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Prodan Ambartsumyan, Olga; Simón Jiménez, Eduardo, dir. The use of large language models for marketing content translation and transcreation. Bellaterra: Universitat Autònoma de Barcelona, 2023. (Tecnologies de la Traducció)

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### TRABAJO DE FIN DE MÁSTER 2022-2023



# THE USE OF LARGE LANGUAGE MODELS FOR MARKETING CONTENT TRANSLATION AND TRANSCREATION

# MÁSTER EN TRADUMÁTICA: TECNOLOGÍAS DE LA TRADUCCIÓN FACULTAD DE TRADUCCIÓN E INTERPRETACIÓN

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Barcelona, July 2023

#### Datos del TFG / Dissertation data

## **Título: The Use of Large Language Models For Marketing Content Translation and Transcreation**

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#### Estudios: Máster oficial en Tradumática: Tecnologías de la Traducción

Studies: Official master's degree in Tradumatics: Translation Technologies

#### Palabras clave / Keywords

Transcreation, ChatGPT, marketing, artificial intelligence, machine translation, natural language processing

#### Resumen del TFM / Abstract

This thesis explores the use of large language models for marketing content transcreation. With the rapid advancements in natural language processing and the emergence of powerful language models like ChatGPT and DeepL, there is a growing interest in using these models to automate the transcreation process. This study aims to investigate the benefits, challenges, and potential applications of large language models in marketing content transcreation, examining their impact on efficiency, accuracy, creativity, and cultural adaptation.

The practical case of this research involves the transcreation of marketing content used by an Edtech company Learnlife from English into Spanish. The aim of this paper is to understand which system better meets the needs of multilingual marketing managers, in particular those who manage content in English and Spanish.

We present a detailed report of the result of our experiment. The findings of this research can contribute to the understanding of how large language models can improve marketing content transcreation and provide valuable insights for marketers, language professionals, and researchers in the field of natural language processing.

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#### **Dedication**

This Master's Degree is dedicated to my daughter Sofia Ruzanna, who is my motivation to constantly move forward and grow. Thank you, Sofia, for all the evenings you spent alone in the house, while I was away studying.

And also to my mother Ruzanna Ambartsumyan, who passed me her love for languages and linguistics, new discoveries and her general belief that nothing is impossible.

Special thanks to my father Vasily Prodan, for his methodical mind and support in my endeavors.

Also thank you to my tutor Eduard Simón, for the inspiration to persevere and for opening new horizons in the realm of AI, languages, countries, lifestyle, education and professional application.

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#### I. INTRODUCTION AND OBJECTIVES

Most of transactional and even informational content we read on the internet has the purpose to take us on a customer journey with a specific goal in mind. The most efficient content in the sense of concentrated information and emotional impact, of course aims to lead the customer to take a carefully planned action, such as awareness, transaction or brand evangelism. Businesses heavily depend on content to attract attention to the product or services.

When companies launch in foreign markets, they must follow a certain plan that includes localizing the product and then developing a marketing strategy for the target country. While localizing a product has been widely automated, due to extensive standardised terminology bases, the marketing content has a more creative side to it, and in this case a bad translation, can completely distort the perception of the product, and in some cases can potentially fail the entire campaign or cause a scandal.

As an example, when Pepsi launched its products in China between 1963 and 1967 with a slogan, which read "Come alive with Pepsi" in English. Apparently, it was poorly translated into Chinese, which resulted in a disastrous campaign. In Chinese, it said, "Pepsi brings your ancestors back from the dead."

Another example is about the Parker pen, which wouldn't make you pregnant. When they launched their ballpoint pen to the Mexican market the idea behind the slogan was that it was a pen, which "won't leak in your pocket and embarrass you", they translated "embarrass" as "embarazar" "to impregnate" in Spanish, which failed the whole campaign.

As we see, when it comes to business and marketing content translation is an extremely sensitive domain. Sometimes, it may require some more creative efforts from a translator, such as transcreation. While translating implies conversion of text or speech from one language to another, ensuring accurate conveyance of meaning and maintaining linguistic and cultural nuance, transcreation, on the other hand, involves adapting content to suit the target audience while preserving the intended impact and emotion.

Transcreation could be the key for the expansion of businesses. Until now transcreation has been a strictly human prerogative, employing highly skilled linguists, which also requires considerable time and effort, and has a high cost.

In the recent years, content creation has been practically revolutionized by the Artificial Intelligence (AI) technologies. It has become so efficient that it can learn both from patterns and

from data and it has improved the quality, relevance, and speed of content creation specifically for businesses.

There are many benefits to using technology for content creation. Firstly, AI is capable of analysing data and user behaviour, and based on that can generate highly personalized content. Secondly, it can save a lot of time and resources as it works faster than a human, and is a cheaper workforce. Despite its capabilities, AI also has its limitations, which we will also cover in this work.

The purpose of this research is to determine to which degree it is possible to use current Al solutions available for creative translation for business, primarily for marketing purposes. Business content generally follows a certain pattern, has a standard way of guiding the consumer through the sales process. The content can vary by platform, where it is published, from an article to a social media post, video or podcast. It also varies by purpose: a description, an article, website or landing page, social media content, instructions, etc. Therefore, we will aim to test whether different kinds of text transcreation can be managed through AI.

We will base our research around a number of texts in English, used in a marketing campaign of an Edtech company – Learnlife. The texts have been designed for their Summer Camps campaign and have been distributed through different channels in order to reach their target audience in Barcelona. We will attempt to transcreate those texts into Spanish with the aim of creating the same kind of impact on the target audience that would generate successful transactions.

