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Assessing and Optimizing Digital Marketing Strategies for Life Sciences Marketing Agency

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Management Summary

We have been witnessing a growing digital transformation for decades. The COVID-19 pandemic accelerated this change, replacing traditional face-to-face interaction and physical marketing with digital communications and engagements. With the development of technology and the increase in information density, new ways and approaches to categorising online data are utilised. Therefore, every business must adhere to the new standards, introduce an online presence, and optimise its visibility to stay competitive in an ever-changing environment. Companies must go beyond having just a website or social media account to market their business effectively. Understanding how data is stored and what points in customer behaviours can be useful for the business is essential. Thus, every channel should be optimised for visibility and offer value to gain more traffic and interest in prospects. (Amankwah-Amoah et al., 2021)

The life sciences sector, like many others, had to adapt rapidly to the constraints imposed by the pandemic. Websites and social media became primary channels for interaction, emphasising the importance of online visibility. However, the content type and expertise level differ from other sectors. Life sciences cover healthcare, biotechnology, pharmaceuticals, medical devices and more. Those fields can be further divided into two primary types of business transactions and relationships. The first main type is business-to-clients (B2C), where the target audience often includes patients. B2C for Life sciences is different from other sectors as it often relates to promoting treatments, medicines or other medical equipment. This brings forth ethical and regulatory complexities. For instance, the Netherlands has established the Code of Conduct, which governs the advertising of pharmaceutical products for humans, ensuring user safety and complicating marketing campaigns (*Explanatory Notes to the Dutch Code of Conduct for Pharmaceutical Advertising*, n.d.). The second is business-to-business (B2B), for example, medical device companies selling to analytics labs or marketing agencies supporting other companies in their strategies, as B2B relies more on careful advertisement and communications with partners and customers. The primary target audiences are highly educated scientists, professionals, and business owners. Thus, a few dominant strategies became fundamental in the B2B life sciences sector. The companies operate through two main channels: a website as a base form of information and social media as a communication channel. Within this particular group (B2B in life sciences), LinkedIn emerged as a leading social media (SM) as it was created for professional networking.

Consequently, the focal point of marketing strategies revolves around inbound marketing. In this approach, businesses aim to be discovered by customers by offering content valuable to their target audience rather than actively seeking out prospects. The potential customers make choices based on

the brand's reputation, reliability and accessibility.(Wisetsri et al., 2021) This encapsulates the core strategy JPP Life Sciences Marketing & BD agency employs. They craft educational and informative content to showcase their expertise and raise awareness about pivotal developments in marketing and business development.

As a relatively young company, just three years old, JPP aims to maintain its current position and foster further growth. The strategies developed and improved upon in this report are considered fundamental for any Life Sciences marketing agency of a similar size. However, this report is presented from the perspective of JPP and its unique challenges.

Upon evaluation, it was observed that the company's website had undergone partial optimisation to enhance online visibility. However, a significant issue arose regarding the content's inability to capture users' interest effectively. Similarly, the LinkedIn account maintained by the company experienced low engagement and limited interest from its audience, resulting in reduced reach of new posts. As a response, a research question was formulated: "How can JPP Life Sciences Marketing agency integrate and optimise its channels and improve digital marketing strategies to enhance online visibility and customer engagement?" Given the need to address various aspects of this question, the study employed mixed methods to cater to the diverse ways to analyse broad data from different channels. The analysis uncovered several key findings. JPP's Search Engine Optimization (SEO) strategy effectively drove organic traffic to their website, emphasising the ongoing need for continuous optimisation for search engines. While JPP initially faced challenges with low reach on LinkedIn, improvements were made during the internship period, resulting in increased impressions and follower growth. Content analysis on LinkedIn revealed a preference for visual and video content, indicating a need to adapt the content format for enhanced engagement. Furthermore, the third channel, an email marketing campaign, was strategically planned to offer yet another valuable content for potential customers and showcase the company's expertise.

Insights not only provides insights into JPP's theoretical methodology behind the company's approach to digital marketing, encompassing concepts such as omnichannel marketing and inbound marketing, but it also clarifies each channel's significance in its strategy. Furthermore, the report delves into the company's profile and offers a comprehensive exploration of the research methodology grounded in a pragmatic approach. The following sections reveal the detailed analysis and comprehensive discussion of the results, serving as a resource for future strategic decisions.

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1. Introduction

1.1. Omnichannel Marketing

Omnichannel marketing is an approach to managing customer interactions across multiple channels. This strategy connects two or more channels to deliver a seamless customer experience, integrating data collection and analysis and covering all customers touchpoints. It significantly surpasses the multi-channel approach, which often provides disjointed and separate experiences for the customer. For instance, in a multi-channel scenario, an online store and a physical store might offer similar products but remain disconnected, resulting in a fragmented experience for customers. In contrast, omnichannel marketing ensures that all channels are interconnected, allowing customers to seamlessly transition between them, such as picking up online orders at a physical store or having items delivered from the store, thereby enhancing the overall customer experience. (Akter et al., 2021)

The rising importance of omnichannel marketing aligns with the changing consumer behaviour and rapid technological advancements. Businesses influenced by digitalization are obliged to offer convenient, swift, and personalized services (Verhoef et al., 2015). Several touchpoints for clients mean the need for well-intertwined customer journey management. To navigate potential needs through products and services or support, prioritize communication, and enhance customer retention (Lemon & Verhoef, 2016). This phenomenon is widely recognized and studied in the retail industry. However, it is also gaining momentum in the Life Sciences sector. As people's expectations change due to social and demographic shifts, as observed in e-commerce, there is a growing desire for similar experiences in all facets of life, including work, healthcare, and leisure (Verhoef et al., 2015).

The Life Sciences sector is traditionally distinct from general marketing trends due to stringent regulations, ethical considerations, and different motivations. It is also related to the specifics of life sciences industry clients. Depending on the field within this sector and the place of the supply chain that the company focuses on, addressing one of the 4P's traditional marketing principles, the channels and type of promotion will differ whether it is direct-to-consumer advertising or using a sales representative to share information about the products with the retail party (Rollins et al., 2014). Nevertheless, it is undeniable that upon digitalization, new primary channels were added, including websites, social media, and email marketing, which are online based. The COVID-19 pandemic, by forcing online presence and reducing face-to-face client interactions (Amankwah-

Amoah et al., 2021), revealed the pharmaceutical industry's delay in adopting online visibility trends. This urgent situation forced pharmaceutical and other Life Sciences companies to rapidly integrate digital channels into their core strategies for value creation (Parekh et al., 2016). The shift marked a significant move to more dynamic employment of digital platforms, emphasizing their critical role in client engagement and business continuity.

1.2. Inbound Marketing

Inbound marketing is a strategic approach focusing on attracting customers through valuable content and tailored experiences. This methodology, primarily leveraging digital visibility, employs a variety of tactics such as content creation, social media engagement, and Search Engine Optimization (SEO). These efforts are designed to draw potential customers' attention to the business, ensuring that the business is easily discoverable online whenever a lead searches for specific products or services. This approach marks a significant shift from traditional outbound marketing methods, where marketers seek out customers. In contrast, inbound marketing resonates with the current societal change, where modern consumers increasingly rely on online resources and favour businesses that offer personalized services or products (Halligan et al., 2014).

The application of inbound marketing is vital in the life sciences industry. This sector demands informed decision-making, with its audience seeking detailed and accurate information, often backed by scientific literature. Inbound marketing's relevance in life sciences arises from its intention to inform and engage an educated audience, including healthcare professionals, researchers, and patients.

Inbound marketing is based on content marketing, which has become much more accessible for more companies due to digitalization, as it can be much more cost-effective to post blogs than print paper newsletters (Lieb Rebecca, 2012). Effective strategy based on education before selling supports brand visibility and authority, especially in the competitive and regulated life sciences arena.

1.3. Search Engine Optimization (SEO)

Search Engine Optimization (SEO) entails a number of tasks that improve the visibility of the content (e.g., website page, blog, SM posts, articles) for the search engines. When using a search engine, the search results are ranked by algorithms and programs to deliver the most accurate content or answer to the phrase or question. SEO aims to enhance visibility and ranking on search

engine results pages (SERPs). Naturally, top-ranking websites receive more visitors, which fosters a goal to rank in the top 10 results. Ranking depends on many factors, and search engines such as Google constantly evolve. The main factors of search algorithms are the quality of the content, whether it answers the question, and explains the key phrases and links directed to the website. SEO entails all actions within keyword research, website environment management, content relevancy, and adherence to search engine algorithms, all aimed at improving the organic discoverability of content (Grappone et al., 2011).

Keywords are phrases or single words written in search engines (SE) by users (e.g., life sciences marketing agency in NL) to find needed information. The search engine will recognize content created using look-for keywords as the source of needed information. However, the evolution of SEs shifted towards prioritizing user experience, content quality, and strategic use of keywords. Modern SEO practices now encompass many factors, including mobile optimization, user intent, and semantic search (Goodwin, 2023).

Broadly categorized into on-page and off-page SEO, these categories represent distinct yet complementary aspects of SEO practices. Off-page refers to strategies and actions outside the website to improve its position in SEs. It focuses on enhancing the perception of a website's popularity, relevance, and authority, consequently linking and promoting content and the website in different places (e.g., social media). Elements that fall into off-page SEO include but are not limited to:

Backlinks: Links from external websites that point back to a website. The quality, quantity, and relevance of these backlinks are critical factors. Search engines like Google consider high-quality backlinks as a vote of confidence, indicating that content is valuable. However, not all backlinks are created equal. Links from authoritative, high-ranking, and relevant websites carry more weight. Conversely, backlinks from questionable sources can negatively impact SEO.

Social Media Engagement: A strong presence on social media can amplify content's reach, drive traffic to a website, and enhance brand visibility. When content is shared widely on social media platforms, it increases the likelihood of garnering backlinks, which benefits SEO.

On-page SEO refers to optimizing elements within a website, directly influencing its search engine rankings. This includes a range of components:

Content Optimization: This includes the strategic use of keywords, which are terms or phrases that potential visitors might use when searching for content relevant to what the website offers. Keywords should be distributed naturally within the content, headers, and image descriptions.

Title Tags and Meta Descriptions: Title tags are clickable headlines that appear in search results, while meta descriptions are summaries that explain the page's content. Both elements must be compelling and include relevant keywords, as they influence SEO and affect click-through rates.

