At the beginning of the Internship, the Site Health score was not bad, as it was 76%, an acceptable score, but one that needs to be improved.

It is important to add that an error was detected in the SEMrush settings in this section: the information provided by the software was biased. As can be seen in Figure 16, only 100 pages were being analyzed, in other words, it only gave us information on the errors of 100 pages of the domain <u>https://myinvestor.es/</u>.

Site Audit Settings					
Configure basic settings					
Crawl scope	myinvestor.es (i	ncluding a	ll subdomains) 🖉		
Limit of checked pages	100	~	per audit		
Crawl source	Website	~			

Figure 16. Pages crawled in SEMrush audit SEO September 2022

When the problem was detected, the limit range of checked pages was extended to the maximum. Now the software was crawling 1,392 pages (depending on the month being analyzed, the number differs). Due to this, as can be seen in Figure 17 the errors increased significantly: from 89 to 461, as well as the warnings and notices.



Figure 17. Errors and warnings from domain https://myinvestor.es/ after checking all pages

After this adjustment, the real Site Health number went from 76% to 62% (Figure 18).



Figure 18. Domain Site Health Score after checking all pages (September 2022)

As mentioned above, the priority is to fix the errors. Among the list of errors, there were:

- Duplicate title tags.
- Duplicate meta descriptions.
- Duplicate content.
- Broken internal links.
- Redirect strings.

As it can be seen, these errors that have been detected are part of the technical SEO.

3. <u>Backlink Audit</u>: MyInvestor's web domain had a significant number of toxic backlinks or needed of improvement. It is important to remember that having quality backlinks is one of the most influential factors in the Authority Score.

#### 3.3.1.2. Points to improve on Google Search Console

In the "Experience" section, 92 URLs affected by a problem with CLS have been detected, as shown in Figure 19.

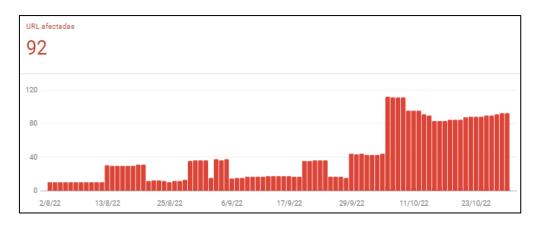
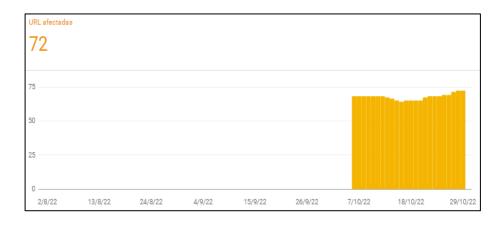


Figure 19. Google Search Console: CLS problem

As mentioned above in the Theoretical Framework section, the Cumulative Layout Shift (CLS) is the metric that measures the changes in the page interface during the user experience. It should be less than 0.1, but it has been detected that these 92 URLs exceed 0.26, and in some cases reach 0.29 (Figure 20). This causes the site speed to be affected.

Grupos de URLs ⊘		Ŧ
URL de ejemplo   ⑦	Población del grupo 🛛	↓ CLS del grupo
https://myinvestor.es/notas-de-prensa/myinvestor-lanza-un-broker-de-acciones y-completa-su-oferta-de-productos-de-inversion/	72	0,26
https://myinvestor.es/cuentas-tarjetas/cuentas/	7	0,26
https://myinvestor.es/landings/cuenta-remunerada/?utm_source=rankia&utm_ medium=link&utm_campaign=cuentas	7	0,27
https://myinvestor.es/landings/webinars/proximo-webinar/	6	0,29

Figure 20. Google Search Console: URLs with CLS problem divided by groups



In addition, 72 URLs have been identified as needing improvement in terms of LCP (Figure 21).

Figure 21. Google Search Console: LCP Problem

When the Largest Contentful Paint (LCP), i.e., the time it takes to load the page content takes more than 2.5 seconds, it is considered bad. In Figure 22, it can be seen that these 72 URLs have an LCP of 3.9 seconds. In this case it is not a serious error, but it is better to fix it sooner rather than later.





#### 3.3.1.3. Points to improve on Brandwatch

After having carried out the brand analysis with Brandwatch tool, several problems and points for improvement have been detected:

- 1. <u>Improve Sentiment</u>: It has been detected that there is a significant sector of people complaining mainly about the functioning of the app, and doubts about operations and products of the Myinvestor range.
- 2. <u>Increase the number and variety of posts</u>: Once it is known what days and times there is more audience and the keywords related to the brand, it should increase the number of posts talking about those keywords.

## 3.3.2. On-Page SEO Strategy

As previously mentioned in point 2 "Theoretical Framework", On-Page SEO strategies focus on optimizing both the content of the website and its HTML code, i.e., everything inside the website.

## 3.3.2.1. WordPress (SEO & internal linking)

One of the main features of MyInvestor is that it creates a lot of content related to the investment world and especially about financial education. Each month there is a content publishing structure:

- Three blog articles on concepts from the investment world or news on the website.
- One "consulting" at the end of the month: where it is collected a series of questions about the investment world asked by our clients. The most interesting ones are selected and answered in the same article.
- Four "MyGlosary": Every Thursday a term related to the financial world is published, together with its definition. It is called "MyGlosary".
- Two Podcasts: In the podcasts, professionals from the investment world are interviewed and talk about specific topics.

There may be months where more or less content is published, but more or less this is the scheme that is followed.

All this content is published on the MyInvestor blog page, which is managed through WordPress. Through this open-source website creation platform (Ithemes, 2023), apart from being able to publish the blog content, each article can be positioned individually. As can be seen in Figure 23, most of the articles had no SEO score, and of those that did have a score, almost half had an "acceptable" score.



Figure 12. WordPress: Blog SEO Score before Audit SEO

This SEO score is calculated through a WordPress plugin called "Yoast". This plugin helps the user both to properly position the content for search engines and to achieve a good readability. Yoast establishes a series of criteria that must be met, such as: the length of the Meta description or title, a minimum number of internal and external links, the content must have a minimum number of words, etc.

As can be seen in Figure 24, the plugin has two sections: SEO and readability. The SEO section is divided into two categories:

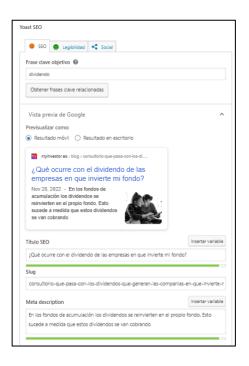


Figure 13. WordPress: Yoast SEO plugin example

- Target keyword → Here it can be indicated the keyword to be positioned the article.
   This keyword will be used in the following section and in the content to position the article better.
- Google Preview  $\rightarrow$ In this category it can be seen how the content will look like in Google. It is important to know how the result will look like in the search engine.
  - SEO Title: this is the phrase in charge of presenting the topic to the user. It appears in search engines and its purpose is to invite readers to enter the content.
  - *Meta-description*: Describes the content within the web page and is important to capture the user's attention.
  - Slug: This is the final part of the URL. It is important for SEO positioning since it includes the keyword of the page and makes it easier for the search engine to index and position it.

To achieve a green score in Yoast SEO and thus improve the SEO of the articles, a specific keyword has been searched and selected for each article, and used in the SEO Title, Slug, and Meta description. Great care has also been taken with the length of these, so that the content is perfectly readable in the search engine results.