Due to the nature of our research we will have to cover a wide spectrum of areas relating to business and marketing, content creation, translation and transcreation processes, translation technology, and artificial intelligence, in particular the area related to large language models, that deals with generation of human-like texts in various languages.

This research is structured based on a theoretical framework that includes the definition, history, and current uses of AI, the practical part, where we will be testing an AI platform for the transcreation of different types of content and subsequent evaluation. Unfortunately, due to the time restrictions, we will not be able to get additional data on the transcreated content performance online, as search engines require at least 6 months to rank new content.

We will make conclusions about the viability and efficiency of employing AI for transcreation, analyse the results and identify potential problems and risks.

We will attempt to answer the following key questions during this research:

- a. Is AI transcreation possible at this point of its development? For what type of content?
- b. What does that process look like?
- c. What metrics can be used to measure transcreation quality?
- d. Can AI transcreate content with a Call to Action (CTA) to incentivize the reader to take an action?
- e. What prompts are the most efficient for transcreation of different types of content, and can they become standardized?
- f. Are there any downsides to using AI for content generation and transcreation?
- g. What predictions for the future of transcreation can we make, based on the existing technologies and tendencies?
- h. Will the future internet be dominated by artificial texts?
- i. What effects will it have on the job market?

The objective of our research is to formulate a hypothesis based on the above questions, where we will analyse the method and the process of transcreation of business content from English into Spanish with the help of AI, and evaluate the results. We will then make conclusions regarding the process of transcreation, its effect on businesses, and the future of the job market for translators who do this type of work.

#### II. THEORETICAL FRAMEWORK

In this part of the thesis, we will set up the theoretical framework by introducing the basic concepts we will be using in our research. These concepts cover definitions related to content creation for businesses, marketing, translation and transcreation of content, and artificial intelligence.

In addition to providing definitions, this research will delve into detailed explanations of the processes of translation and transcreation. We will explore the various software tools that are available to facilitate translation and transcreation processes. These tools include computer-assisted translation (CAT) software, which assists human translators by providing features that automate translation, quality control and evaluation.

Additionally, we will touch upon the advancements in Large Language Models, which are advanced artificial intelligence systems designed to understand and generate human language.

With their immense size and training data, these models possess a broad knowledge base encompassing various domains and topics in many languages, and can be used to assist with creative writing and content generation in various languages.

Lastly, we will present a case study that serves as a practical application to evaluate the abilities of AI in the field of transcreation. This case study will involve analysing the performance of AI-driven transcreation tools in adapting marketing content for different target markets. By examining the outcomes and comparing them to human-generated transcreations, we will be able to assess the effectiveness and limitations of AI in this context.

This section is divided into Definitions, Tools, and the Case Study. Because we intend to cover such large scope of areas, including business, translation and AI, and for the sake of brevity, all definitions will be limited strictly to what is relevant to our study, so they are by no means exhaustive.

#### 1. Definitions

#### 1.1 Content

Content is any form of communication that a business creates and shares with its audience. This includes written, visual, and audio content. Written content can take the form of blog posts, articles, social media posts, and email newsletters. Visual content can include images, infographics, and videos, while audio content can be in the form of podcasts or webinars. The purpose of content is to inform, educate, entertain, and persuade the audience.

Content is a critical component of any business's marketing strategy, as it plays a key role in establishing brand awareness, building a loyal customer base, and generating leads. Effective content can help businesses create a strong online presence and reach their target audience with the right message at the right time. In addition, content marketing can help businesses increase their website traffic, improve their search engine rankings, and establish themselves as thought leaders in their industry.

It allows businesses to communicate with their target audience, establish brand awareness, and generate leads. Whether it is through written, visual, or audio content, businesses can use content to educate, entertain, and persuade their audience. Therefore, it is crucial for businesses to invest in creating high-quality content that resonates with their target audience to achieve their marketing goals.

#### 1.2 Marketing

According to Hubspot, Marketing is the process of getting people interested in your company's product or service. This happens through market research, analysis, and understanding your ideal customer's interests. Marketing pertains to all aspects of a business, including product development, distribution methods, sales, and advertising.<sup>1</sup>

Modern marketing as we know it dates to 1950s, when companies started to use different platforms to advertise a product – first, print materials, followed by TV ads, and lastly the internet. Its main purpose is to attract consumers to a product or a service offered by a company through messaging.

The process of transforming initial interest into a transaction is called lead conversion, "leads" being the consumers that show initial interest. The most crucial component in the whole process of marketing is what kind of messaging will the particular audience receive to become interested. This is achieved through various types of content, which is usually helpful, educational and sometimes inspiring.

#### 1.2.1 Inbound vs. Outbound Marketing

While marketing for a business can be divided into many fields and areas, its two main areas of division are inbound and outbound marketing. They employ different techniques and strategies to reach their audience, and content is of primary importance for both.

Inbound marketing focuses on attracting potential customers by creating valuable content and experiences that align with their interests and needs. The goal is to draw individuals organically to the business through various channels, such as blogs, social media, internet browsing, and content marketing. Inbound marketing strategies typically involve providing informative and relevant content that educates, entertains, or solves problems for the audience. By offering

valuable resources, businesses aim to establish trust, build relationships, and ultimately generate transactions.