Headers: Proper use of header tags (e.g., H1, H2, H3) helps organize content in a structured manner, making it easier for search engines to understand and index the information on a webpage.

Image Optimization: Assigning accurate and descriptive file names and alt text (alternative text). Having alt text for images on a website makes it easier for them to be found in image searches, thus enhancing the page's visibility that includes the images.

On-page SEO can be further broken into two subcategories:

Technical SEO: It includes enhancing website speed, ensuring mobile-friendliness, and maintaining a logical website architecture. A well-structured site with efficient navigation and linking patterns improves user experience and facilitates search engines in crawling and indexing the site. Technical SEO is a continuous process, requiring regular audits to identify and correct any issues that might impede a website's performance.

Content SEO: This includes blogs, videos, infographics, and other multimedia elements. The content must be well-structured, providing value to the audience and being tailored to align with search engine algorithms.

In B2B marketing for Life Sciences, the nuances of SEO are particularly significant. Unlike Business-to-Consumer (B2C) SEO, B2B SEO demands a deeper understanding of the industry's specific jargon, longer sales cycles, and a focus on lead generation over immediate sales. The primary objective in this context is to attract traffic and engage a highly specialized audience with a propensity to evolve into long-term business relationships. This requires content rich in relevant keywords that resonate with the professional audience (Barrett Jonathan & Herten, 2021).

1.4.Social Media

Social media is a term used to refer to a diverse range of online communication platforms that offer virtual spaces for users to interact, share content, and build communities. Social media has become a crucial tool in marketing due to its accessibility, immediacy, and user-generated content. Marketers benefit from social media's ability to communicate directly with audiences, build brand awareness, and drive customer engagement. Social media enables real-time engagement, which provides immediate feedback and insights into consumer behaviour and preferences, giving marketers the unique possibility to adapt brand image or product influence directly to the evolving needs and trends of the market. Moreover, those platforms are equipped with algorithms to analyse user data to deliver tailored content, ensuring marketing messages reach the most relevant audiences. This precision targeting enhances the effectiveness of marketing campaigns (Kietzmann et al., 2011). In the context of B2B, SM is a base for marketing and communications, supporting activities such as product presentation, brand building, and customer communications. It is instrumental in sales management and business development, helping to generate referrals, qualify prospects, and manage relationships (Rose et al., 2021).

As a professional networking site, LinkedIn has evolved to cater to the professional needs of its users. It is a multifaceted platform for professional branding, content sharing, industry-specific discussions, and, most importantly, B2B marketing.(Mora Cortez & Ghosh Dastidar, 2022) Thus naturally it became the primary SM channel for most of Life Sciences industry that offers B2B services, as their target audiences are professionals using LinkedIn.

1.5.Email Marketing

The concept of email was established in the early 1970s, and since then, email marketing evolved into an integral component of digital communication. In 2023, email marketing's revenue was estimated at over 10 billion U.S. dollars and is expected to grow exponentially in upcoming years (Dancheva, 2023). This platform has outperformed its initial purpose, evolving into a dynamic and adaptable tool that remains key for marketers in driving sales and engagement. This tool is still relevant today due to its versatility and cost-efficiency, enabling marketers to establish direct, personalized connections with a broad spectrum of prospects and clients (Jenkins Simms, 2009). A key strength of email marketing is its adaptability and efficiently measurable impact. Campaign performance can be quantitatively assessed through various metrics, such as open rates, click-through rates, and the duration spent reading the emails. These provide marketers with actionable insights to refine their strategy's optimal effectiveness (Gunelius, 2018). Furthermore,

the ease of customization in email marketing allows for tailored communications, employing diverse marketing concepts and iterative testing to enhance user engagement and relevance of the delivered content significantly.

The versatility of email marketing aligns seamlessly with the objectives of inbound marketing. This integration is particularly effective in delivering content of high relevance and value to recipients, such as educational materials, templates, and white papers. Such content nurtures existing customer relationships and attracts potential prospects by offering solutions and information fitting their needs (Baggott et al., 2007). Given the advantages mentioned above, this communication strategy holds significant relevance for the Life Sciences industry.

1.6. Internship

The Life Sciences Industry faces the challenge of adapting to new marketing trends and utilizing a broader spectrum of digital channels. There is a growing demand for marketing experts who can create high-quality scientific content and skilfully navigate diverse channels to enhance brand presence, especially among startups and scale-ups that often do not have in-house marketing departments. Consequently, to attract these enterprises, marketing agencies must enhance their online visibility, ensuring they are easily discoverable by potential clients.

JPP, embracing inbound marketing principles, strives to create valuable content that organically attracts clients. However, a critical assessment of JPP's current digital marketing strategies revealed a significant problem: the agency's online presence was predominantly limited to its website, with minimal utilization of LinkedIn. Furthermore, although the website was somewhat optimized for search engines, it primarily offered blog content, resulting in limited online visibility and engagement opportunities.

Based on those insights, a research question was formed:

How can JPP Life Sciences Marketing agency integrate and optimise its channels and improve digital marketing strategies to enhance online visibility and customer engagement?

Given the broad range of this research question and the practical constraints of a five-month project timeline, the focus was narrowed to improving the interconnection between the three channels: website, LinkedIn and email campaign. This included enhancing the creation of SEO-optimized content for social media, optimizing the tracking system of links for better feedback and analysis, and developing and preparing to introduce a new channel—email marketing. Therefore, sub-questions for this research question were prepared:

1. **What are the most effective techniques for Search Engine Optimization for website and SM content?**
2. **What are the most effective strategies and techniques for enhancing reach on LinkedIn for a Life Sciences marketing agency?**
3. **How can email marketing be strategically utilized to generate leads and nurture customer relationships effectively?**

The internship, therefore, was designed with a dual focus: firstly, to evaluate and enhance JPP's digital marketing strategies for improved long-term efficacy, and secondly, to expand the agency's online presence beyond the website. This involved a comprehensive approach containing LinkedIn strategy development, website optimization, and the initiation of an email marketing campaign. The goal was to ensure that JPP's digital presence was not only more visible but also offered a richer variety of content, thereby catering to the diverse needs of potential clients in the Life Sciences sector.

2. Company Profile

2.1. Overview

JPP Life Sciences Marketing and BD was founded in 2019 in Leiden by the current CEO. It specializes in marketing and business development services for the Life Sciences sector, focusing on start-ups and scale-ups within that sector. The life sciences sector is a broad range of industries and disciplines concerned with studying living organisms and life processes, including companies working in fields like biotechnology, pharmaceuticals, clinical research, and trials or healthcare services. The key competitive advantage of the company is its scientific background, as all employees, including the CEO, hold at least a bachelor's degree in Life Sciences (e.g., biopharmaceutical sciences, chemistry, and biology).

The key services of the company include:

- **Business Development:** Offering custom solutions to enhance growth and market position for life sciences organizations. Focus areas include strategy development, market-entry, and customer relationship management.
- **Web Design & Development:** Creating SEO-friendly, user-centric websites tailored to life sciences companies, emphasizing unique, engaging content and design.

- **Content creation:** creating SEO-friendly, high-quality, well-researched, and engaging content with a deep understanding of the Life Sciences sector.
- **Consulting Services:** Providing expert consulting in life sciences marketing and business development with a strategic and innovative approach.

For a few initial years, the founder was the sole employee, but in 2023 the company expanded to include additional full-time employees. Throughout 2023, the company employed six interns for various durations of time for marketing and business development projects. Next to the core team, freelancers are employed for single projects, mostly concerning writing longer content pieces.

JPP targets start-ups and scale-ups as clients, as these companies often lack in-house marketing departments or possess small teams, making them inclined to explore the outsourcing of specific marketing functions. The current company's portfolio is a balanced mix of medium-sized companies, which engage hourly with weekly distribution and collaboration with project-based startups. However, working with the startups are considered as a part of investment, as helping them grow their online presence supports growth of the company. Furthermore, JPP recently obtained strategic partnership with Leiden Bio Science Park, that is the largest and most mature Life Sciences & Health cluster in the Netherlands, that consists of more than 215 organisations.

2.2. Location and culture

JPP is situated in PLNT in Leiden. PLNT is a community created for entrepreneurs, offering support and space for work. This location is considered to be a vital strategic point. The company rents an office next to around 50 other startups. This offers an opportunity to create special relations with emerging startups and make the working environment easier for the customer.

JPP Life Sciences presents a distinctive blend of various cultural attributes commonly found in literature. At its core, the company culture is shaped by its small but dynamic team structure. With only two full-time employees, including a founder and a managerial-level employee, the company operates with a lean and agile approach. This structure enables close collaboration and direct oversight of projects and tasks.

Internships play a crucial role in the company's operations. Typically, JPP Life Sciences engages two interns at a time, which adds a fresh and innovative perspective to the work environment. While the interns form a significant portion of the workforce, their role is primarily supportive and

developmental rather than client-facing, although they partake in client projects. This approach ensures that the company maintains a balance between fostering new talent and delivering customer-focused outcomes.

The working environment at JPP Life Sciences is characterized by a friendly and creative atmosphere, with a strong emphasis on customer satisfaction. However, it branches from a purely customer-centric model, as interns do not independently engage with clients. This structure allows for a focused and guided learning experience for interns while ensuring that client interactions are handled by more experienced staff.

Given the company's small size, the founder's vision and goals significantly influence its direction and project choices. This leadership style ensures that the company's objectives are closely aligned with the founder's aspirations, providing clear guidance and purpose to the team. However, it's important to note that this leadership approach does not strictly align with a clan culture, which typically involves a more family-like, inclusive atmosphere. Instead, JPP Life Sciences' culture can be best described as a hybrid, combining elements of visionary leadership with a focus on innovation and customer satisfaction.

2.3. Market analysis

The life sciences industry, encompassing pharmaceuticals, biotechnology, medical devices, and related sectors, is dynamic and evolving. This industry is pivotal in developing new treatments, medical devices, and IT solutions for healthcare, extending its influence on agriculture and food processing. The Netherlands is historically a hub of innovation and home to regulatory giants like the European Medicines Agency and the European Patent Office.

According to NFIA and HollandBio, the Dutch life sciences sector boasts an impressive €7 billion economic impact and over €50 billion in export value. The Netherlands' strategic positioning as a small yet well-connected country focused on constant innovation has been instrumental in its growth. The presence of major global players like Philips, ASML, and Unilever underscores the country's global position in the market (HollandBIO, 2023).