After this is done, the improvement in the overall SEO of the blog can be seen in Figure 25:



Figure 14. WordPress: Blog SEO Score after applying techniques

In addition to modifying the Title, Meta-description and Slug of each Blog article to improve the Yoast SEO score, it has also been done a link building strategy since it has been detected that the articles lacked to create a network of links pointing both outside the domain and within:

- Internal links: Internal links have been added which redirect to those pages that are interested in receiving more organic traffic. For example, if an article talks about investment funds, a link has been added in the word "investment fund" that directs to the web page of MyInvestor: https://myinvestor.es/inversion/fondos-inversion/ where all the information about the product and service offered by the company is explained.
- External links: When creating a network of links, do not forget to add links to external pages. These external pages must be related to the sector in which the company operates and make sense within the context in which the article is being discussed. It is important that the external links come from pages with a good organic positioning, since this also affects the company's own Authority Score.

It is worth pointing out that there are a total of 67 articles that have not been able to get a green score. That's because they are articles where the video of the podcasts is shared: there is not much written content, just a contextual sentence of the topic covered in the podcast. That been said, the Yoast plugin penalizes a lot the fact that there is not enough content on the page, that's why the maximum score it can get is orange.

## **3.3.2.2.** Keyword, Title & description proposal URLs and upload to CMS

All content related to the MyInvestor Blog (<u>https://myinvestor.es/blog/</u>) is managed through WordPress, as explained above. On the other hand, the content of the web pages where all products and services are presented, Information about MyInvestor and Legal Terms, is managed from another Content Management System (CMS), called "Strapi". This CMS is very easy to use thanks to its simple user experience.

Through the CMS it has been possible to identify those pages that need an improvement in terms of SEO positioning. For this purpose, an Excel table has been created with all the pages that are part of the domain of <u>https://myinvestor.es</u>, as shown in Figure A1.

In this Excel table, columns have been added for the titles, descriptions and keywords that were before the SEO strategy. Next to each column, another column has been inserted with the new proposal. In the case of the "Title Proposal" and "Description proposal", another column has been added where the characters are counted. This is because, when creating a title and description based on SEO, they should not exceed a certain number of characters. Depending on which source is consulted the length varies, but to have a reference point, the length of the title should be between 50 and 70 characters (Montti, 2021) and the description between 155 and 160 characters (Moz, 2023). This is given so that all the information to be transmitted can be read from any device.

First of all, it has been chosen those keywords to be positioned. These keywords must follow a series of criteria: First, they must be related to the content of the web page; and second, they must be keywords with a high search volume. To find out the search volume of each keyword, it has been consulted through tools such as Google Ads, where the user is provided with a keyword planner. There, the specific keyword can be searched and see its average monthly visits and its level of competitiveness, i.e., if the competition uses that keyword a lot.

Finally, the table with the proposal was presented to the rest of the Marketing Department to compare opinions and decide together on the best solution. In Figure A1 it can be seen that there are descriptions that exceed 160 characters, this is due to the type of strategy and regulations of the bank. A series of mandatory information must be given to the consumer and it is not negotiable. Therefore, these are decisions that must be adapted to the proposed SEO strategies.

# 3.3.2.3. Site health: Solve errors

When performing the website audit with the SEMrush tool, it was found that the Site Health of the site was very low (62%) and that the number of errors has risen dramatically (461) due to the fact that not all pages were being crawled: only 100 were being crawled.

The Site Health score is made up of the number of errors and warnings found on a website. Therefore, if the score is higher, the fewer problems the website has, the better the usability and the better the search engine optimization for the website. That said, the goal was to identify the errors, separate them by theme and apply a specific strategy for each one. In total, 6 different errors were detected:

- a) Duplicate Title Tags (183) & Duplicate Meta Descriptions (119)
- b) Pages with duplicate content problems (104)
- c) Broken internal links (30)
- d) Pages that returned a 4xx status code (8)
- e) Broken images (17)
- a) Duplicate Title Tags and Meta Descriptions

These two errors of duplicate title tags and duplicate meta descriptions is related to the previous points. Many URLs, both from the main website and blogs, had duplicate titles and meta descriptions, so the proposal has been prepared in an Excel sheet to remove duplicate content, and leverage and optimize the content for search engines.

b) Pages with duplicate content problems

A significant number of URLs (104) had duplicate content. After investigating why, it was discovered that the main problem was that there were old URLS that had been replaced by new ones with updated content. These old URLs are obsolete but had not been deindexed. By not deindexing them, search engines parse and index them, overlapping with the new URLs and negatively affecting the optimization of the MyInvestor website.

To solve this error, Google's tool "Google Search Console", mentioned above, has been used. This tool, apart from showing URL performance, page experience and key web metrics, also allows removing URLs (Figure 26).

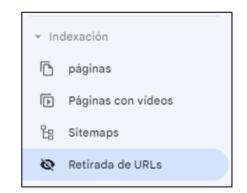


Figure 15. Google Search Console: URL removal menu

Once inside the "URLs removal" section, a new request is created for those URLs that are wanted to remove. To do so, the URL of those pages to be removed must be entered, and then select the option: remove only this URL or remove all the URLs that have this prefix (Figure 27). If a group of URLs shares a prefix, the second option is faster.

	IPORALMENTE	BORRAR URL ALMACENADA EN CACH	IÉ
meses y se borra t se volverán a gene	anto su fragmento rar cuando las pág	os de la Búsqueda de Google durante como la versión almacenada en caci inas vuelvan a rastrearse. Para retira Jexen o quítalas de tu sitio web. <u>Más</u>	hé, que
Introduce una l	JRL		
Todas las variantes	de URL (www/non-w	ww y http/https) se verán afectadas	
Retirar solo es	sta URL		
0	sta URL las URLs que tengai	n este prefijo	

Figure 16. Google Search Console: URL Removal new request

It is noteworthy that this option only works to remove URLs temporarily, specifically for six months. This strategy has been used to remove quickly so that it can be reflected instantly in the short-term results. To completely remove URLs with obsolete content, the listing has been sent to the technical team to update the Sitemap by removing the URLs.

#### c) Broken Internal Links

Broken links have been detected within the website. These broken internal links direct users who access them to websites that do not exist. Broken links usually happen because of errors in internal hyperlinks or because the redirects have not been configured correctly when a page has been unsubscribed. This negatively influences on the user experience and, consequently, on search engine rankings, since search engines identify that our website is poorly coded.

The Marketing Department's job has been to detect this problem, and then communicate it to the technical team where they can fix it. The Marketing Department does not have access to the more technical parts of website maintenance, so they must make requests to the technical department.

d) Pages that returned a 4xx status code

A 4xx error means that a particular web page cannot be accessed. This problem is related to broken links. Broken links redirect to a page that does not exist. These pages have a 4xx status code, in this case 404. The 404 code means that the server cannot find the server that the user is requesting.

These errors prevent users and search engine robots from accessing web pages and can negatively impact both user experience and search engine crawlability.

## e) Broken images

A broken image is an image that cannot be displayed because it no longer exists, its URL is misspelled or because the file path is invalid. Broken images can negatively influence search rankings because they provide a bad user experience and indicate to search engines that the page has a poor quality (Churick, 2023).