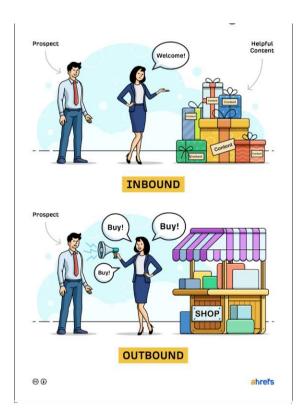


Figure 1. Inbound vs. Outbound Marketing

 $Source: $\frac{\text{https://ahrefs.com/blog/inbound-vs-outbound-}}{\text{marketing/\#:}^{2}:\text{text=Inbound\%20marketing\%20is\%20where\%20you,to\%20do\%20the\%20same}} $$\%20$ thing.$ 

Outbound marketing is the business pushing a product on their audience through active calls, promotions, emails, etc. It usually has a higher cost per lead and does not produce long-lasting awareness and brand loyalty.

In recent years, inbound marketing has gained prominence due to its customer-centric approach and ability to establish long-term relationships. It focuses on creating valuable content and personalized experiences that resonate with the target audience. Outbound marketing, on the other hand, is often seen as more intrusive and less targeted.



Figure 2. Specifics of Inbound and Outbound Marketing

Source: http://www.getspokal.com/blog/

As we can see in the diagrams above, inbound marketing is a strategy that centers on the creation and distribution of high-quality content. It serves as the foundation of inbound marketing because it is what attracts, engages, and retains the attention of the target audience.

Inbound marketing recognizes that consumers are inundated with advertisements and promotional messages in their daily lives. To stand out and capture their interest, businesses must offer something valuable in return. This is where quality content plays a crucial role.

Inbound marketing utilizes various channels to attract and engage the target audience. These channels serve as avenues for businesses to distribute their content, interact with potential customers, and build relationships.

Some commonly used inbound marketing channels are: blogs, articles, email campaigns, social media marketing, websites and landing pages. The choice of channels depends on the target audience, industry, and specific goals of the business. A comprehensive inbound marketing strategy often combines multiple channels to maximize reach, engagement, and conversion opportunities.

For the purpose of our research, we will test AI content transcreation on using content for all of the channels mentioned in the previous paragraph.

#### 1.3 Content Creation Process for marketing

The content creation process refers to the series of steps involved in planning, developing, and producing content for various platforms and purposes. While the specific process may vary depending on the organization or individual, the general process of content creation process includes defining objectives and target audience, research, planning, content creation and editing, and finally publishing and promotion through the relevant channels. <sup>2</sup>

Once content is published, it is usually analysed for its performance and transaction rates through different analytics tools, such as website traffic and engagement metrics. Due to time constraints, we will not be able to analyse the content used in this research for performance.

#### 1.4 Translation

#### 1.4.1 Definition

Translation is the process of transferring meaning from one language to another while preserving the context and intent of the original message (Nida & Taber, 1982).

Translation is a complex and multifaceted process that involves various cognitive and linguistic processes, as well as cultural and contextual factors. It plays a vital role in facilitating cross-cultural communication and understanding, disseminating knowledge and information, and preserving cultural heritage and diversity in a variety of contexts, from business and politics to education and entertainment.

It involves processes that require the use of various regions of the human brain, such as the left hemisphere, which is responsible for language processing and production (Koehne et al., 2016).

Translation can be divided into many different types, which include among others the following: literary translation, technical translation, legal translation, medical translation, website localization or audio-visual translation. For the purpose of our research, we will be focusing on translation for business.

#### 1.4.2 Translation for business

Translation plays a critical role in facilitating international business transactions and global communication. In a world where businesses are increasingly operating across borders, translation helps to overcome language barriers and enables companies to connect with customers, partners, and stakeholders from different countries and cultures.

One of the key benefits of translation for businesses is that it allows companies to reach a wider audience and expand their customer base. By translating their website, marketing materials, and product information into multiple languages, businesses can better target potential customers in different regions and increase their global reach. This not only increases sales and revenue but also helps to establish the company as a trusted and respected international brand.

Translation is also important for businesses that operate in multilingual environments, such as multinational corporations or international organizations. In these settings, translation is essential for effective communication between colleagues and partners who may speak different languages. It ensures that everyone can understand each other and work together towards common goals, regardless of their native language.

Moreover, accurate and high-quality translation is crucial in legal and regulatory contexts. For example, businesses that operate in multiple countries must comply with local laws and regulations, and accurate translation is necessary to ensure compliance. Inaccurate or poorquality translation can result in legal and financial repercussions, as well as damage to the company's reputation.

Translation is also an essential tool for businesses operating in today's globalized world. It enables companies to reach a wider audience, improve communication, comply with legal and regulatory requirements, and establish themselves as trusted international brands. By investing in professional translation services, businesses can unlock new opportunities and overcome the language barriers that can hinder their growth and success in the global marketplace.

One of the important aspects of translation of marketing content is the focus on cultural context when reaching international markets and target audience, which involves a complex and multistep process that requires careful attention to detail, cultural sensitivity, and quality assurance.

#### 1.4.3 Human translation

Because of the enormous amount of information that must be communicated across languages apart from the traditional human translation, there has emerged machine translation (MT). These two are the main approaches to translation.

Human translation involves the work of professional translators who use their knowledge and skills to accurately convey the meaning and style of a text from one language to another.

Human translators play a critical role in the translation process. They have unique abilities to deeply understand and convey the nuances of language and culture, including idiomatic

expressions, cultural references, and other complexities at which machine translation may fail. They can also adapt translations to the target audience and ensure cultural sensitivity, which is essential in industries like literary translations, marketing, and advertising, as well as confidential documents of legal and medical nature, where accuracy and precision are crucial.

The process of translation involves several steps - comprehension, translation, editing, proofreading, and quality assurance. Human translation is the preferred choice for many industries because of its accuracy, quality, customization, confidentiality, and cultural sensitivity.