Government policies in the Netherlands have facilitated business growth by setting up a company and favourable investment tax conditions, encouraging the business growth also in the life sciences industry.

The 2023 BiotechGate report reveals that most life sciences companies in the Netherlands are independent or privately held. However, there is a noticeable trend of decreasing new company foundations. In the European context, the Netherlands ranks third in the number of biotech companies, trailing Germany and the UK. Notably, the assets available for out-licensing predominantly consist of therapeutics in preclinical phases.

The marketing landscape within the Dutch life sciences industry is diverse, with various companies varying in size and scope. Large consultancy firms like Deloitte dominate the market, specializing in multiple sectors, including life sciences. However, their services often remain inaccessible to smaller companies due to financial constraints. This gap has given rise to smaller marketing agencies and a growing trend of freelancing, which offers more flexible and affordable options for companies of different sizes.

The Life Sciences industry can be divided between B2C and B2B sectors that differ dramatically in marketing approach. The B2C segment of the Dutch life sciences industry focuses on marketing to individual patients and their needs. Unlike B2B marketing, B2C strategies do not require detailed and expert-level content. Instead, they thrive on relatable communication that is simple, clear, and with a reduced jargon. This approach is crucial because most B2C customers are unlikely to be familiar with medical terminology. Emotional storytelling and empathetic narratives are particularly effective in B2C marketing, as they can sway customers' decisions based on their personal experiences and emotional responses. For instance, marketing stories highlighting successful patient outcomes can be compelling in persuading individuals to opt for specific treatments.

In contrast, B2B marketing content must be informative, educational, and detailed, providing comprehensive in-depth information about how a product or service can benefit an organization. The language used in B2B communications often involves complex medical terminology, which is appropriate and expected in this context. Additionally, B2B marketing involves developing long-term personal relationships with clients, as these relationships are crucial for ongoing business opportunities and referrals.

In the Dutch life sciences marketing landscape, two notable companies emerge as potential competitors to JPP: Medical Digitals and Sciential. Medical Digitals specializes in healthcare marketing with a particular focus on patient marketing. However, its primary target audience, healthcare facilities, positions it less as a direct competitor to JPP, which has a different focus. On

the other hand, Sciential represents a more direct competition. Catering primarily to medium and large-sized companies, Sciential offers marketing solutions specifically tailored to the broad scope of the life sciences sector. Its similarity in size and scope to JPP marks it as a noteworthy competitor. Nevertheless, Sciential's focus on larger corporations leaves a start-up niche segment open for JPP. This gap presents an opportunity for JPP to build a strong position within a more specialized market segment, thereby establishing itself as a leader in its niche.

2.4.SWOT analysis

For a better understanding of the company's position, a SWOT analysis was performed.

JPP Life Sciences Marketing can be considered as a key partner for startups and scale-ups in the Netherlands, thanks to a combination of unique strengths. A key competitive advantage lies in the company's founder, whose dynamic personality and extensive background in marketing and business development within major biotech companies are invaluable. His broad experience and vast network serve as a driving force for the company, attracting new clients through connections and word-of-mouth referrals, which also enhances the company's reputation.

Another significant strength of JPP Life Sciences is its strategic location. Being in close proximity to key life sciences hubs such as the PLNT community, the Leiden Bio Science Park community, and Leiden University, the company is optimally positioned for startups in these areas, facilitating in-person interactions and collaborations.

A further major strength is the company's emphasis on hiring employees and engaging with freelancers and interns who possess a scientific background. This ensures a deep understanding of the client's needs, particularly those of scientific startups. The team's expertise in science not only elevates the quality of content creation but also guarantees a profound comprehension of the unique challenges and demands of the life sciences sector. This aspect is especially critical for startups that require nuanced and knowledgeable communication strategies, ensuring that JPP Life Sciences Marketing can provide tailored, insightful, and credible support to its clients.

While JPP Life Sciences Marketing has several strengths, it also faces certain operational challenges. One such area is its financial strategy, particularly in relation to its focus on startups and scaleups. This specialization indeed positions the company strongly in a niche market, but it also introduces complexities in monetizing services. The nature of working with startups often

means accepting lower compensation compared to engagements with larger, more established clients. Furthermore, collaboration with startups is mainly project-based, which introduces a degree of income instability, especially when projects may get extended or delayed. This financial uncertainty is a significant concern when working with startups, given their dynamic nature, and it adds to the inherent risk associated with engaging in such ventures. Therefore, strategic client selection becomes crucial — ensuring that collaborations with startups are viewed as investments rather than resource drains, balanced by maintaining a portfolio of larger clients to sustain the company's financial health.

Another challenge is the company's dependence on its founder, who is a key asset but also a point of vulnerability. Relying heavily on a single individual can be risky, as it may limit the company's capacity to grow and adapt. Additionally, with a small team size, the workload can become unsustainable for just two full-time employees. Over-reliance on interns for handling significant client engagements could potentially lead to inconsistencies in service quality and may even pose risks to the company's reputation.

The multifaceted nature of business dynamics means certain aspects can be perceived differently — as strengths, weaknesses, or opportunities — depending on the perspective. For JPP Life Sciences Marketing, their specialized focus on startups and scaleups exemplifies this multifaceted aspect. While this niche positioning presents certain operational challenges, it also opens up many opportunities. This niche positioning allows for trust-based collaborations with innovative companies. The potential to develop long-term relationships with these startups as they grow can lead to more substantial projects and expanded revenue. The dynamic nature of this sector offers opportunities for market expansion and drives the diversification of services to meet a range of evolving needs. Working within interconnected startup networks can boost referrals and organic growth, enhancing JPP Life Sciences' brand recognition as a specialist in this field. Consequently, this focus not only strengthens the company's market position but also broadens its influence in the life sciences sector.

While specialization and expertise are cornerstone strengths for JPP Life Sciences Marketing, the company faces significant threats in this evolving market. Digital presence has become a fundamental necessity in today's digitalized world, and the number of marketing consultants is reaching saturation. Small and mid-sized companies are increasingly recognizing the importance

of having in-house marketing departments. This shift means that the need for external marketing consultancy might diminish as these companies build or strengthen their own marketing teams.

Additionally, the generation of other marketing agencies capable of offering similar services poses a competitive threat. These agencies can provide support in constructing or enhancing marketing strategies, potentially taking on JPP Life Sciences Marketing's client base.

Another significant threat is the rapid advancement in optimization and AI tools, which are becoming normalized in business operations. These technological advancements are automating many basic tasks that customers previously outsourced. As a result, clients may choose to handle these tasks in-house rather than outsourcing them, which could lead to a reduction in the demand for some of the services currently offered by JPP Life Sciences Marketing.

3. Methodological frameworks

3.1. Research Approach

Neither the goal nor the topic of the internship was predetermined. Therefore, in-depth observation and evaluation of the new environment were needed to determine this project's direction. After listing problems defined during observations, a pragmatic approach was followed as it aligned well with the multi-faced challenges of this internship.

Paradigm, in the context of academic research, is fundamentally a philosophical assumption that shapes and defines the researcher's worldview. It is a conceptual framework that categorizes how we perceive and interpret the real world into structured models. Among the various paradigms, such as post positivism, constructivism, and pragmatism, each holds common elements that define their perspective on axiology (the role of values and morals in research), epistemology (the process of knowledge acquisition), ontology (assumptions about the nature of reality), and methodology (the means of acquiring knowledge). A paradigm outlines the tools and pathways employed to acquire knowledge within a specific worldview (Kaushik & Walsh, 2019).

Pragmatism is a research paradigm that centres around the consequences of actions, takes a problem-based approach, and emphasizes real-world application.

Two core ideas of pragmatism particularly resonated throughout the course of this internship:

1. "Actions cannot be separated from the situations and contexts in which they occur."
2. "Actions are linked to consequences in ways that are open to change." (Morgan D., 2014)

This paradigm suited the internship, which did not have a predefined outline from the onset. Instead, strategies were developed based on emerging needs and observed problems, embodying the pragmatic ethos of adaptability and responsiveness. The approach was empirical, following a methodology encompassing observation, induction, deduction, testing, and evaluation. This was particularly evident in the formation of the LinkedIn strategy, where a lack of activity on the account was identified as a critical issue, leading to limited reach. The pragmatic approach facilitated the identification of this practical problem and the subsequent development of a targeted strategy to address it.

While a similar approach was applied to all three defined problems within the internship scope, only the LinkedIn strategy progressed to the testing and evaluation phase. This progression underscores the pragmatic paradigm's emphasis on empirical research and its suitability for a project where strategies evolve in response to real-time observations and analyses.

3.2. SEO strategies

As explored in the theoretical framework, SEO is crucial for visibility, especially in the Life Sciences sector, where regulatory and ethical constraints limit certain marketing avenues. Biotech firms developing novel treatments primarily rely on SEO to attract investors and early adopters. Websites with high-quality content optimized for organic traffic are more desirable than those that rely on paid advertisements.

The primary objective of SEO efforts was to elevate the company's ranking for keywords relevant for life sciences marketing, thereby establishing it as a leading consulting service in this niche.

SEO principles were applied in content creation, including website blog posts, LinkedIn newsletter episodes, and client articles. Although client-related projects are not presented in this report, knowledge gained during them was integrated into the content strategy and validated through interviews with an expert (Appendix), ensuring alignment with industry standards.

The SEO strategy involved carefully selecting keyword research tools and assessing website performance. This suite included:

1. **MOZ:** Utilized for keyword tracking, domain overview, competitive analysis, and link research. As a paid tool, MOZ offers comprehensive data but with monthly usage limitations.

2. **Power Suite:** Employed for similar purposes as MOZ, this tool is free and provides supplementary data.
3. **Ahrefs:** This suite of free tools includes a keyword difficulty checker, keyword generator, SERP checker, keyword rank checker, website authority checker, and website traffic checker.
4. **Google Keyword Planner and Google Trends:** Used for assessing keyword search volume, these tools provide valuable insights into user search behaviours.

Considering MOZ's limited monthly capacity, the research was supplemented with free tools, acknowledging that each tool employs different methods for metric calculation. Consequently, all metrics were treated as estimates, with decisions made based on a comparative analysis of results from all tools.

Key metrics included:

- **Keyword Search Volume:** The average monthly frequency of a specific keyword search in a designated location.
- **Keyword Difficulty:** A scale of 1-100 reflecting the challenge of ranking within the top 10 search results or the first page on search engines (Google), considering factors like Page Authority (PA), Domain Authority (DA), search volume, predicted Click-Through Rate (CTR), and the influence of backlinks.