Out of 17 broken images detected, 15 are blog article images and 2 are website images. In the case of the broken blog images, it has been detected that the files have been deleted. To fix this, they have either been replaced with a new image or the file has simply been deleted.

In the case of the 2 website images. Content Management System "Strapi" has been used to detect the specific URL of the broken images and replaced them with new ones.

## 3.3.2.4. Title tags (H1, H2, H3)

H1, H2, H3, tags are HTML headings that are used within a website to identify the main topics of the page, as well as the subtopics. It is essential to create a good tagging structure so that search engines can quickly understand the content of the website (Wearecontent, 2021).

From an SEO perspective, in addition to building a good structure, header tags should be used to rank the web page for specific keywords. As mentioned above in the "Theoretical Framework" point, there should only be one H1 tag and it should contain the keyword. The H2 corresponds to the subheadings that must include words derived from the keyword and finally the H3, is not so important but serves to further specify the content that covers the H2.

There are two ways to know the Header tags of each web page:

1. Going to the web page which is wanted to inspect, right click and select the "View Page source" option. An example is shown in Figure 28: the HTML code that can be seen is that of the main page of MyInvestor <u>https://myinvestor.es/</u>.

Line	wrap
1	<pre><idoctype html=""><html lang="es"><head><title>E1 neobanco experto en inversión</title><meta ",<="" "https:="" content='Somos el neobanco de la libertad: ni condiciones ni comisione&lt;/pre&gt;&lt;/th&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;-2&lt;/th&gt;&lt;th&gt;&lt;pre&gt;"@context": "http://www.schema.org",&lt;/pre&gt;&lt;/th&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;3&lt;/th&gt;&lt;th&gt;&lt;pre&gt;\$quot;@type": "BankOrCreditUnion",&lt;/pre&gt;&lt;/th&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;- 14&lt;/th&gt;&lt;th&gt;&lt;pre&gt;"name": "Myinvestor",&lt;/pre&gt;&lt;/th&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;- 5&lt;/th&gt;&lt;th&gt;' myinvestor.es="" namee"description"="" th="" url":=""/></head></html></idoctype></pre>
6	<pre>"logo": "https://myinvestor.es/images/logo-myinvestor.svg",</pre>
7	<pre>"image": "https://myinvestor.es/images/logo-myinvestor.svg",</pre>
- 8	"description": "Somos un neobanco online con una misión: ayudar a nuestros clientes a gestionar su patrimonio ofreciendo productos top y comisio
- 9	<pre>&gt;</pre> />/> <pre>&gt;</pre> <pre>&gt;</pre> /> <pre>/&gt;</pre> /> <pre>/&gt;</pre> /> <pre>/&gt;</pre> // <pre>/&gt;</pre> // <pre>/&gt;</pre> // <pre>/&gt;</pre> // <pre>/&gt;</pre> <pre>/&gt;</pre> <pre>/&gt;</pre> <pre>//</pre> <pre>/&gt;</pre> <pre>//</pre> <pre>//</pre> <pre>/&gt;</pre> <pre>//</pre> <pre>/&gt;</pre> <pre>//</pre> <pr< th=""></pr<>
10	para tener tu <span class="text h2 accent bold">liguidez</span> <span class="text h2 accent bold"></span> Mejoramos las condicion
11	
12	Tu dinero en MyInvestor está garantizado por el <a hrof="https://www.fgd.es/es/Entidades_Credito.html" class="link bold" Fondo Español de Garantía de Depósitos.
13	<pre></pre>

Figure 17. HTML code from <u>https://myinvestor.es/</u>

In Figure 28 it also can be seen that the H1 tag, in this case <title> is: "The Neo bank investment expert".

2. The second method and the one that has been used is to install the plugin: "SEO META in 1 click". With this plugin it can be known with just one click the Header tags structure of any web page, in addition to other relevant information for SEO: Title, description, alt images, links, and more (Figure 29).



Figure 18. Plugin: SEO META in 1 click example

Upon the Plugin has been installed, each of the URLs of the web domain has been reviewed and a proposal has been prepared using the most interesting keywords to position each of the URLs. Figure 30 shows an example of how the proposal has been made: On the right, an image of the URL being analyzed; and on the left, the new Header Tags structure, with some explanations.

MyiNVESTOF Currents y tarjetas inversión htp Inversión i Acciones y ETF	steza Pinanciación (hica amilin) (Harra coloraz	https://myinveator.es/inversion/broker/ <h1> Ac</h1>	Cones y ETF con comit HEP manin as was to acco relation of manin a manine HEP Can be consume to ETF 1 HEP Emission a Francesc Law HEP	nen ozna eta ozerende de 3 12 % de comprovedpaj 8 31 % 1 Stratera de maños 738 sué rentaces phecen
iYa están aquí! Más de acciones españolas, 2.0 europeas y 1.000 EFF. Nesto brider cres. Advants de invertir en Vial Street compara viales europea. Inverte cala semodiada e tota ta peocores integradas en una monadatade (terr rate)	ya pundes	SH12- Acciones y ETF con comisiones baias y claras (412- y Dar qué el brôker de Myinyestor) 481 Segue de la prôker de Myinyestor 493 Careja acona de la hala aversará 494 Careja acona de la hala aversará 495 Careja acona de la hala aversará 496 Careja acona de la hala aversará 497 Par enos impositos en sinación 498 Page mens impositos en siscila 498 Costes transparentes 498 Costes transparentes 498 Papande silve ar Myinyesto 498 Papande silve ar Myinyesto 498 Papande silve ar Myinyestor 498 Papande silve ar Myinyestor 499 Papande silve ar Myinyestor 492 Por qué Inventir con Myinyestor 492 Por qué Inventir con Myinyestor 492 Parta Transitor de las últimas novedades 492 Parta Transitor de las últimas novedades 492 Pamaline frecuentes 493 Papande silve pude interesari	<h2> ( 43) 43) 43) 43) 43) 43) 43) 43) 43) 43)</h2>	quitar H4 y H5 Costes transparentes • EXR • EXR
Sin mínimo de inversión en cada operación Invierte dende quieras y diversifica al míximo tu cartera sin costas.	Costes bajos y muy claritos Comisión de comprevente de 0.12 % sin mínimo de inversión y 0.30 %			
mines. Rentablica el dinero no invertido Udera hara un 1 % 1% 12 di se establidad para el la de que tergar en la cuenta an inverso. <sup>1</sup> Otividate de Hacienda y del 720 Monestro informar a la agenca terbadora de ha poescores para fue regerar en la de mando 1750.	it untris de driva, hals mar versitaria Paga menos impuestos en tus dividendos bandicas da ura nem reando an la dividendos bandicas da ura nem reando an la dividendo da la aconas menosana. Nemano da cita dividendo da la dividendo menosana de cita de acciones es fácil Tagena las actores a liginestor y atores conservas.	Invierte en miles de acciones con comisión de 0,12% de compraven 0,30% de cambio de divisa. Nada Olvídate del modelo 720.	ta y	my

Figure 19. Header Tags proposal for https://myinvestor.es/inversion/broker/

After the proposals for each of the URLs had been made, they were shown to the rest of the Marketing department so that they could contribute their point of view and reach a joint agreement. Once agreed, the report has been passed to the technical department to proceed with the implementation of the changes.