One of the advantages of human translation over machine translation is accuracy. While machine translation has improved over the years, it still struggles to accurately translate complex sentences, especially if they contain idioms or cultural references.

Another advantage of human translation is quality. Human translators take the time to review and edit translations for accuracy, clarity, and consistency. They can also customize translations to meet the specific needs of clients and their target audiences. This attention to nuance results in high-quality translations that are able to create an emotional impact similar to the source text.

The shortcomings of human translation are the human factor, slow speed, inconsistency of terminology use and high cost of this very skilled work.

#### 1.4.4 Machine translation

Machine translation involves the use of computer algorithms to automatically translate text from one language to another.

In the field of machine translation, three prominent approaches have emerged over the years: Rule-Based Machine Translation (RBMT), Statistical Machine Translation (SMT) and Neural Machine Translation (NMT). All three approaches have contributed significantly to the advancement of automated translation systems.

Rule-Based Machine Translation machine translation, RBMT was the first approach to machine translation, and thus, a relatively mature area in this field. RBMT systems are constituted by two components: the rules, which account for the syntactic knowledge, and the lexicon, which deals with the morphological, syntactic, and semantic information. Both rules and lexicons are grounded on linguistic knowledge and generated by expert linguists. As a result, the build process is expensive, and the system is difficult to maintain (Bennett and Slocum, 1985).

Although they usually provide a mechanism to create new rules, extend, and adapt the lexicon, changes are usually very costly and the results, frequently, do not pay off (Isabelle et al., 2007).

Statistical Machine Translation is an approach that relies on statistical models to generate translations. SMT systems analyse large bilingual corpora, meaning collections of texts in two languages that are aligned at the sentence or paragraph level, where each segment in one language has a corresponding translation in the other to learn patterns and probabilities of word and phrase alignments between source and target languages. SMT operates on the principle of breaking down sentences into smaller units called phrases. It translates these phrases independently and then recombines them to form the final translation.

The translation process in SMT is driven by statistical models that estimate the likelihood of a particular phrase translation based on its occurrence in the training data. MT systems heavily rely on large parallel corpora for training. These corpora consist of aligned sentences in the source and target languages. The quality and size of the training data directly impact the performance of SMT systems, which can struggle with low-resource languages or when dealing with domain-specific or rare terminology.

Neural Machine Translation (NMT) represents a paradigm shift in machine translation, utilizing artificial neural networks to learn translation patterns. NMT models can capture complex linguistic structures and dependencies.

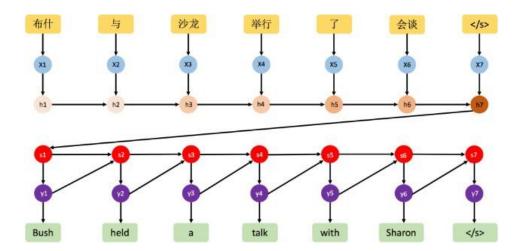


Figure 3. Graphical representation of the functioning of a Neural Machine Translation system *Source:* Sutskever et al., 2014

NMT models employ a sequence-to-sequence framework, consisting of an encoder and a decoder. The encoder reads the input sentence and generates a fixed-length representation

(vector) called a "context vector." The decoder then generates the translated sentence based on the context vector, considering the learned representations of the source sentence.

NMT models are trained end-to-end, meaning that the models learn to generate translations directly from the input sentences without relying on explicit alignment information. This characteristic allows NMT models to handle longer sentences and capture global dependencies more effectively.

While SMT systems heavily rely on parallel corpora, NMT models can be trained on both parallel and monolingual data. This flexibility is advantageous in scenarios where parallel data is scarce. However, NMT models typically require a large amount of training data to achieve optimal performance.

NMT models have shown significant improvements in translation quality, producing more fluent and natural-sounding translations compared to SMT systems. They are also able to capture context and handle long-range dependencies, which contributes to their superior output quality.

One of the main advantages of machine translation is its speed and efficiency. Machine translation can quickly translate large volumes of text, making it useful for industries that require fast translations, such as software and e-commerce websites.

Machine translation is also useful for providing rough translations for personal use or for gaining a general understanding of a text. For example, machine translation can be useful for translating social media posts, emails, or other informal communication.

In addition, machine translation can be used as a tool for human translators. Human translators can use machine translation software to generate a rough translation in the correct format, which they can then edit and refine to produce a high-quality translation. This saves time and can increase productivity.

One of the most popular translation machines in the world is Google Translate. The system uses Google Neural Machine Translation to increase its fluency and accuracy. The system not only applies a large data set for training its algorithms, but its end-to-end design also allows the system to learn over time and create better, more natural translations.

Google Neural Machine Translation can even process what are called "zero-shot translations." For example, the translation from French to Spanish is a zero-shot translation because it is a direct translation. Previously, Google Translate would translate the initial language into English, and then translate that English to the target language.

However, machine translation still struggles with accurately translating complex sentences, idioms, and cultural nuances. It can also produce errors and inconsistencies that can affect the quality and accuracy of the translation. Therefore, human revision and post-editing are critical for tasks like legal or medical documents, where accuracy and clarity are essential.

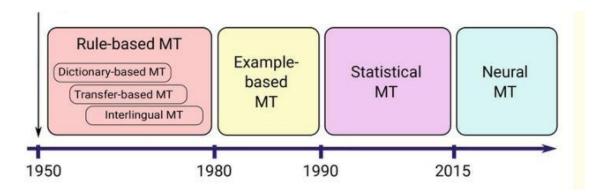


Figure 4. Timeline of Machine Translation Evolution

#### 1.4.5 Stages of translation

The process of translation can be divided into several stages, including comprehension, analysis, transfer, and production (Baker, 2018).