Where **PA** is a score predicting how well a specific page ranks in search engines based on backlinks and internal link structure, while **DA** predicts a website's ranking potential in search engines, factoring in backlinks. **CTR** represents the ratio of users who click on a specific link to the total number of users who view a page, email, or advertisement, indicating the effectiveness of online campaigns and keyword usage.

The content strategy was balanced between keyword volume and difficulty. Keywords with a difficulty rating below 30 were prioritized, incorporating a mix of higher-difficulty keywords when needed. This approach was essential for achieving a comprehensive SEO impact. In addition, a keyword density of 1-2% was maintained in created texts, and relevant keywords were also embedded in alt texts for images, enhancing the potential for featured snippets and graphic search visibility.

A significant aspect of the strategy involved leveraging LinkedIn, given its high domain authority (99) and low spam score (1%). Articles crafted for LinkedIn were strategically designed to rank for

specific keywords. While these pieces were authored by the team, they were posted on the JPP's founder's LinkedIn profile, which has a higher follower count and engagement level than the company's profile. This strategic move aimed to maximize visibility and take advantage of the platform's algorithm, which favours profiles with higher engagement metrics.

3.3.Social Media strategies

LinkedIn is the primary social media platform for JPP and its clients. Therefore, it is essential for JPP to have a strong brand presence on LinkedIn.

The primary goal for utilizing LinkedIn was to expand JPP's follower base, a key metric in measuring the company's influence and reach within the professional community. To achieve this, a multifaced strategy was adopted:

1. **Company Profile Activities:** The company's LinkedIn profile was maintained with regular updates, ensuring a minimum frequency of at least one post per week. This consistent posting schedule was critical in enhancing the visibility of the posts. The company profile was also utilized to host webinars, share information about other events, and inform about newsletters.
2. **Long-form text content:** The JPP's founder's profile was used to publish the newsletter. This strategic choice was driven by the founder's established network and influence, which provided a broader reach and higher engagement potential for in-depth articles.
3. **Activity and content type:** The strategy emphasized consistent activity with a minimum of one post per week. The content variety included carousel posts, a series of images with explanatory content known for higher engagement rates, text updates with single images, polls, and videos.
4. **Omnichannel Content Repurposing:** An essential aspect of the strategy was repurposing long-form content from the company's website, such as blogs. This content was adapted for LinkedIn as detailed text posts accompanied by single images or carousels. Additionally, the incorporation of video insights was explored to enhance engagement.
5. **Keyword and Hashtag Optimization:** Each post was prepared to include relevant keywords and up to five hashtags. These hashtags were a mix of high-volume and niche topics, selected based on their relevance to the update's content and targeted industry.

To measure the effectiveness of the strategy, several tools and metrics were employed:

- **LinkedIn Analytics:** Provided insights into the performance of the company's LinkedIn profile and individual posts.

- **URL Campaign Tracking (UTM):** Enabled traffic tracking from LinkedIn to the JPP's website, helping to understand user behaviour post-engagement. The UTM is a tag added to URLs that helps categorize specific website traffic sources.
- **Google Analytics 4 (GA4):** Assisted in analysing visitor data from LinkedIn for a comprehensive understanding of engagement patterns.

Metrics:

- **Impressions:** The total number of times content was displayed to LinkedIn users.
- **Views (for videos):** The number of times a video content was watched.
- **Clicks:** The number of times users clicked on a post. For example, to see more text.
- **Reactions:** The total LinkedIn-specific interactions (like or celebrate) content received.
- **Comments:** The number of comments made on posts.
- **Shares:** number of times a post was shared.
- **New Follows:** The increase in the number of followers of LinkedIn profiles.
- **Engagement Rate:** The ratio of interactions (clicks, reactions, comments, shares) to the total number of impressions.
- **Unique Impressions:** The count of individual users who saw content, excluding multiple views by the same user.

The development of LinkedIn strategy was based on observation and analysis of successful accounts, creators' comments, and competitors' post performances and any information on algorithms. LinkedIn favours content that provides professional value and insights, unlike other social platforms. This platform's algorithm prioritizes content that is likely to generate engagement and provide value to its users. When a post is published, it is initially shown to a small segment of the profile's audience to measure its initial engagement. If the post receives a reasonable engagement rate (likes, comments, shares), the algorithm will show it to more people. This iterative process is critical in expanding content beyond the immediate follower base. The algorithm tends to favour profiles and pages that post regularly and interact with their audience. Maintaining a steady flow of content and engaging with the audience (responding to comments and participating in discussions) signals LinkedIn that your profile is active and valuable, which can increase the visibility of your content.

3.4. Email Marketing strategies

In order to expand to another channel for JPP's reach, an email marketing campaign was developed during the internship.

The primary goal of the email marketing campaign is to engage potential leads by offering them valuable content, tools, and resources. This material is designed to provide functional knowledge and introduce the services offered by the company in detail. The campaign leverages repurposed content from other platforms to ensure consistency across channels. That includes expanding on blog information, referring to a LinkedIn newsletter, promoting events, and reusing presentations from old webinars, besides repurposed content. New templates were created to offer unique value.

The contact list for this campaign is cultivated through information shared in other communication channels, such as webinar registration confirmations and holiday messaging, informing about the campaign, and directing to the sign-in form. This method ensures that individuals opting into the email campaign are doing so voluntarily, providing explicit consent in alignment with European regulatory standards. Subscribers can unsubscribe at any time, a practice in strict adherence to data protection and privacy regulations.

HubSpot was utilized for creating and managing forms, contact lists, and the creation of an automated email chain. HubSpot's Customer Relation Management (CRM) tool streamlines processes and provides valuable analytics.

The metrics monitored through HubSpot include open rates, click rates, spam reports, unsubscribe rates, link engagement, top engaged contacts, time spent viewing emails (categorized as reading (>8 seconds) or skimming (2-8 seconds) based on duration), engagement over time, device usage, operating systems (iOS or Android), and browser types (including Chrome, email apps, and Microsoft).

Utilizing HubSpot's analytics allows for in-depth email campaign evaluation. The following key metrics can be monitored and analysed:

1. **Open Rates:** This metric tracks the percentage of recipients who open the emails, providing insights into email content's initial appeal and relevance.
2. **Click Rates:** The proportion of recipients who click on links within the emails and separately indicate which links were used.
3. **Spam Reports**
4. **Unsubscribe Rates**
5. **Link Engagement:** Indicating which links within emails receive the most clicks.
6. **Top Engaged Contacts:** Identifying the subscribers who engage most frequently with content.

7. **Email Viewing Duration:** Categorizes the time spent viewing our emails into 'reading' (over 8 seconds) and 'skimming' (2-8 seconds).
8. **Engagement Over Time:** Tracking how engagement metrics evolve.
9. **Device Usage:** Analysing the devices used to view received emails helps optimize email design for different platforms.
10. **Operating Systems:** The information of the operating system used to view the email, for instance, via iOS or Android.

Browser Types: Information about the email viewing platforms can include email apps or web browsers such as Chrome.

4. Results

4.1. Quantitative

Website performance

Google Analytics 4 (GA4) was employed as a primary analytical tool to systematically evaluate the efficacy of online presence and marketing initiatives. This analytics platform provided data on user interactions with JPP's website, which was analysed to get insights into traffic patterns and user behaviour. The resulting data was transformed into visual representations, culminating in the creation of the charts depicted in [Figure 1](#) and [Figure 2](#).

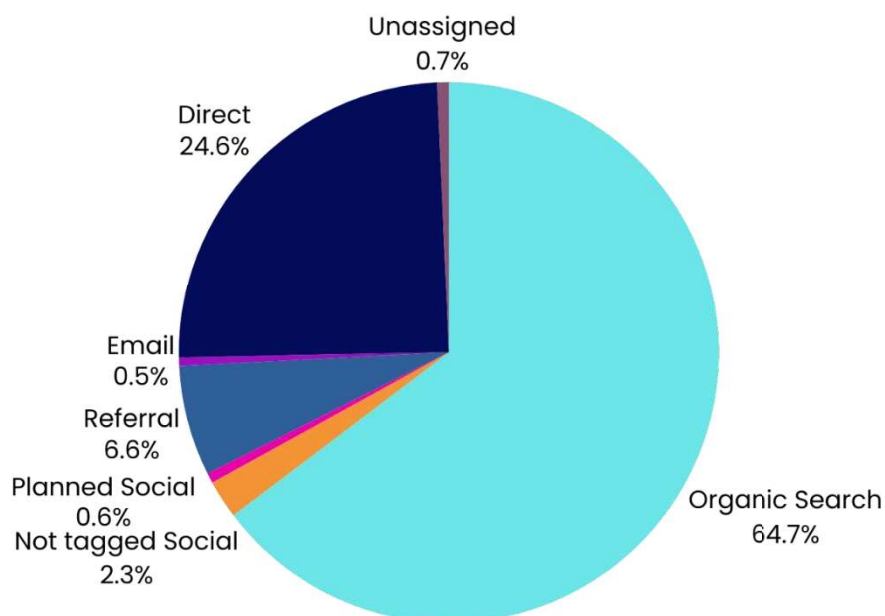


Figure 1: Pie chart showing website traffic source distribution.

When analysing data on the sources through which users reach a website, GA4 categorizes them by generic sources (e.g., organic search or organic social) and generic medium (e.g., reference). The Urchin Tracking Method (UTM) was implemented to categorize more precise data reading with a larger variety of data. UTMs are query strings appended to URLs, allowing for granular tracking of user interaction with digital content. This method was particularly useful in distinguishing between sessions originating from LinkedIn updates and newsletters, which would typically aggregate under the generic source/medium label in Google Analytics 4 (GA4) as 'linkedin.com / referral.' Therefore, distinct UTM tags were employed: 'linkedin / update' and 'linkedin / newsletter,' correspondingly. However, it is pertinent to note that this strategy was implemented midway through the internship. Hence, eleven posts and two newsletters preceding this change could not be distinctly categorized.

The data represented in [Figure 1](#) contains all sessions recorded from the beginning of the internship (18/09/2023) until the end of the data collection period (27/01/2024). Organic search traffic, defined as users arriving via a search engine query constituted most of the traffic sources. This underscores the importance of maintaining a solid SEO strategy to ensure high visibility within the top search engine results. Furthermore, approximately 7% of all sessions were referrals, indicating users navigating from direct links on external domains, typically business partners or clients. Links directed from LinkedIn before UTM implementation were assigned under "Not tagged Social" in the pie chart and were the majority of organic social sources. The 'direct' source category within the distribution encapsulates sessions initiated by users who actively input the website's URL into their browser. The data indicates that this direct navigation is the second most dominant traffic source.