# 3.3.2.5. ALT Text images

The MyInvestor website is characterized by being a very visual website, with many images. From an SEO perspective, images are a major factor that should not be forgotten to optimize. One of the ways is to add an ALT text to the images describing the content of the image. This alternative text (ALT) should convey why the image is relevant to the content of the web page (Harvard, 2023).

In order to write alternative text (alt text) in images, so that they can be correctly positioned in search engines, a series of requirements must be met:

- 1. Before writing alt text, it must be established what the purpose of the image is and what information it is trying to convey.
- 2. The ALT text should be short and concise, but descriptive enough for users to understand the content of the image. It should be easy to understand for all users, including those with visual disabilities. It is recommended to be no longer than 125 characters.
- 3. Include relevant keywords in the alt text to help search engines understand the image content and improve SEO.

To conclude, alt text is important to make images accessible to all users, including those who use assistive technologies such as screen readers. For that, it is essential that in a web page with images, these have an ALT text that helps search engines to index the web page and its content.

The images of the blog are in the CMS WordPress. From WordPress, apart from uploading the written content of the blog, videos, audios, documents and images are also managed. Figure 31 shows the image editor table. It can be seen that on the right side there is information about the image: what day it was uploaded, who uploaded it, to which article it is uploaded, file name, ALT text, title, caption, description, and more.

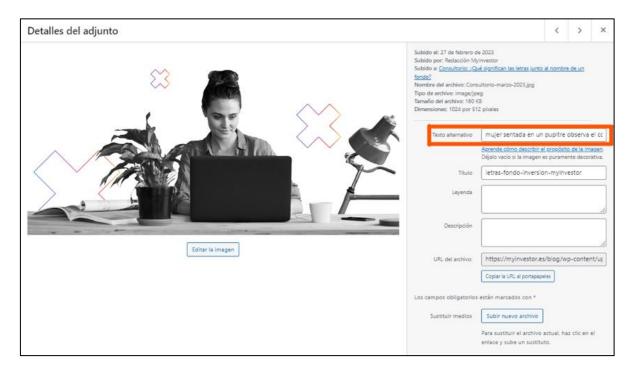


Figure 20. WordPress: ALT images text example

In the alt text box, it was written:

"mujer joven se informa del consultorio de myinvestor en un ordenador portátil negro"

Translated in English means:

"Young woman learns about my investor's consulting on a black laptop".

In this case, the image belongs to a consulting article that is published monthly. In this article, the most interesting questions asked by clients on financial topics are collected. Because of this, the word "MyInvestor's consulting" has been added to the alt text to not only describe the image, but also to position it in search engines.

For the other images of the website, an Excel sheet has been prepared with all the images of each of the URLs of the website. The name they had, the proposal of the new name and the proposal of the ALT text for each of them have been added (Figure 33).

Once the proposal was finished, it was discussed with the rest of the Marketing Department and sent to the technical team to make the agreed changes.

## 3.3.2.6. Google Search Console: Site Speed

It is useless to have a well-worked website in terms of SEO, if the performance and experience of the page are poor. It is essential that the content of the web page loads the faster the better, and that the usability is good.

The Google Search Console tool was used to detect these problems. In the tool, it has been seen that there has been an increase of URLs with Cumulative Layout Shift (CLS) and Largest Contentful Paint (LCP) errors.

When the problems were detected, the origin of the increase in URLs with errors was investigated and, subsequently, a Power Point presentation was prepared with all the information to discuss it with the Marketing Department. In this presentation, not only those URLs that have errors are mentioned, but also an explanation of why the error occurs, causes, and how to fix it (Figure 32).

This presentation, along with CSV files with the affected URLs, has been forwarded to the Technical Department for review and changes.



Figure 21. Google Search Console: Site Speed Audit presentation

## 3.3.3. Off-page SEO Strategy

There is a significant part of a website's positioning that is not directly under the control of the publisher or site owner. Factors such as social media presence and building quality links to other relevant websites are some of the aspects that need to be worked on deeply. Although not directly controllable, these elements can have a positive impact on search ranking and website traffic.

## 3.3.3.1. Backlink audit

A backlink is a link that points from an external website to your own website. It is also known as an inbound link. Backlinks are important for SEO because search engines use them to evaluate the relevance and authority of a web page. The more quality backlinks a website has, the higher its authority and the better it ranks in search results (San Mladenovi et al., 2022).

In order to know the status of the backlinks that MyInvestor has, the SEMrush tool has been used. In the software, there is a specific section to analyze backlinks: Backlink Audit. In this section there is the global Toxicity Score, which informs which backlinks are toxic, potentially toxic or good.

Each backlink has a Toxic Score. This metric indicates on a scale from 0 to 100, with 100 being the maximum score, the risk of that backlink being detrimental to the positioning of the website. This toxicity score is based on a formula that is composed of different markers whose presence will affect the score.

SEMrush uses a total of 45 toxic markers to determine the Toxic Score of a link. Examples of toxic markers are non-indexed domain, duplicate pages, spam, link networks, weak domain, among others.

Figure 33 shows an example of MyInvestor's Overall Toxicity Score in May 2023. In this case, the backlink network consists of 490 referring domains containing a total of 2,800 backlinks. Of these 490 domains, 3 are toxic, 62 are potentially toxic and 425 are good.



Figure 22. SEMrush: Backlink Audit. Overall Toxicity Score (May 2023)

Having toxic and/or potentially toxic backlinks directly harms the domain's Authority Score, therefore, the positioning in search engines. To avoid this, it is necessary to perform a periodic review of the backlinks and clean the toxic ones or those that are considered detrimental for the domain.

The procedure has been as follows: It has been reviewed those backlinks that are toxic and potentially toxic. To do this, it has been reviewed one by one the backlink, looking at the origin of the domain, its Authority Score, the Toxicity Score and on what anchor it is using. If that backlink has a very low score or is toxic, it has been added to the "Disavow" list. In this list are all those domains and URLs that have been considered detrimental to the MyInvestor domain.

Once all the backlinks have been reviewed, the "Disavow" list is exported in a TXT format and it is submitted to Google Disavow Tool. This tool is used to notify Google of those inbound links that the user does not want to be considered in the PageRank of his domain (Figure 34).

otros s esquen web qu	tio web tiene una ac itios web, o si crees nas de enlaces que e retiren esos enlac ta herramienta. Más	que está a p infringen nu es. Si no cor	ounto de re estras dire nsigues qu	ecibir una deb ctrices de cal	ido a enlaces de p idad, solicita a es	oago o os sitios
	Esta es una he	rramienta av	vanzada q	ue debe usar	se con cuidado	
quieres	ona una propiedad desautorizar myinvestor.es	para consult	ar su esta	do o subir una	nueva lista con e	enlaces que

Figure 23. Google Disavow Tool

In Google Disavow Tool, the user simply uploads the previously exported TXT file to notify Google of those domains and URLs that are detrimental to the domain. Once this is done, the SEMrush tool automatically detects that the TXT file has been exported and asks the user if he/she has uploaded the file to Google Disavow Tool, in order to recalculate the Overall Toxicity Score. Following the acceptance, the software instantly recalculates giving information on the current status of the quality of the backlink network.

## 3.3.3.2. Content Marketing

After having done the Sentiment Analysis with the Brandwatch tool, several conclusions could be drawn:

- Customer Sentiment should be improved, as there are a large number of complaints about certain aspects of the User Experience.