**Comprehension** is the first stage of translation, during which the translator reads and comprehends the source text to identify the meaning and intent behind it. This requires the use of various cognitive skills, such as attention, perception, and memory, as well as linguistic knowledge, such as vocabulary, syntax, and discourse (Alves & Gonçalves, 2017). Analysis is the second stage, during which the translator analyses the source text in terms of its structure, content, and style to identify the most appropriate strategies for translating it (Munday, 2016).

Transfer is the third stage of translation, during which the translator transfers the meaning and intent of the source text into the target language. This involves various linguistic and cultural challenges, such as idiomatic expressions, cultural references, and figurative language that require the use of translation strategies, such as literal translation, adaptation, and cultural substitution (Baker, 2018).

**Production** is the final stage, during which the translator produces the target text by applying the chosen translation strategies and ensuring that it is coherent, accurate, and stylistically appropriate (Munday, 2016).

#### 1.5 Transcreation

The term transcreation is a mix between translation and creation. It is mostly used in marketing and advertising. Transcreation can help duplicate marketing messages in a way that hides the fact that translation occurred. Transcreation is generally considered successful if it can provide the audience with the same emotional response they would have obtained from the source message.<sup>3</sup>

The history of transcreation can be traced back to the 1950s when companies began to expand their business operations globally. As companies began to expand internationally, they realized that a literal translation of their advertising and marketing messages was not effective in appealing to local audiences. Thus, the concept of transcreation was born, as advertisers and marketers recognized the need for cultural adaptation in order to effectively communicate with local audiences.

Several factors influence the transcreation process, including the cultural context of the target audience, the type of content, and the message being conveyed. For instance, a marketing campaign aimed at an English-speaking audience may not resonate with a Spanish-speaking audience, and the content may have to be adapted to suit the cultural context of the target audience.

Unlike translation, which involves converting content from one language to another, transcreation involves creating content that resonates with the target audience's cultural values, beliefs, and preferences.

Another factor that may influence the transcreation process is the type of content, whether it is video, social media post, a blog, a slogan. Sometimes, even the products themselves are adapted to new markets, with their new transcreated names.

#### 1.5.1 The Transcreation Process

The process of transcreation is more similar to content creation of an original text that we explained earlier. When done correctly, it creates a similar impact as the source text, and it is an effective way for brands to reach new markets in an authentic and meaningful way. If the text

is not loaded with cultural nuance or idiomatic expressions, a human translator can easily transcreate a text using similar process as translation.

However, for more complex cases, transcreation may involve having to create content from blank. In these cases, a transcreator has to rely on a brief - a document that outlines the key elements of the message that needs to be transcreated, including the target audience, the brand values, the tone of voice, and the desired emotional response. The brief is used as a guide for the transcreation process and helps ensure that the message is effectively adapted to the target culture.

Example of a transcreation brief:

The brief can include the following elements:

Target audience: Who is the message intended for

**Brand values:** What are the core values of the brand that need to be reflected in the message?

**Tone of voice:** What is the desired tone of voice for the message? Should it be serious, playful, or something else?

Emotional response: What emotional response does the message need to evoke in the target audience?

Cultural considerations: What cultural factors need to be taken into account when adapting the message to the target culture?

Length: Transcreated text must match in length the source text.

Figure 5. Example of transcreation brief.

Once the brief has been developed, the transcreation process begins with the creation of a rough draft. The rough draft is a first attempt at adapting the message to the target culture, and is usually created by a transcreator who has expertise in both the source and target cultures. The rough draft is then reviewed by a team of reviewers who provide feedback and suggestions for improvement.

Based on the feedback received, the transcreator revises the rough draft and creates a final version of the transcreated message. The final version is then reviewed by a final quality assurance team who ensure that the message is culturally appropriate and resonates with the target audience.

#### 1.6 Artificial Intelligence

The term "Artificial Intelligence" was defined by John McCarthy, an American computer scientist, and one of its founders, in 1956. He defined it as 'The science and engineering of making intelligent machines.'

According to Technopedia, Artificial intelligence (AI), also known as machine intelligence, is a branch of computer science that focuses on building and managing technology that can learn to autonomously make decisions and carry out actions on behalf of a human being.

Recent advancements in the development of machine translation have been made possible with AI. It has allowed machine translation systems to improve their accuracy and produce more natural-sounding translations.

Additionally, AI has enabled the development of customized machine translation systems for specific industries or domains. These systems can be trained on specific terminology and language structures used in a particular field, resulting in more accurate and relevant translations. This is particularly useful for industries such as IT, legal or medical, where specialized terminology and language are frequently used.

Furthermore, AI has facilitated the development of machine translation systems that can translate multiple languages simultaneously. This approach, known as multilingual machine translation, uses a single model to translate between multiple languages, making it more efficient and cost-effective than traditional machine translation methods.

Al is not a single technology, but an umbrella term that includes any type of software or hardware component that supports machine learning, computer vision, natural language understanding and processing, natural language generation, natural language processing and robotics.<sup>4</sup> In our research, we will focus on the areas related to language processing Al and where they stand in relation to other categories.