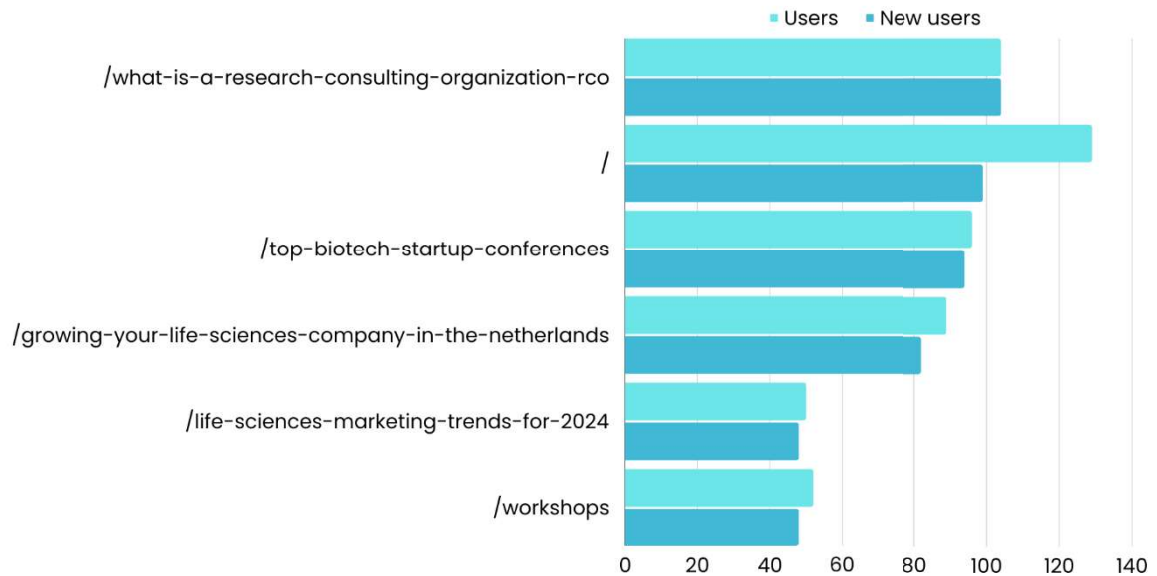


Figure 2: Chart presenting landing pages sessions, divided by type of users.

In [Figure 2](#), "Landing Pages Analysis," we observe user interaction with the website's landing pages within the same timeframe mentioned above. This bar chart starkly illustrates the proportion of users (light blue) versus new users (dark blue). The disparity between these groups indicates low client retention, as the majority of traffic for each top-visited page comprised new users.

The most frequented landing page, "/", refers to the homepage (lifesciencesmarketing.nl/). This is followed by pages linked to older blog posts. The fourth top landing page, "/growing-your-life-sciences-company-in-the-netherlands," relates to our most successful webinar, which was promoted jointly with partner companies. The fifth-ranked page is a blog released during the internship. Additionally, the landing page denoted as "/workshop" has been utilized as a space for information and registration for all subsequent webinars following our most successful one.

These insights validate the efficacy of content creation based on SEO, as evidenced by the high traffic to pages featuring well-ranked keywords. Achieving a featured snippet in Google ([Appendix A](#)) was a notable accomplishment for the 'Life Sciences Marketing Trends for 2024' blog, further proving the value of the SEO approach to content development. Additionally, the data indicate a noticeable interest in informative events, with all webinars—offered at no cost as part of our inbound marketing strategy—rapidly ascending in page visit rankings.

The MOZ platform was utilized for an in-depth assessment of the SEO strategy. The data analysed was extracted from September 18th to January 27th, 2024. According to the extracted report ([Appendix A](#)), JPP has achieved a ranking for three key phrases within the top three search results: "life science marketing trends," "life sciences digital marketing strategy consultant," and "life sciences marketing trends in life sciences." The first keyword successfully obtained a featured snippet in Google, as evidenced in [Appendix A](#). However, it is important to note that the report was extracted two weeks after the snapshot in [Appendix A](#). Since SEO is a dynamic process, the accuracy of this information may have changed since then.

This risk of change underscores the critical need for ongoing keyword performance monitoring and constant content updates to maintain high search rankings. It is essential to highlight that the keywords tracked are strategically selected based on their relevance to key phrases used by potential clients to find services offered by JPP.

When analysing competitive positioning, only Sciential is considered a direct competitor despite other companies being on the dashboard. They were added manually before the internship without strategic reason or value for this research. The comparative data demonstrate JPP's superior domain authority, search visibility, and higher rankings for critical keywords.

The Moz Link Overview ([Appendix A](#)) shows an absence of a spam score, suggesting that the site's backlink profile maintains a quality likely to be favourably received by search algorithms. According to MOZ, the spam score is determined by calculating the percentage of websites that share similar characteristics and have been penalized or banned by Google.

The JPP's site has experienced a slight growth in total links, with an increase in external followed links, which are instrumental in enhancing the site's visibility and authority. The proportion of external, followed links stands at 70%. This figure excels in comparison to 'scientialmarketing.com.' However, the data also reveals a lack of internal linking structure, which is considered a negative point for algorithms.

LinkedIn performance

JPP's LinkedIn profile performance was analysed using LinkedIn Analytics. The data includes various metrics, with a specific focus on impressions, clicks, the content timeline of posts, the type of content, and its correlation to follower growth patterns.

[Table 1](#) lists all LinkedIn updates posted during the internship until 25th of January 2024, including their performance. The updates are sorted from newest to oldest. During that period, a range of content types were disseminated to fulfil diverse requirements, including sharing information about events, repurposing blog content published on the company's website, and examining the

preferences of the JPP's audience. The content titled "Insights carousel - 'Life Sciences Marketing Trends for 2024' achieved an exceptional Click Through Rate (CTR) of 30.2% and an Engagement Rate of 31.2%. Similarly, the "Event recap - 'ChatGPT in Life Sciences' workshop" also captured significant attention, with similar CTR and engagement metrics. These two updates achieved the peak performance metrics, indicating that the content format and the subject matter resonate with the JPP's audience.

Table 1: LinkedIn Content Performance Metrics for timeline 18/09/2023 – 27/01/2024

Post title	Created date	Impressions	Clicks	Click through rate (CTR) [%]	Engagement rate [%]
Last minute event reminder - "Life Sciences Marketing Trends for 2024" webinar (text content)	23/01/2024	25	0	0.0	0.0
Post - "Search Engine Optimization" (visual content)	11/01/2024	241	7	2.9	5.4
4th episode 'Life Sciences Marketing & BD' Newsletter? (text content)	04/01/2024	162	4	2.5	3.1
Event announcement - "Life Sciences Marketing Trends for 2024" webinar (text content)	30/12/2023	575	16	2.8	7.1
Holiday messaging (visual content)	22/12/2023	296	14	4.7	6.1
Event recap - "ChatGPT in Life Sciences" workshop (visual content)	21/12/2023	354	27	7.6	9.3
Insights carousel - "Life Sciences Marketing Trends for 2024" (visual content)	19/12/2023	609	184	30.2	31.2
Insight carousel - "Artificial Intelligence (AI) in Europe" (visual content)	14/12/2023	151	26	17.2	19.9
Poll - "ChatGPT in Life Sciences" (text content)	7/12/2023	284	9	3.2	3.5
Event reminder - "Growing Your Life Sciences Company in The Netherlands" webinar (text content)	30/11/2023	204	5	2.5	2.9
Event reminder - "Perfect Your Biotech Pitch Deck" webinar (text content)	22/11/2023	24	0	0.0	0.0
Insight carousel - "How can CROs differentiate in the competitive landscape?" (visual content)	15/11/2023	648	158	24.4	25.2
3rd episode 'Life Sciences Marketing & BD' Newsletter? (text content)	8/11/2023	75	2	2.7	2.7
Event reminder - "Growing Your Life Sciences Company in The Netherlands" webinar (text content)	11/10/2023	84	10	11.9	14.3
Animal Day repost (text content)	4/10/2023	233	5	2.1	5.2
Insight post - "Biotech business Development" (visual content)	4/10/2023	422	12	2.8	4.0

Table 2: LinkedIn Content Performance Metrics for timeline 05/02/2023 - 17/09/2023.

Post title	Created date	Impressions	Clicks	Click through rate (CTR) [%]	Engagement rate [%]
Event announcement – “Perfect Your Biotech Pitch Deck” webinar (text content)	13/07/2023	279 (o)	9 (o)	3.2 (o)	6.5 (o)
Insight carousel - "Artificial intelligence in Biopharmaceutical Marketing" (visual content)	14/06/2023	689 (o)	184 (o)	26.7 (o)	27.6 (o)
Event recap - "Enhancing Customer Relationships!" webinar (visual content)	9/06/2023	407 (o)	107 (o)	26.3 (o)	27.5 (o)
Insight carousel - "Pharmaceutical Product Launch Strategies " (visual content)	07/06/2023	683 (o)	308 (o)	45.1 (o)	45.7 (o)
Insight carousel – “Innovative Marketing Strategies For Pharmaceutical Products” (visual content)	01/06/2023	526 (o)	114 (o)	21.7 (o)	23 (o)
Repost – “Building The Business” interview (text content)	31/05/2023	338 (o)	5 (o)	1.5 (o)	3.6 (o)
Event announcement – “Growing Your Life Sciences Company in The Netherlands” webinar (text content)	23/03/2023	331 (o) 16649 (s)	21 (o) 222(s)	6.3(o) 1.3 (s)	8.8 (o) 1.3(s)
1 st episode “Life Sciences Marketing & BD” Newsletter (text content)	21/02/2023	160 (o)	4 (o)	2.5 (o)	2.5 (o)

[Table 2](#) lists all LinkedIn updates posted before the internship starting from 5th of February 2023 until 17th of September 2023, including their performance. There is no prior record of data before the 5th of February 2023. The updates are sorted from newest to oldest and an indication of sponsored (s) and organic (o) results is added. It is essential to highlight that a one-time boost was implemented using LinkedIn's paid advertising option during the analysed timeline. The boosted content promoted a planned webinar that was scheduled to take place eight months later. It is worth recognising that sponsored content often tends to deliver better performance, although it is not a permanent solution. When used correctly, it can help attract more followers and improve the overall reach of the profile.