- Make more posts on social networks, about products, functionalities and financial culture. In addition to knowing which days and times are better to publish.

Regarding the first point, all complaints and suggestions made by customers through social networks have been collected and subsequently transferred to the technical departments so that they can act and implement improvements.

Regarding the second point, three strategies have been considered to increase the volume of traffic in networks and improve the planning of posts:

A) Competitive analysis

In order to improve the content in networks, the companies operating in the Spanish digital banking market have been analyzed. An in-depth analysis of several factors has been carried out:

- Website content and user experience (UX).
- Products in which the company competes and their social media campaigns.
- Frequency of posts and interaction ratios.

First of all, it has been prepared an analysis of the content on the website, user experience and then a comparative analysis to see the strengths and weaknesses. This comparative has served both the Marketing Department and the Design Department. For Marketing, to see the content that is used, the structure of Header Tags, keywords used, etc. And for the Design Department, it has been useful to get ideas on how to improve the user experience (Figure 35).

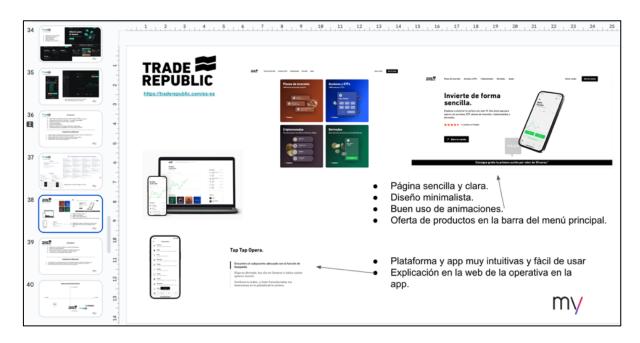


Figure 24. Competitive Analysis: Webpage content & UX

For the analysis of products, a comparison has been made with those companies that compete with MyInvestor in the market, mainly with remunerated accounts and Roboadvisors. First, a comparative table has been made for both accounts and Roboadvisors, in order to easily analyze and compare those products that offer better conditions than MyInvestor (Figure 36).

ENTIDAD	Account name	count name Remuneration		Amount paid/year (Gross)	Requirements
MyInvestor	Cuenta 1%	1% TIN/TAE el primer año. 1% TIN/TAE a partir del segundo año si se invierte en productos de la entidad. Sino, 0,3%	30.000€	300€	
Bankinter	<u>Cuenta nómina</u>	5% TAE el primer año. 2% el segundo año.	5.000€	243,62€	800€ (nómina, pensiones o ingresos profesionales). 3 recibos domiciliados al trimestre. Tener tarjeta activa (mínimo de 3 movimientos al trimestre).
Openbank	<u>Cuenta ahorro</u> <u>Bienvenida Nómina</u>	5% TIN durante los 6 primeros meses y 0,20% TIN los siguientes meses (2,58%TAE/año).	5.000€	130€	Ingreso mensual de al menos 900€
Sabadell	<u>Cuenta Online</u> <u>Sabadell</u>	2% TAE el primer año + 175€ si se domicilia la nómina	30.000€	600€	Solo nuevos clientes. Domiciliar la nómina para obtener los 175€.
ING	<u>Cuenta Naranja</u>	0,30% TAE	1,5 millones €	Depende del saldo	Tener cuenta nómina, por lo tanto, domiciliar nómina (700€)
N26	Cuenta N26 Estándar	-	-	-	
Revolut	<u>Cuenta Revolut</u> (Estándar)	-	-	-	
					m\/

Figure 25. Competitive Analysis: Product comparison table

After the comparison was made, it has been investigated the campaigns carried out by the competition for their products and on which social networks: Facebook, Twitter, Instagram. SEM campaigns have also been analyzed, i.e., paid campaigns. For this purpose, the Facebook Ads tool and SEMrush were used (Figure 37).

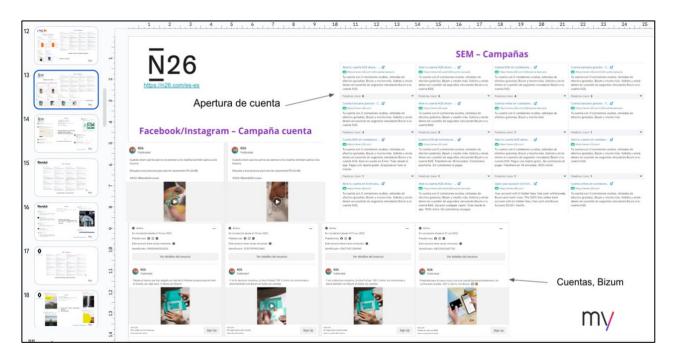


Figure 26. Competitive Analysis: Social Media Campaigns

### B) Social Media Planning

Once the analysis of the competition in social networks has been carried out. A publication strategy has been prepared for each month. In this strategy, several factors have been considered:

- Post topics: Publish more posts for those products that have higher priority by company decision. In this case the priority was (in order):
  - Interest-bearing account.
  - Investment funds.
  - Stocks and ETFs.
  - Roboadvisor.
  - Deposits.
- Number of posts per social network: Twitter is the priority social network, since it is where MyInvestor has the largest number of followers and the most engagement. Since one of the main objectives has been to increase the frequency of posts, the following has been established:
  - Twitter: Between 3 and 4 posts per day during the week and 2 posts on weekends.
  - Instagram: 3 posts during the week and 3 stories daily and 2 stories on weekends.
  - LinkedIn: 1 post daily.

In addition, the days of the week where there is more interaction with MyInvestor, as well as the times of the day, were analyzed. For this purpose, the Brandwatch tool was used (Figure 38 and Figure 39). The most relevant posts were published on those days and at those times of the day with the most activity.

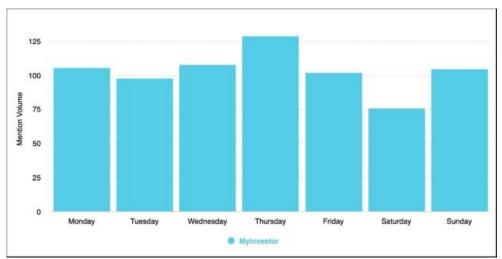


Figure 27. Brandwatch: Mention volume by day

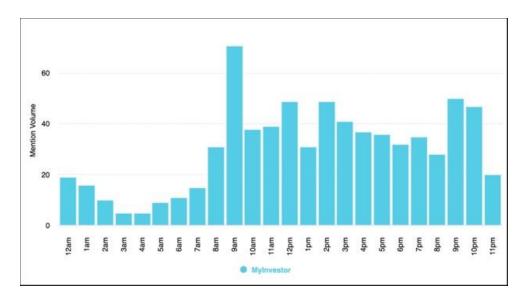


Figure 28. Brandwatch: Mention volume by day and hour

When the posts have been created and established the days and hours with the most engagement, a monthly calendar has been created with all those posts and specific days on which they will be published (Figure A2).

C) Collaboration with influencers

One of the ways to increase brand exposure and reach more people is to collaborate with influencers. The word "Influencer" is not only limited to the world of fashion and lifestyle, but also expands in many areas, such as the finance sector.