#### 1.6.1 Types of Artificial Intelligence

Based on capability and functionality of Al-based systems, Al can be categorized into the following types:

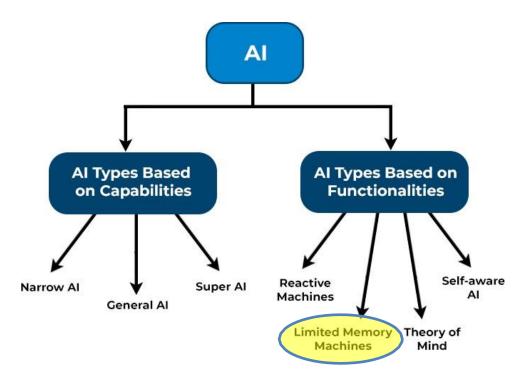


Figure 6. Types of AI

Source: <a href="https://www.spiceworks.com/tech/artificial-intelligence/articles/what-is-ai/">https://www.spiceworks.com/tech/artificial-intelligence/articles/what-is-ai/</a> (consulted 26.03.2023)

- Reactive Machines AI operate solely based on the present data, taking into account only the current situation
- Theory Of Mind AI focus mainly on emotional intelligence so that human believes and thoughts can be better comprehended
- Self-aware AI machines have their own consciousness and become self-aware. Does not exist to date <sup>5</sup>.
- Limited Memory AI can make informed and improved decisions by studying the past data from its memory. It is one of the most sophisticated AI and can absorb learning data and improve over time based on its experience similar to the way the human brain's neurons connect. This is the AI that is widely used and being perfected today.

Under the category of Limited Memory we can find several subfields that deal with text generation and learning:

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Figure 7 Limited Memory AI subfields

Source: <a href="https://www.miquido.com/blog/how-does-artificial-intelligence-work/">https://www.miquido.com/blog/how-does-artificial-intelligence-work/</a> (consulted 26.03.2023)

There are several branches of artificial intelligence, based on the techniques they use to solve problems, and the one we would like to focus on is Natural Language Processing (NLP).

#### 1.6.2 Natural Language Processing (NLP) and Language Modeling (LM)

NLP is the branch of AI that deals with the interaction between computers and humans using natural language.

One of the important NLP applications is Language modeling (LM) which uses various statistical and probabilistic techniques to determine the probability of a given sequence of words occurring in a sentence. It analyses bodies of text data to provide a basis for their word predictions, particularly ones that generate text as an output. Some of these applications include machine translation and question answering. It is the reason that machines can understand qualitative information. Each language model type, in one way or another, turns qualitative information into quantitative information. This allows people to communicate with machines as they do with each other to a limited extent.

Language models determine word probability by analysing text data. They interpret this data by feeding it through an algorithm that establishes rules for context in natural language. Then, the model applies these rules in language tasks to accurately predict or produce new sentences. The model essentially learns the features and characteristics of basic language and uses those features to understand new phrases.

One of the main reasons natural language processing is so critical to businesses is that it can be used to analyse large volumes of text data, like social media comments, customer support

tickets, online reviews, news reports, and more. All this business data contains a wealth of valuable insights, and NLP can quickly help businesses discover what those insights are.

It does this by helping machines make sense of human language in a faster, more accurate, and more consistent way than human agents. NLP tools process data in real time, 24/7, and apply the same criteria to all your data, so you can ensure the results you receive are accurate – and not riddled with inconsistencies. Once NLP tools can understand what a piece of text is about, and even measure things like sentiment, businesses can start to prioritize and organize their data in a way that suits their needs.

Natural language processing is the driving force behind machine intelligence in many modern real-world applications. In our work we will focus on the NLP uses for machine translation.

#### 1.6.3 Machine learning and Deep Learning

Machine Learning is a subset of AI that involves using algorithms to learn from data and make predictions based on that data. It also involves training neural networks on large amounts of data.

Deep learning is a subfield of machine learning that focuses on training artificial neural networks to learn and make intelligent decisions by processing vast amounts of data. It is inspired by the structure and function of the human brain, specifically the interconnectedness of neurons.

In deep learning, neural networks are designed with multiple layers of interconnected nodes called neurons. Each neuron receives input data, performs computations on it, and passes the output to the next layer of neurons. The layers are hierarchically organized, allowing the network to learn increasingly complex patterns and representations as information flows through the network.

The key strength of deep learning lies in its ability to automatically learn and extract meaningful features from raw data without the need for manual feature engineering. By iteratively adjusting the connections and weights between neurons, deep learning models can optimize their performance and improve their ability to recognize and classify patterns in data.

Deep learning has shown remarkable success in various domains, including computer vision, natural language processing, speech recognition, and many others. It has revolutionized fields such as image classification, object detection, language translation, and speech synthesis, achieving state-of-the-art performance in many tasks.

The training process in deep learning typically requires large amounts of labeled data and significant computational resources. However, the power of deep learning lies in its ability to automatically learn complex representations and generalize well to unseen data, making it a valuable tool for solving challenging problems in artificial intelligence.

#### 1.6.4 Limitations of Machine Translation and AI

Translating text from one language to another is a challenging task due to the complexity of natural languages, which encompass ambiguity and multiple overlapping meanings. Although machine translation (MT) has made significant advancements, it still struggles to consistently meet expectations in terms of translation quality. One of the primary reasons for MT's shortcomings lies in its inadequate comprehension of the semantic meaning of the text.

Compared to human translators, MT systems have a limited understanding of the contextual aspects of the text. They often lack the ability to grasp the relationships between words and their corresponding concepts, nuances, syntax, spelling, and idiomatic expressions. As a result, MT tends to produce literal translations that may include unfamiliar expressions, lack fluency in the target language, and exhibit incorrect grammar.

Furthermore, the absence of appropriate context can lead to biased translations influenced by gender or culture. MT systems also struggle to select the most appropriate translation words, often resulting in the usage of irrelevant terms or misinterpretations of the intended meaning. Additionally, MT systems face challenges in recognizing dialectical and cultural differences within the target language, as well as detecting linguistic variations.