Further analysing content before the internship, insight carousel - "Artificial intelligence in Biopharmaceutical Marketing" achieved the highest number of impressions but had a relatively low engagement rate of only 26.7%. In contrast, the second-best performing organic content, "Insight carousel - Pharmaceutical Product Launch Strategies," which had slightly fewer impressions, achieved significantly higher click-through and engagement rates.

Upon comparing results from both tables, a noticeable preference for visual content was observed. When a social media update includes at least one image or video, it is considered as visual content. On the other hand, a post without a video or an image is considered as text content, but it can still be a repost of visual content. An analytical assessment reveals that carousels, a sequence of images forcing audience interaction to navigate through, consistently outperformed their text-only counterparts in terms of engagement metrics. This trend was sustained even when

text posts was creating by reposting visual content update, highlighting audience preference shifting towards more dynamic and visually-driven content forms. The variations in engagement and click-through rates for specific carousels can be attributed to various factors. It might be influenced by the content's topic, the visual appeal of the initial pages, and the length of the slideshow (more slides can either encourage or discourage further clicks). It is important to note that the exact cause has not been definitively identified due to insufficient testing.

Impressions are an essential metric for measuring the visibility of content. They indicate how often a piece of content appears on individual feeds, regardless of when it was initially posted. Impressions do not require user engagement and are a measure of the potential reach of the content. Impressions can accumulate over time, as the content may continue to appear on users' feeds and search results and be shared by others long after the initial post. Consequently, it is essential to clarify that the data presented in both tables, including impression counts, represent the total number of impressions that content received up until the date of data export, January 27, 2024. This means that [Table 2](#) also includes impressions that occurred during the internship for older content.

For instance, if a user visited the JPP profile on 6th of December 2023, which was during the internship, they may have scrolled through the feed and read content that was posted on different days. Therefore, taking a comprehensive approach when analysing impression data and considering the entire timeline is crucial. Users can access content in various ways, not just by seeing it on their feeds.

The timeline of impressions presented in [Figure 3](#) and [Figure 5](#) offer a view into the visibility over time. The click metrics associated with these impressions provide additional insight into user behaviour. While many impressions indicate broad visibility, the clicks reflect a deliberate choice to engage further with the content. The click-through trends for JPP Company, particularly about high-impression posts, are still relatively low with few exceptions, suggesting low interest in deeper engagement. However, as stated before, carousels are the most interesting for the audience to engage.

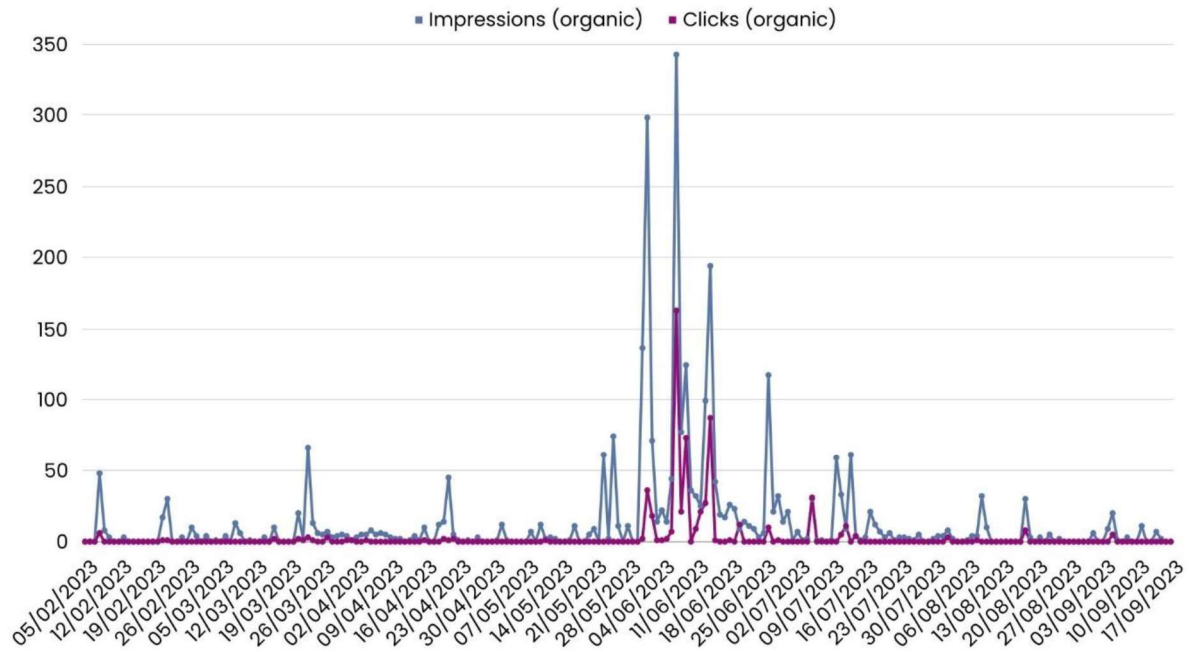


Figure 3: LinkedIn Impressions and Clicks Trends for timeline 05/02/2023 – 17/09/2023

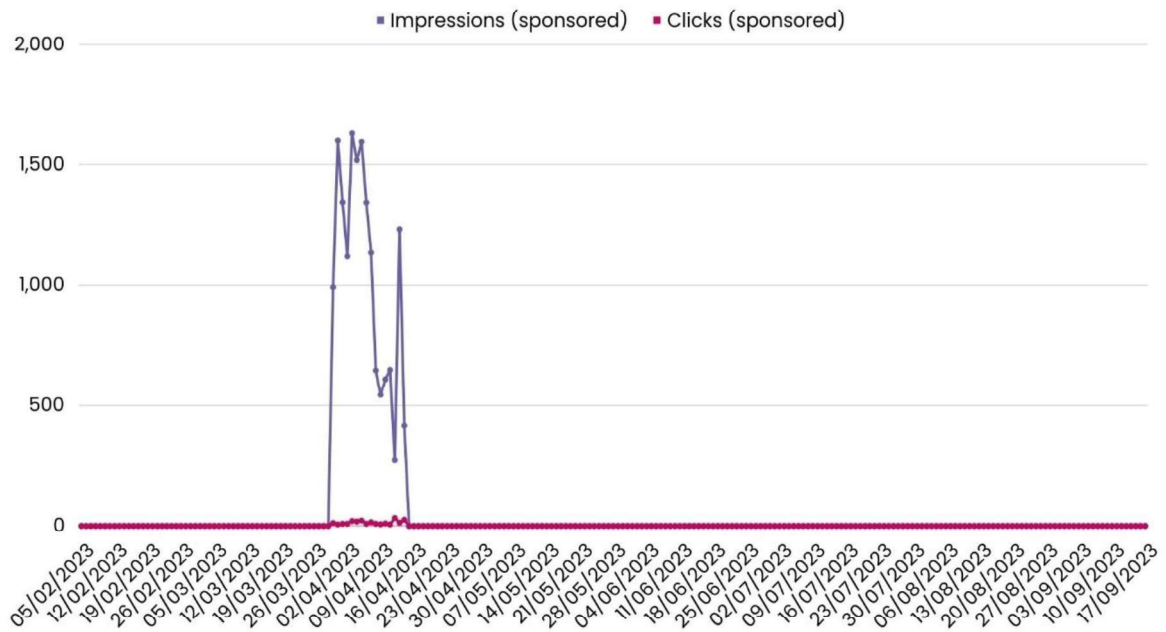


Figure 4: LinkedIn sponsored Impressions and Clicks Trends for timeline 05/02/2023 – 17/09/2023

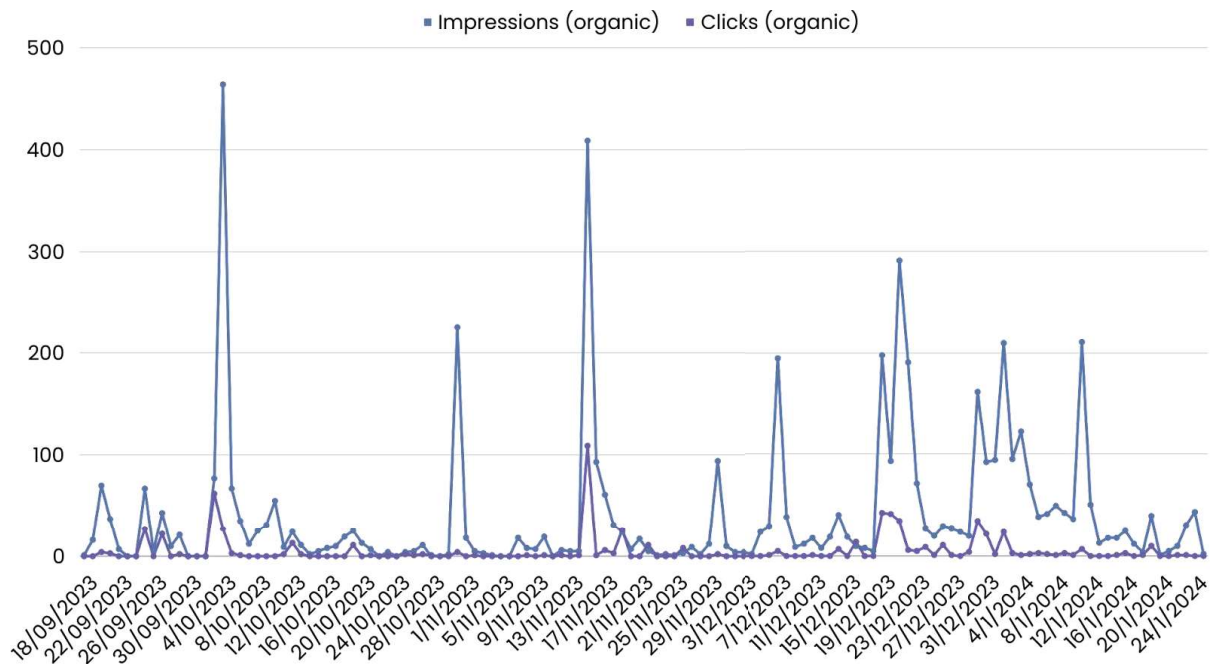


Figure 5: LinkedIn Impressions and Clicks Trends for timeline 18/09/2023 – 27/01/2024

Figure 3 displays the accessible data from before the internship, explicitly focusing on organic data. What is evident is how the impression count changes when posts are consistently published. This consistency was observed for a two-week period starting in June, and it had a significant impact. However, it is also clear how quickly these gains diminish when regular posting is halted. As mentioned previously, the post-boosting feature was used only once, which resulted in a record number of impressions. This is illustrated in Figure 4, and the changes are visible not only on the boosting day but also for a few days afterwards. However, this boost did not have a lasting effect on organic impression counts, click-through rates (CTR), or engagement rates over a more extended period.