It has been observed that Twitter and YouTube are the main social networks where there are more influencers in the world of finance. Since the company's objective is to gain visibility and make itself known in the Spanish market, it has decided to strengthen the collaboration with influencers. It is important to mention that, before the Internship, the company already had collaborations with several influencers, but in the last year it has decided to expand the network of collaborators.

For the new influencer search, a series of parameters related to the company's objectives have been established.

- Influencers who talk about personal finance, who talk about topics such as: accounts, investment funds, stocks, ETFs and mortgages.
- Influencers who have more than 10,000 followers on Twitter.
- Accept the terms and conditions of the contract.

Influencers have been contacted via e-mail, showing interest to start a collaboration. If the influencer has answered the e-mail, a meeting is set up to explain the conditions of the collaboration and the subsequent signing of the contract.

## 4. RESULTS ANALYSIS

After all the appropriate strategies and techniques have been applied, the final results have been reviewed to make an evaluation of the procedure as a whole.

As it can be seen above, in order to improve the positioning in search engines, several strategies have been developed depending on the objective. On the one hand, On-Page SEO strategies and on the other hand, Off-Page SEO strategies.

## 4.1.1. On-Page SEO

## 4.1.1.1. WordPress SEO blog:

As can be seen in Table 1, before implementing the strategy, most of the blog articles (209) were not even well positioned for search engines. After implementing the strategy, 80% of the blog articles had good SEO positioning, while 20% had acceptable positioning.

	September 2022	June 2023
Blog articles with SEO Score: Good	69	271
Blog articles with SEO Score: Acceptable	48	67
Without SEO Score	209	-

Table 1. Comparative SEO score of blog posts before and after

## 4.1.1.2. Keywords, Title & Description and Header tags (H1)

This 20%, representing 67 articles, are articles that have not been able to improve the SEO positioning to: Good. This is because the calculation of the SEO score established by the plugin used called "Yoast", establishes a series of specific characteristics that prevent having the maximum score, such as: the low number of words contained in the article, i.e., if the article does not reach a minimum of 300 words, it will be counted as a serious error, making it impossible to achieve the maximum score.

That said, the important factor has been that all the blog articles have been positioned, and that those 209 articles that did not have SEO score now do.

Strategically defining specific keywords for each of the pages has helped to create titles and descriptions that make sense in terms of search engine positioning. After applying the changes, MyInvestor URLs now have an orderly structure that makes sense from an SEO perspective. This also applies to the Header Tags strategy. Specifying header tags in each URL has established an orderly and hierarchical structure of the pages, facilitating indexing by search engines.

In this case, both the header tags and the keywords, titles & descriptions cannot directly quantify the improvement, that is, it is not possible to know immediately if these measures implemented have been good or not. This is a clear example that SEO strategies do not give results immediately but require a certain amount of time. Moreover, these strategies are a small but important part of an SEO strategy.

These SEO techniques can be reflected in the Authority Score, so later the effect on the Authority Score after applying the strategies will be analyzed.

## 4.1.1.3. Site Health: Solve errors

Unlike the previous point, the eradication of errors does have an immediate effect on the Site Health Score. The SEMrush tool allows to re-run the analysis of URLs as many times as wanted, so it can be known immediately whether the errors have been fixed.

At the beginning of the SEO audit, a total of 461 errors were detected. These errors are divided between: Duplicate Title Tags (183) & Duplicate Meta Descriptions (119), Pages with duplicate content problems (104), Broken internal links (30), Pages that returned a 4xx status code (8), Broken images (17). This was detrimental to Site Health with a score of 62%.

	September 2022	June 2023
Errors	461	21
Site Health Score	62%	77%

As of June 2023, it has been managed to reduce the errors to only 2 and, as a consequence, increase the Site Health to 77% (Table 2).

Table 2. Comparison of Errors and Site Health Score September 2022 vs June 2023

As can be seen in Table 2, the improvement in Site Health is considerable, despite not being able to reduce the number of errors to 0. The balance of the error reduction is positive, with an increase of 15 points in the Site Health Score.

The remaining 21 errors are: Pages that returned a 4xx status code (4), incorrect pages found in sitemap.xml (3), redirect chains and loops (4), pages couldn't be crawled (6) and pages returned 4XX status code (4). As it can be seen, there are new errors appearing, or existing errors. This is because there are constantly movements in MyInvestor pages: new URLs are created with new content, pages are deleted or updated. This leads to the detection of new problems.

Despite the constant updating of content and URLs, the overall balance is very positive as mentioned above: substantial reduction of the number of errors and increase of the Site Health Score.

## 4.1.1.4. Site Speed

In November 2022 performance was inadequate, with a score of 39 points. This score was affected by problems in Site Speed, specifically Cumulative Layout Shift (CLS), Largest Contentful Paint (LCP) and First Contentful Paint (FCP) problems.

After the analysis was done and sent to the IT team for resolution, improvements have been noted. In June 2023, there was a significant increase in performance to 69 points (Figure 40).

	39) 98 75 dimiento Accesibilidad 75 Prácticas recomendadas	98 SEO			92 Prácticas scomendadas	98 560
39         Rendimiento         Los valores son edituaciones y pundenos va rendemento so esclusia directimente a part calviadora         0 -049       50-20         SECENCIAS		TY         1 etems           Type         1 etems           Annotation         1 etems           Annotation         1 etems           Type         1 etems           Type         1 etems           Type         1 etems           Type         1 etems	69 Rendimiento Los valores son estimaciones y pueden esti rendimiento se calcula diructamente a partor saluvadora: 0-49			The constraints of the constrain
First Contentful Paint 5,7 s	Time to Inter 9,1 S	active	<ul> <li>First Contentful Paint</li> <li>2,3 s</li> </ul>		Renderizado del 3,2 s	I mayor elemento con contenido
▲ Speed Index 8,3 S	Total Blockin 510 ms		<ul> <li>Total Blocking Time</li> <li>560 ms</li> </ul>	•	Cambios de dise	eño acumulados
Renderizado del mayor elemento con o 7,6 s	contenido Cumulative L 0,021	ayout Shift	Speed Index 7,5 s			
Captured at 2 nov 2022, 13:23 CET Carga inicial de la página	☐5 Moto G4 emulado with Lighthouse 9.6.6 Ф Limitación de 4G lenta	♣o Carga de una única página	Captured at 25 may 2023, 15:47 CEST O Cargo inicial de la página	Eb Moto G Power emulado with I ☞ Limitación de 4G lenta	Lighthouse 10.2.0	Z <sub>0</sub> Carga de una única página
	November 202	2		June	2023	

Figure 29. Google Search Console: Site Speed comparison November 2022 vs June 2023

It is normal for web pages undergo changes, and the performance score to vary. The fact that there is constant movement of content and URLs on the web page means that the performance and Site Speed should be reviewed periodically.

## 4.1.2. Off-page SEO

#### 4.1.2.1. Backlink audit (toxicity audit)

Having a healthy link network is crucial to achieve a high Authority Score. That is why we have been analyzing and cleaning the backlinks of the web domain. With the Google Disavow Tool, previously mentioned, those backlinks that were toxic to the web domain have been disavowed. As of June 2023, a total of 442 toxic domains have been disavowed, as can be seen in Figure 41.



Figure 30. SEMrush: Backlink Audit status June 2023

As of June 2023 there are a total of 496 referring domains, of which 427 are non-toxic, 68 are potentially toxic and only 1 is toxic. The backlinks and referring domains vary a lot over time: new ones come out, some are lost, or new toxic ones appear. The question is to check periodically and to keep the toxicity as low as possible.