Overall, while MT has the potential to produce high-quality translations, it is hindered by its lack of contextual awareness, difficulty in capturing textual subtleties, and the challenge of selecting the most suitable terms. Despite advancements in MT technology, the accuracy of translations in certain situations remains mediocre. Therefore, it is crucial to ensure the accuracy and correctness of translations, especially in the context of a Master's thesis in translation technology.

One significant limitation of machine translation is its inherent possibility of errors. Although MT technology continuously learns and improves its translations, it is still far from being flawless. Consequently, translations generated by MT can vary in quality and consistency, depending on the algorithms employed. Achieving accurate translations requires significant effort, and the inconsistency of MT can lead to the possibility of erroneous translations.

Another limitation is that machine translation often fails to consider sentence context. Consequently, the resulting translations may be grammatically correct but lack meaningful interpretation. Without accounting for context, the translations can deviate significantly from the original text or even become irrelevant to the intended message, resulting in numerous misconceptions, convoluted statements, and nonsensical renderings. Additionally, machine translation struggles with the translation of phrases and idiomatic or colloquial language. Operating on a word-by-word basis, MT algorithms often produce overly literal translations that may sound peculiar or unclear.

Furthermore, machine translation frequently overlooks cultural and social aspects of the text. This can be particularly problematic when translating specialized professional documents, such as legal or medical texts, which rely heavily on highly specific vocabulary and cultural references. Machine translation's lack of cultural understanding often leads to suboptimal translations in these domains. In conclusion, the consistency of machine translation often yields mediocre results. Thus, while it can provide a general understanding of the text's content, it is not a comprehensive solution for translating documents.

The complexity of natural languages poses a significant challenge for machine translation. While machine translation technology is rapidly advancing, algorithms still struggle to accurately and fluently translate text due to the vast vocabulary and intricate syntax of all languages. Consequently, machine translations may exhibit awkward phrasing or an incomplete understanding of certain expressions.

Another limitation is the lack of context in machine translation. While machine translations are becoming more prevalent, they still have several disadvantages compared to translations done by human translators. One major drawback is the "quality gap" in machine translation, where the translations often lack linguistic complexity and tend to be overly literal. Machines struggle to comprehend slang or the contextual implications of language, resulting in translations that may not accurately convey the intended meaning of the source text.

#### 1. Tools

#### 2.1 ChatGPT - the most advanced NLP model

There is a large number of AI platforms already available. The most popular ones are: Google Cloud Learning Machine, IBM Watson, NVIDIA Deep Learning AI Software, Content DNA Platform, Nia Infosys, Azure Machine Learning Studio, Cortana, Salesforce Einstein.

However, ChatGPT is the most popular AI platform to date because of its accessibility and most human-like responses. It is a generative AI model, which allows users to enter written prompts and receive human-like text, images and even videos, generated by the platform. ChatGPT is programmed to understand human language and generate responses based on large corpora of data. It also uses human feedback in the training loop to minimize harmful, untruthful, and/or biased outputs.

ChatGPT falls under the category of Limited Memory AI. This is because it has the ability to form short-term memories and use them to inform its decisions. It can take into account past experiences to some extent, which allows it to generate more natural and engaging conversations with users. One of its standout features is its ability to remember previous interactions and incorporate that context into subsequent responses.

ChatGPT is built on several technologies, including Natural Language Processing (NLP), Machine Learning, and Deep Learning. These technologies are used to create the model's deep neural networks and enable it to learn from and generate text data.

The primary source of data for ChatGPT is the WebText dataset, which consists of approximately 8 million web pages collected from the internet.<sup>6</sup> This dataset is publicly available and was created by OpenAI specifically for training language models.

The WebText dataset is a diverse collection of text that includes a wide variety of sources such as news articles, websites, and online forums. This diversity helps to ensure that the model is exposed to a broad range of language and writing styles, which is essential for generating human-like text.

	Wikipedia	Books	Journals	Reddit links	СС	Other	Total
GPT-1		4.6					4.6
GPT-2				40			40
GPT-3	11.4	21	101	50	570		753

Figure 8Summary of Major Dataset Sizes. Shown in GB.

Source: https://s10251.pcdn.co/pdf/2022-Alan-D-Thompson-Whats-in-my-Al-Rev-0.pdf

ChatGPT has been trained on a diverse range of corpora primarily in English, which includes a vast collection of text from the internet. Based on the figure 7, we can see that online content in English is by far exceeds all others. Although Spanish is the second most popular language of the internet the gap between the two languages represented online is nearly 50%.

Rank ♦	Language <b>♦</b>	16 May 2023 \$	22 June 2023 \$
1	English	55.0%	54.3%
2	Spanish	5.0%	5.1%
3	Russian	4.9%	4.9%
4	French	4.4%	4.5%
5	German	4.3%	4.4%

Figure 9. Usage statistics of content languages for websites

Source: https://en.wikipedia.org/wiki/Languages used on the Internet

Although, it has been exposed to a wide variety of topics, genres, and writing styles to develop a broad understanding of language, ChatGPT primarily works with the English language, so its performance and accuracy may be higher for English compared to other languages, as it has received more training data and optimization for English language understanding and generation. We must keep this in mind, while we are carrying out the practical part of our research, as ChatGPT might have a much more limited output in Spanish.

Based on all that training, ChatGPT's neural network has 175 billion parameters or variables that allow it to take an input and then generate an output that best matches a query.