High impression peaks, as illustrated in Figure 5, are associated with data from the internship period and usually align with the date of posting. This highlights how updates have an immediate effect on visibility. This observation is consistent with the data from before September 18th, as regular posting resulted in more frequent peaks in impression counts.

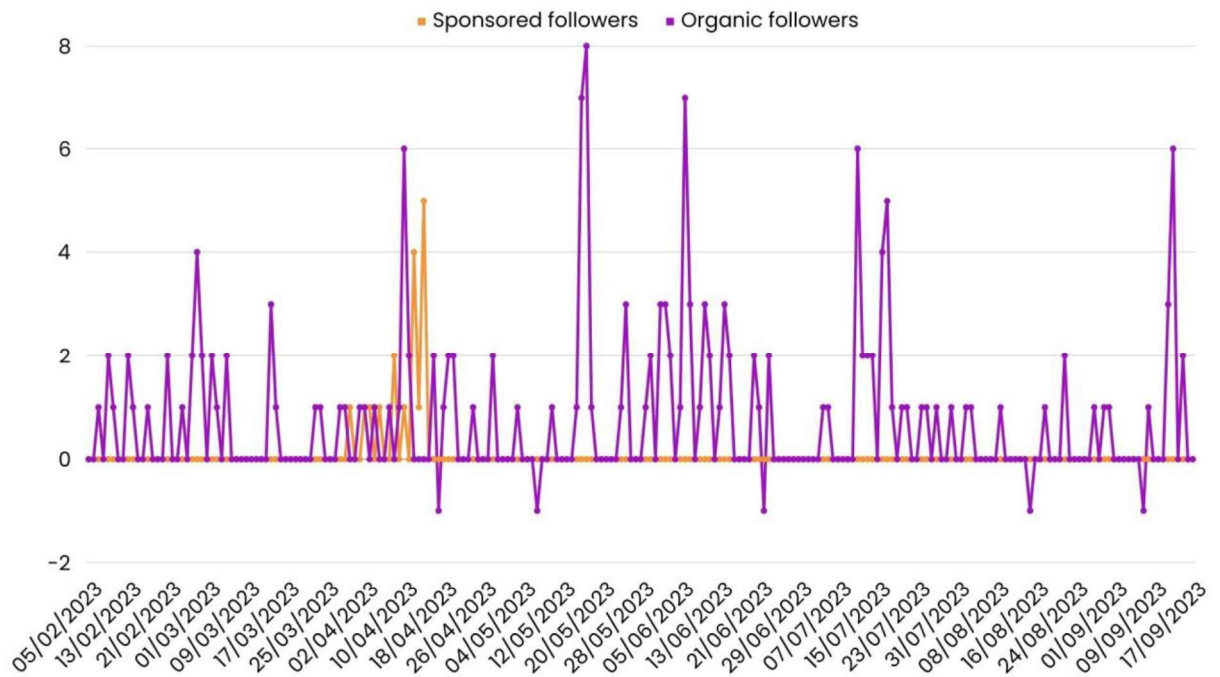


Figure 6: LinkedIn New Follower changes for timeline 05/02/2023 – 17/09/2023

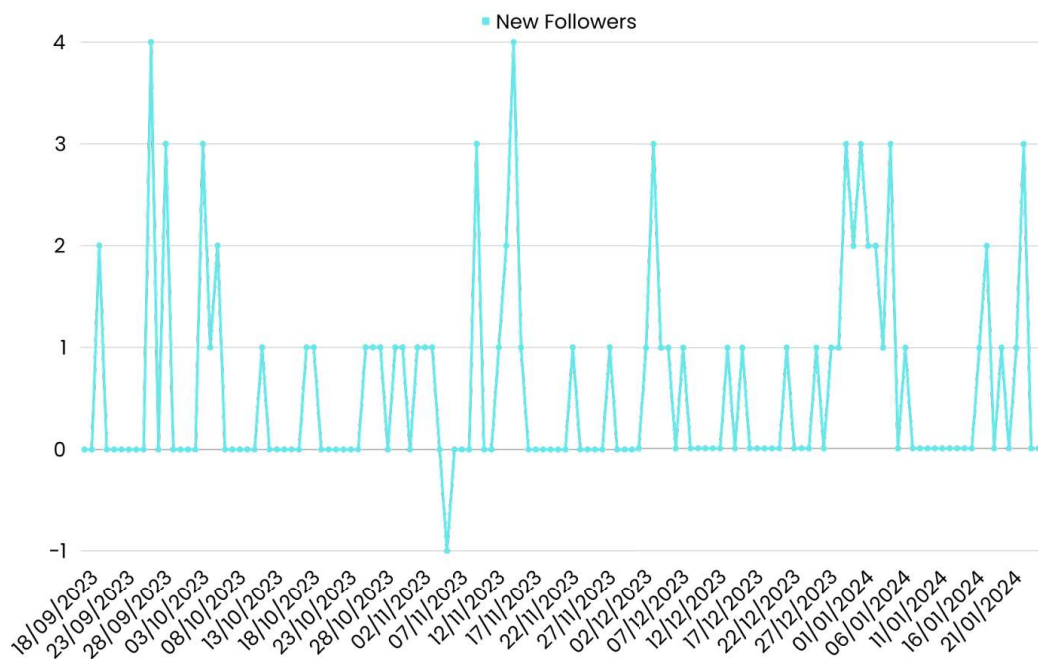


Figure 7: LinkedIn New Follower changes for timeline 18/09/2023 – 27/01/2024

[Figure 6](#) and [Figure 7](#) shows changes in follower count over time before and during the internship. A comparative analysis with [Figure 3](#) to [Figure 5](#), reveals a clear correlation: elevated content visibility is frequently a precursor to increases in follower count. This pattern indicates that the more content users are exposed to, the more likely they will engage with the company's LinkedIn page and follow it.

The data again indicates that consistently posting content helps to maintain a certain level of visibility. This increased visibility has been linked to followers' growth, especially when impressions remained consistently above zero.

Email campaign performance

During the internship, the email campaign was in its initial stages. A comprehensive outline for the campaign was drafted, and the first two emails were created. The campaign, designed with an automated sending feature, is envisioned to encompass a series of 13 emails. This automation ensures that the emails are dispatched at predetermined times each month. The inaugural email, a confirmation of subscription, is set to be sent immediately upon a user's signup via the form.

The email campaign is titled "Building the Business," which aligns with the "Building Your Business - Interview" series featured on JPP's website. These are interviews with CEOs and founders of Life Sciences startups and scale-ups. The campaign's primary objective is to provide fundamental marketing insights and highlight JPP's services to entrepreneurs and novice marketers within the life sciences sector. The target audience includes scientists with limited marketing and sales experience.

The second email elaborates on the unique value proposition and offers downloadable templates ([Appendix B](#)). All emails are structured to include complimentary templates and worksheets. An additional advantage for those on the contact list is the opportunity to benefit from free consultations. Details are embedded within the worksheets, targeting actively engaged individuals.

Due to the limitations of the HubSpot CRM starter subscription, A/B testing was not feasible. However, alternative feedback mechanisms have been planned. The sixth and final emails in the series would include a feedback form, enabling the monitoring of changes in recipient perceptions over the course of the campaign.

Performance tracking will align with the metrics outlined in the methods chapter. These metrics will guide adaptations in the subject lines to enhance open rates and modifications in the email outline based on engagement metrics such as read time. These metrics will also reveal which downloadable resources resonate most with the audience, initiating content adjustments for future emails.

In order to ensure an effective transition, documentation of all drafted designs outlines, and research has been prepared. This will provide the succeeding intern with a solid foundation and clear direction for implementing and evolving the developed strategy.

4.2. Qualitative

The qualitative component of this research involved an in-depth semi-structured interview with Patrick ([Appendix C](#)), an SEO expert with a chemistry background. An interview was conducted during the final month of the internship. The purpose of this interview was not only to discuss the unique challenges and digital marketing strategies related to the life sciences industry but also to validate if the approaches used during the internship aligned with industry standards. For analysis, the interview was subjected to thematic analysis, as outlined in Table 3, where colour coding was applied to highlight the key themes addressed during the interview ([Appendix C](#)).

Table 3: Colour Coding Legend for Thematic Analysis of Interview

Colour	Theme
Red	Life Sciences-Specific Digital Marketing Characteristics
Green	Life Sciences Digital Marketing Strategy
Orange	Covid-19 pandemic influence
Light Blue	SEO characteristics
Purple	SEO challenges
Blue	SEO strategy
Dark Blue	SEO metrics and tools
Dark Green	LinkedIn strategy

Introduction and Background:

The interviewee, Patrick, introduced himself as a digital marketing professional based in the UK with a background in chemistry. After working as an R&D chemist in consumer goods companies, he transitioned to digital marketing, specializing in SEO. Since April 2021, he has been working independently in digital marketing for the life sciences sector.

Summary of interpreted themes:

Life Sciences-Specific Digital Marketing Characteristics:

The interviewee discussed how the life sciences sector differs from other industries in terms of digital marketing. He noted that life science companies tend to be cautious and slow in adopting the latest digital trends, often lagging behind technology-focused industries. This caution is due to the demographic of professionals in the sector, with many experienced scientists being less familiar with digital marketing practices.

The interviewee described his role in digital marketing for life sciences, emphasizing the combination of his scientific background with digital marketing skills. He highlighted the importance of simplifying complex scientific content to make it more accessible and optimizing content for relevant keywords.

In terms of content channels, Patrick mainly utilizes Google and LinkedIn for life sciences clients. Website content often includes white papers, which scientists prefer for their professional tone. LinkedIn is employed for brand awareness rather than direct selling.

Covid-19 Pandemic Influence:

The interviewee mentioned the positive impact of the COVID-19 pandemic on life science companies, prompting them to recognize the need for a digital presence and digital marketing strategies.