Figure 42 shows the evolution of toxic backlinks. At the end of 2022, there seemed to be a drastic increase in the number of both toxic and potentially toxic backlinks. From February onwards, it has been started to control and clean up toxic backlinks. Since then, they have continued to appear but have been kept under control, without reaching the peaks that were reached before the control.

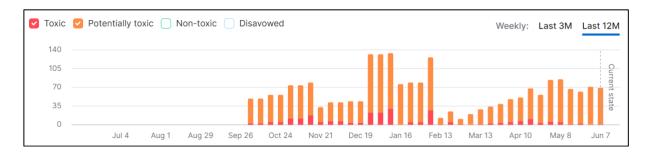


Figure 31. SEMrush: Backlinks Toxicity evolution over the time

## 4.1.2.2. Content Marketing

To measure the results of the Content Marketing strategy, the SEMrush tool was used. SEMrush also offers tools for in-depth analysis of social networks. In the "Social Media" section, there is a tool called "Social Tracker". In it, it can be performed an in-depth analysis of the content on networks, audiences and engagement of the different social networks. It also offers the option of adding competitors' social networks for comparison purposes.

		January-May 2022	January-May 2023	Variation (%)
	Followers	24.417	29.366	+20.3%
TWITTER	Publications	509	536	+5.3%
	Engagement	5.412	13.013	+140.4%
	Followers	5.709	6.912	+21.1%
INSTAGRAM	Publications	34	47	+38.2%
	Engagement	2.109	3.642	+72.6%

Table 3. SEMrush: Twitter & Instagram metrics 2022 vs 2023 comparison (SEMrush)

Before starting with the analysis of the table, it is worth highlighting that it was not possible to track the LinkedIn social network because the SEMrush Social Tracker does not detect the variation in the number of posts.

If attention is paid to the number of followers and posts, it can be deduced that Twitter is the Social Network with the highest importance within MyInvestor, so comparing Twitter with Instagram is meaningless. However, the goal of increasing both the number of followers and engagement is shared by both social networks.

The objective of the Content Marketing strategy has been to achieve more visibility of MyInvestor's Social Media profiles, as well as to increase Engagement. As can be seen in Table 3, the number of followers has risen considerably on both social networks: +20.3% on Twitter and +21.1% on Instagram compared to the previous period.

As for the increase in the number of publications, it has been slightly higher on Twitter (+5.2%) and much higher on Instagram (+38.2%). But the interesting thing is in Engagement: on Twitter it has increased by +140.4% and on Instagram, by +72.6%. In the case of Twitter, with approximately the same number of publications as last year, a significantly higher number of engagements has been achieved, which in turn translates into greater audience interest in the content published.

## 4.1.2.3. Authority Score

As mentioned above, the Authority Score is the metric that represents the quality of a website's SEO. All the strategies used in this report have been used to improve the SEO, ergo to increase the Authority Score.

In Table 4, it has been compared the data at the beginning of the internship and at the end of the internship. It is worth remembering that the Authority Score in September was 42, but in February there was a change in the formula by SEMrush and it decreased to 33. This means that the Authority Score before the change has the same value as the one after, so it has been decided to put the Authority Score after the change in the formula.

	September 2022	June 2023	Variation (%)
Authority Score	33	35	
Organic Traffic	50.806	61.343	+20.7%
Organic Keywords	6.924	15.232	+120%

Table 4. SEMrush: Domain metrics comparison September 2022 vs June 2022

During the internship period, the Authority Score increased by 2 points. In addition, the monthly organic traffic on the website was 61.343 users in June, an increase of 20.7% compared to September. It is also worth bringing up that the organic keywords have increased considerably (+120%) compared to September. These organic keywords are those that bring users to the domain through the top 100 organic search results in Google. That means that more of our keywords are positioned in the first results of Google.

# 5. CONCLUSIONS

This report has shown an exhaustive analysis of the search engine optimization process in the Spanish banking market of the Neo bank MyInvestor. From knowing the status of the company's search engine positioning, to the implementation of specific strategies and subsequent analysis and evaluation of the results obtained.

In order to know the status of MyInvestor's positioning, an SEO Audit was carried out. Tools such as SEMrush and Google Search Console were used to obtain an overview of the company's SEO situation. In addition, Brandwatch: a brand monitoring tool was used to perform a sentiment analysis and learn about public opinion about the company MyInvestor. This process allowed to identify those errors and problems and marked the starting point for the implementation of Digital Marketing techniques to improve MyInvestor's online presence and increase its visibility in search engines.

With the analysis of the problems, specific techniques were selected to improve MyInvestor's search engine positioning. Both on-page and off-page SEO techniques were used, grouped into two strategies: SEO On-Page Strategy and SEO Off-Page Strategy. A White Hat SEO strategy was implemented, which strictly adheres to the rules and recommendations offered by the search engines. For this, a variety of tools were used to collect data and apply the specific strategies for each problem.

Finally, the results at the end of the internship were analyzed to see if the strategies used have improved the company's status with respect to September 2022. It can be said that the search engine positioning has improved throughout the Internship: The Site Health has increased from 62% in September 2022 to 77% in June 2023. That means that MyInvestor's SEO health has increased 12 points in 8 months. The website performance has also improved: from 39 points to 69. Another indicator of the improvement in positioning is the increase in monthly organic traffic by 20.7% compared to September 2022 and an increase in the number of organic keywords by 120% compared to September 2022.

Referring to social networks, it has also been detected a significant improvement compared to last year: increase of followers by 20%, increase of Engagement by 140.4% on Twitter and 72.6% on Instagram.

In conclusion, working on organic positioning and analyzing audience sentiment on social networks in order to subsequently implement the right strategies is essential to obtain good results in the short, medium and long term for any company, including those in the banking sector. It is of importance to mention that it is impossible to obtain results from an SEO strategy in the short term: it requires constant work and perseverance to achieve the objectives and results.

# 5.1. IMPLICATIONS/CONTRIBUTIONS AND FUTURE WORK

Prior to this MyInvestor Report, the company did not have a person or persons specifically focused on the continuous improvement and maintenance of search engine positioning. This is a very important area of marketing that often goes unnoticed in the business world, especially in the financial sector, which is generally a very traditional and archaic sector. With this Report, a guide has been established so that the company, from now on, can carry out SEO and Sentiment Analysis audits.

In the realization of this Report, little information has been found that delved into the SEO of the financial sector, especially of the Neo banks. With the realization of this report, an internal vision of the audit process and improvement of the organic positioning of the company and the creation of synergies with the Social Media Analysis is provided.

# 5.2. LIMITATIONS AND FUTURE RESEARCH

Working in a company in the financial sector means facing a large number of restrictions and protocols. From product creation to communication with clients, there are specific rules that must be strictly adhered to. Product information and marketing campaigns must include the necessary legal information, as well as language that cannot lead to misunderstandings among consumers. Products are marketed that directly affect consumers' purchasing power, so it is essential to comply with regulations in all aspects of the company, especially marketing and communication.

Another limitation for the development of the Internship Report has been the use of the necessary tools and software for the analysis of social networks, SEO analysis and technical analysis of the MyInvestor website. The company uses specific tools for the development of marketing activities, so it has been necessary to understand and learn how to fully use these tools to perform the relevant marketing tasks. It is worth noting that some of them, such as SEMrush and Google Search Console have been previously used in the Master.