SEO Characteristics:

Patrick provided insights into SEO (Search Engine Optimization), emphasizing its application beyond Google to platforms like YouTube, TikTok, and Instagram. He explained that SEO aims to increase website traffic, particularly for generating leads in the life sciences sector.

SEO Challenges:

One challenge mentioned was the difficulty of outranking scientific articles published on authoritative websites due to their high authority, extensive history, and specialized content.

Overcoming this challenge often involves simplifying complex topics and making them more accessible to a broader audience.

SEO Strategy:

The interviewee outlined his strategy, which starts with keyword research to understand what potential clients are searching for. He discussed the importance of structuring content logically, using clear headings, and predicting search terms when data is unavailable due to niche or emerging topics.

SEO Metrics and Tools:

Patrick mentioned using tools such as Google Search Console and Google Analytics to track keyword positions, impressions, click-through rates, and website user behaviour. He highlighted the significance of measuring lead generation through contact forms as a key metric.

LinkedIn Strategy:

LinkedIn was identified as a primary content channel for life sciences companies, focusing on brand awareness rather than direct selling. Patrick also emphasized the importance of having a substantial network on LinkedIn to ensure visibility and readership of articles.

The interview highlighted the challenges and characteristics of Life Sciences marketing. Most of the steps and techniques were followed and introduced in SEO strategies within this internship. For instance, tracking impressions, clicks, and content engagement using Google Analytics. However, one crucial tool was not activated - Google Search Console.

An additional semi-structured interview was carried out with the Founder and CEO of JPP during the concluding month of the internship. This interview served as an element of the active research phase, verifying the observations made regarding the organizational structure, internal dynamics, and the company's strategic objectives. The conversation provided an in-depth understanding of JPP's operational ethos and future aspirations, contributing to the research's depth and accuracy. However, in adherence to confidentiality agreements and to maintain the integrity of sensitive information, the contents of this interview are not disclosed in this report. For reference and transparency, the complete list of questions used during this interview has been documented and is accessible in [Appendix D](#). This ensures that the research methodology remains transparent while respecting the information's confidentiality.

5. Discussion

Throughout the internship at JPP, it became clear that while the company is primarily client-focused, an optimized digital marketing strategy is critical for its online visibility and lead generation. Although the timeframe of the internship constrained the full implementation and optimization of new strategies, the insights gained provide a solid foundation for the company's future marketing initiatives.

Key areas of focus included website optimization, content repurposing for multi-platform use, LinkedIn account management, and developing an email marketing campaign, underscoring the diverse aspects of digital marketing.

A key observation during the internship was the central role of the website as the hub of omnichannel presence. Optimization for search engines, mainly through technical and content aspects, emerged as essential for attracting organic traffic. This focus aligns with the company's aim to minimize reliance on paid advertisements, with a strategic emphasis on organic traffic for its stability and cost-effectiveness.

The SEO strategy, prior to the internship, reflects the long-term nature of SEO results, typically visible within 3-6 months post-implementation. The current ranking keywords are outcomes of pre-internship strategies. Given the complexities of SEO, including backlink structures and dynamic market competition, the contributions made during the internship are significant for future organic search success despite not being immediately noticeable in this report.

Additionally, research on website performance identified areas for improvement, such as linking structure.

The LinkedIn strategy focused on increasing posting frequency and diversifying content types to enhance engagement and follower growth. This platform's significance was emphasized, particularly given its prevalent use in the life sciences sector for B2B interactions. Unfortunately, not all goals were achieved. For instance, building the engagement rate leaves space for further strategy improvement. The goal is to enhance reach and encourage the audience to engage with the content.

Email marketing, a new channel for JPP, involved thorough research and content planning. During the internship, significant progress was made in this domain, although the full results of the campaign was not realized within the timeframe. The development phase created two comprehensive email templates alongside the conceptualization of topics for an additional eleven emails. This groundwork laid a solid foundation for the future expansion of the campaign. A vital aspect of this phase involved the strategic setup of the campaign's infrastructure. This process included preparing and refining contact forms and enhancing their design and functionality to optimize the user experience.

5.1. Conclusion

The internship's research and activities addressed the primary research questions, demonstrating the effectiveness of an integrated omnichannel approach and the importance of content consistency across platforms.

The concerted efforts in enhancing JPP's omnichannel presence were aligned with the research question of optimizing omnichannel and inbound marketing. Strategies such as SEO enhancement of the website, a targeted approach on LinkedIn, and foundational work for an email marketing campaign demonstrated the efficacy of a unified omnichannel strategy, establishing a cohesive marketing ecosystem.

Practical applications, including optimizing blog content and developing an SEO-focused newsletter, underlined the significance of SEO in increasing organic traffic and enhancing online presence.

Although the actual launch of the email marketing campaign did not occur within the internship timeline, the preparatory phase provided insights into the strategic use of this channel for lead generation and customer relationship management.

The development and execution of a LinkedIn strategy successfully addressed the challenge of boosting visibility and growing the follower count on the platform. Consistent content posting and the implementation of practices aligned with the platform's algorithm contributed to the growth in followers, confirming the strategy's effectiveness. However, there remained a significant issue with low user engagement on posts, except for a few exceptions involving the most popular carousels. Therefore, it is necessary to reevaluate the content communication strategy to identify areas that require improvement. Furthermore, due to time constraints, no in-depth analysis of user perspective was conducted. Gathering input from users could be highly valuable in determining how to create more engaging content moving forward.

The internship at JPP contributed to the company's strategy by identifying critical areas for improvement and laying a foundation for further operational optimization. The insights gained during the internship emphasized that it is essential for a marketing agency not only to serve its clients effectively but also to cultivate its own brand. It is fundamental for long-term growth and a stronger market position.

5.2. Recommendations

Based on the insights and experiences from the internship, the following recommendations are proposed to enhance JPP's digital marketing and operational effectiveness:

Social Media Posting Frequency:

Increase the frequency of LinkedIn posts beyond the current once-a-week schedule. This strategic increase is pivotal in sustaining high impression levels and amplifying the overall reach of content updates. To maximize effectiveness, conduct analytical research to identify the most impactful post timing. This approach involves analysing engagement patterns, audience online activity, and competitor posting schedules to ascertain the optimal posting frequency.

Video Content:

Prioritize the creation and distribution of visual content, with a particular focus on video formats. This form of content, which was not extensively explored during the internship, is currently highly engaging on other social media platforms and should be leveraged to captivate the audience more effectively.

Engagement on LinkedIn:

Revise the communication strategy and content on LinkedIn. Despite achieving peak impressions and follower growth, the engagement rate remained low. Enhancing this rate is crucial for better algorithmic positioning and extended reach. In order to gain a deeper understanding of the target audience, it is essential to expand qualitative research efforts by conducting surveys and interviews with users and followers of JPP. This approach will allow to gather valuable insights and document users' content preferences.

SEO Efforts Monitoring and Blog Optimization:

Continue to monitor the SEO efforts implemented during the internship, especially concerning blog and newsletter performance. It is crucial that future content, particularly newsletters, adheres to the established SEO strategy to build authority. Additionally, a consistent review and update of all blog posts on the website are recommended, focusing on keywords, images, and linking structures. Additionally, the integration of Google Search Console as a key tool for performance measurement is strongly recommended. This necessity was underscored in the interview with an industry expert and further reinforced by its correlation with other analytical tools. Google Search Console offers invaluable insights into website traffic, search rankings, and the overall effectiveness of SEO strategies, making it an essential component for comprehensive performance analysis and strategic decision-making. Implementing this tool will significantly enhance JPP's ability to monitor and optimize its digital presence.

Email Marketing Campaign Launch:

Initiate the planned email marketing campaign, following the strategy and content drafted during the internship. This campaign should align with recent trends and effectively utilize JPP's existing resources, such as presentations from past webinars, for content repurposing.

6. Self-Reflection

My internship at JPP provided a rich and diverse experience that extended beyond the range of activities detailed in this report. I engaged in various tasks that included participating in client meetings, assisting in creating various content for different events, and contributing to the preparation and execution of webinars and workshops.

A unique aspect of my internship was the location of JPP's office in PLNT, a startup hub. This constant exposure to entrepreneurs infused the company with an entrepreneurial spirit, incorporating a mindset where challenges are viewed as opportunities for learning and growth. The environment was not only enriching for the company culture but also presented invaluable networking opportunities for me.

This experience highlighted the importance of having a foundational understanding of life sciences in marketing for this sector. The blend of skills taught in the SBM program is indeed relevant and in demand in the industry. Financial management, strategic management, marketing, and science-based entrepreneurship courses provided a crucial background for understanding the company's operations and the broader market context.

From a personal development perspective, the internship offered significant independence, from choosing my thesis topic to specializing in areas of interest. I was encouraged to dedicate time to learning about new topics and integrating these lessons into JPP's strategy. Even when I encountered setbacks, such as accidentally crushing the company's website, I was encouraged to use this failure as a learning opportunity that, as a result, allowed me to gain invaluable insights. This trial-and-error approach, normalized in the entrepreneurial world, was a fundamental aspect of my experience at JPP.

Initially, navigating the new sector was challenging, requiring time to research and understand market standards. However, with the supportive environment at JPP, my skills and confidence grew, evidenced by the progressively improved quality of newsletters and social media content I produced.

Another significant learning experience for me was understanding how to establish boundaries and assess the feasibility of projects. This skill proved particularly vital when the idea of developing an email marketing campaign emerged midway through the internship. Faced with a limited timeframe, I learned to evaluate what could be accomplished realistically and to accept that I might not witness the realization of my efforts. This was a crucial exercise in recognizing the importance of setting achievable goals and managing expectations within a project's scope. Moreover, this experience highlighted the necessity of delegation in a bigger team setting. As someone who takes great responsibility in their work, learning to trust the process and hand over the reins when needed was an important growth moment. It highlighted the significance of teamwork and the collective effort required to complete a project, especially in a dynamic business environment.

Participating in client meetings was a highlight of my internship, offering hands-on experience in enhancing other companies' online presence. Engaging directly with clients was enlightening and rewarding, as it involved collaborative efforts to achieve their marketing goals. This experience was particularly revelatory for me as an introvert. Contrary to my initial apprehensions, I found great enjoyment and fulfilment in teamwork and client interactions. This realization was important, providing me with valuable insights into the kind of roles I could pursue in my future career. This newfound understanding of my professional preferences is a significant takeaway from my internship, shaping my career trajectory and guiding my choices in future job opportunities.

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8. Appendices

Appendix A: MOZ dashboard reports.