Finally, the duration of the internship has also been a limitation for a complete development of the proposal and to be able to observe the SEO changes. Some SEO metrics, such as the Authority Score, require a lot of time to see improvements. An example is linkbuilding, which has a big effect on the Authority Score and getting more linkbuildings requires a lot of time.

For a future work it would be interesting to deepen in the aspects that can directly improve the domain Authority Score, such as the link network. It would also be interesting to deepen how SEO and Sentiment Analysis can complement each other to improve a marketing strategy. Some areas to study could be in-depth keyword research, relevant content creation, online reputation management or even user experience improvement.

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# **APPENDIX A**

URL	TITLE	Title Proposal	N. charact.	DESCRIPTION	N. charact	Description Proposal	N. charact.	KEYWORDS Proposal
Ĩ	Mylnvestor, El neobanco experto en inversión	El neobanco experto en inversión	32	Somos el neobanco de la libertad: ni condiciones ni comisiones. Cuenta gratuita remunerada al 1% TIN/TAE hasta 20.000€ el primer año. Y extendemos la remuneración del 1% TIN/TAE is realizas inversiones de 300 € al mes en nuestras carteras indexadas (roboadvisor), fondos y planes. Sin domiciliar nómina. Roboadvisor de carteras indexadas y cientos de fondos de inversión de gestión activa e indexados sin comisiones de custodia. Invierte en Vanguard, IShares, Fidelity, Amundi y NN, sin minimo de inversión.		PENDIENTE!!	11	myinvestor, neobanco, myinvestor cuenta, myinvestor inversian, myinvestor fondos inversian, myinvestor cuenta online, myinvestor banca online
https://myinvestor.es/ayuda/preguntas-frecuentes/	Preguntas frecuentes	Preguntas frecuentes (FAQs)	27	Las preguntas más frecuentes sobre Mylnvestor, el neobanco experto en inversión.	80	Preguntas más frecuentes, dudas, FAQs sobre como funciona MyInvestor	68	MyInvestor, andbank myinvestor
https://myinvestor.es/conocenos/	Conócenos	Qué es Mylnvestor - Conócenos	29	Somos un neobanco digital con una misión: ayudar a nuestros clientes a gestionar su patrimonio poniendo a su alcance una amplia gama de productos de inversión con comisiones mínimas. Nuestros accionistas son Andbank España, El Corte Inglés Seguros, AXA España y varios family offices. Estamos supervisados por la CNMV y el Banco de España y tu dinero está protegido por el Fondo de Garantia de Depósitos España.	412	NO TOCAR	8	neobanca, mejor neobanco
https://myinvestor.es/cuentas-tarjetas/cuentas-menores/	Cuenta Junior para pequeños grandes inversores	Cuenta Junior para menores	27	Cuenta Junior para menores de 18 años. Cuenta gratuita y remunerada al 1 % TIN / TAE durante 12 meses hasta 30.000 €. Y ampliamos la remuneración del 1 % TIN / TAE si realizas inversiones de 300 € al mes en nuestras carteras indexadas (roboadvisor), fondos y planes. Gratis, sin condiciones ni comisiones.			0	cuenta bancaria para menores
https://myinvestor.es/cuentas-tarjetas/cuentas/	Cuenta remunerada 1% TIN/TAE hasta 20.000 €	Cuenta remunerada 1% TIN/TAE hasta 30.000 €	43	Cuenta gratuita y remunerada al 1 % TIN / TAE durante 12 meses hasta 20.000 €. Y ampliamos la remuneración del 1 % TIN / TAE si realizas inversiones de 300 € al mes en nuestras carteras indexadas (roboadvisor), fondos y planes. Sin condiciones ni comisiones. No es necesario domicilar nómina y recibos, pero puedes hacerlo si quieres. Tarjetas de debito y crédito gratis. Transferencias SEPA gratis. Acceso a roboadvisor (carteras indexadas) desde 150 euros con costes minimos. Acceso a cientos de fondos de inversión de gestión activa e indexados sin comisiones añadidas, ni siquiera de custodis. Vanguard, IShares, Fidelity, Amundi y NN, sin minimo de inversión. Planes de pensiones, indexadas, sal como para consumo. Crowdfunding inmobilario.		NO TOCAR	8	mejores cuentas remuneradas, cuentas remuneradas sin nomina, cuentas ahorro remuneradas.
https://myinvestor.es/cuentas-tarjetas/tarjetas/	Tarjetas gratuitas de crédito y débito	Tarjetas Gratis de crédito y débito sin comisiones	50	Tarjetas gratuitas con seguro de accidente en viajes incluido. Sin gastos de mantenimiento ni renovación. Retiradas gratis en cualquier cajero del mundo.	153	Tarjetas débito y crédito gratuitas. Con seguro accidente en viajes incluido. Saca dinero gratis en todo el mundo. Sin gastos de mantenimiento ni renovacion.	157	tarjetas de credito online, tarjeta debito, tarjeta de credito gratis, tarjeta de debito y credito, debito, tarjeta credito online, solicitar tarjeta de crédito, tarjeta débito crédito
https://myinvestor.es/hipotecas/	Hipotecas	Hipotecas ¿Cudi elegir?	24	Hipotecas a tipo fijo y variable para nuevos préstamos y subrogaciones. Cambia tu hipoteca de banco y empieza a ahorrar.	120		0	hipoteca subrogada, subrogar hipoteca, subrogación hipoteca, mejores hipotecas, camparar hipotecas, cambio de banco la hipoteca, hipoteca variable, hipoteca fija
https://myinvestor.es/hipotecas/hipoteca-fija/	Hipoteca Fija		0	Hipotecas a tipo fijo para nuevos préstamos y subrogaciones. Cambia tu hipoteca de banco y empieza a ahorrar.	109		0	hipoteca a tipo fija, hipoteca fija, mejar hipoteca fija, mejares hipotecas tipo fijo, interes hipotecas, fija fitereses fijas hipotecas, hipoteca fija variable, interes fijo en hipotecas, hipotecas con interes fijo

# Figure A1. CMS: Excel table with websites Title, Description & Keywords proposal

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Figure A2. Post planification: April 2023 posts table

# ANNEX A – ETHICS COMMITTEE APPROVAL



This is to certify that

Project No.: DDMKT2023-7-118520

Project Title: Digital Marketing Strategies in a Neo bank Implementation of SEO & Sentiment Analysis

Principal Researcher: Adrià Camps Orihuela

according to the regulations of the Ethics Committee of NOVA IMS and MagIC Research Center this project was considered to meet the requirements of the NOVA IMS Internal Review Board, being considered **APPROVED** on 7/11/2023.

It is the Principal Researcher's responsibility to ensure that all researchers and stakeholders associated with this project are aware of the conditions of approval and which documents have been approved.

The Principal Researcher is required to notify the Ethics Committee, via amendment or progress report, of

- Any significant change to the project and the reason for that change;

- Any unforeseen events or unexpected developments that merit notification;

- The inability of the Principal Researcher to continue in that role or any other change in research personnel involved in the project.

Lisbon, 7/11/2023

NOVA IMS Ethics Committee ethicscommittee@novaims.unl.pt