According to OpenAI, using ChatGPT for content generation has great benefits in efficiency, better quality, and cost-effectiveness. However, the efficiency of ChatGPT for transcreation, especially in a language other than English remains to be tested in our research. We should also remember that ChatGPT merely retrieves data that it has been trained on according to the prompt.

ChatGPT-3 is the platform we will be using to test transcreation for this research.

#### 1.1.1 Prompting in ChatGPT

#### Example of a ChatGPT prompt:

**Prompt:** transcreate a landing page for an international school in a fun and engaging tone, specifically targeting local parents who live in Barcelona.

The transcreation should be in Spanish and capture the essence of the original text while resonating with the local community and highlighting the unique benefits of the school.

(Includes: target audience, brand values, tone of voice, emotional response, cultural considerations, length)

Original Landing Page (English): [Source text]

Figure 10. Example of ChatGPT Prompt

ChatGPT is triggered by prompts, which is the communication language understood by Al. Prompts are a command written by a human for ChatGPT to execute. The output possibilities include answers to questions, producing content, writing or debugging a code, translations, and suggestions of ideas. Moreover, it can provide output in various formats, including tables and images, and adopt a different kind of tone and role.

The main challenge in writing a prompt is to formulate it in such way that ChatGPT creates an output that aligns with all the parameters of the prompt. ChatGPT also has the ability to record the history of prompts and build on previous requests. Thanks to that, once the output is produced, we can engage in a back and forth communication with ChatGPT, building opon previous prompts and refining parameters until we receive a satisfactory result.

As more and more companies employ AI, prompt engineers could save companies a lot of time and energy training AI chatbots to improve their responses by designing the optimal textual input using appropriate words, phrases, sentence structures, and punctuation. Suggestions have been made by prominent organizations that prompt engineering could become the job of the future. Various forums where users share pre-written prompts for different subjects are also becoming more and more popular.

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The prompt is a critical component of the transcreation process as the output can differ significantly on how precisely a command is formulated, whether or not it specifies the tone, the length, the purpose, and the style for the requested output. In some cases we could say that a prompt would be the AI equivalent of brief, that is provided to a human translator for a transcreation project.

#### 2.2 DeepL Translator

DeepL Translator was developed by DeepL GmbH, a German company specializing in artificial intelligence and language technology. It uses a neural machine translation (NMT) approach to improve the translation process.<sup>8</sup>

DeepL Translator is an online translation service that utilizes deep learning technology to provide high quality and accurate translations between multiple languages. One of the key advantages of DeepL Translator is its ability to capture the context and nuances of the source text, resulting in more fluent and natural-sounding translations. This is achieved through the use of deep learning models trained on vast amounts of multilingual data, and parallel texts in various language pairs.

DeepL Translator supports a wide range of languages, including English and Spanish, which we will be testing in this work. It can handle various types of text, including general documents, websites, and technical content, and has a user-friendly interface. DeepL Translator has gained a reputation for delivering translations that are often considered more accurate and natural compared to other machine translation services thanks to its advanced deep learning algorithms and continuous improvement through feedback.

DeepL Translator is a paid service, and its features may require a subscription or payment. However, it offers a free version with limitations, allowing users to experience its translation capabilities at no cost. Although we previously mentioned Google Translate, we will be using the free version of DeepL Translator, as it has higher accuracy rates.

#### 2.3 Automated Evaluation Systems. BLEU

Automated evaluation systems are computer-based methods or tools used to assess or measure the quality, performance, or effectiveness of a given system, process, or output in an automated

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manner. These systems are designed to provide objective assessments, measurements, or scores, often using predefined criteria or metrics.

In the context of natural language processing and machine translation, automated evaluation systems are commonly employed to assess the quality of machine-generated translations. These systems compare the output of machine translation systems with reference translations or human-generated translations to determine their accuracy, fluency, adequacy, or other linguistic aspects.

One widely used automated evaluation system in machine translation is the BLEU (Bilingual Evaluation Understudy) metric. BLEU calculates the similarity between machine-generated translations and reference translations based on n-gram matching and sentence-level precision. It assigns a score between 0 and 1, with higher scores indicating better alignment with the reference translations.

Other automated evaluation systems in natural language processing may focus on different aspects such as grammar, readability, coherence, or semantic correctness. They often utilize algorithms, statistical models, or linguistic rules to analyze and evaluate the quality or characteristics of the given text.

It is important to note that BLEU calculates its score on similarity of the two texts, and therefore may fail to capture all aspects of human linguistic competence or fully reflect the intended meaning or nuances in the text. Human evaluation and subjective judgment are still crucial for a comprehensive assessment of language-related tasks. For our research we will be employing a human evaluation system that we designed on 1-5 point score system, where we used BLEU system as a reference. We will also be using the similarity technique through an automatic comparison system, however, instead of the source text; we will compare the similarity rate of two target texts – human and Al-generated texts. We will provide more details on the evaluation process in the "Method" section of this paper.

#### 2. Case Study: Learnlife

As mentioned in the introduction, for our case study we will be using marketing materials, created by Learnlife, an Edtech company that provides a platform and community for lifelong learning. It was founded in 2016 in Barcelona, Spain, where it is currently based, with global operations.

Learnlife's platform is designed to empower learners of all ages to take control of their education and learning journey. The platform includes a variety of learning resources, including courses, workshops, and coaching programs to help learners develop the skills and knowledge they need to succeed in the 21st century. It also has two physical hubs in Barcelona and Castelldefels, the showcase centers for personal learning, where it also runs afterschool activities and summer camp.

Learnlife markets to an English-speaking audience globally and locally. However, they have noticed that they have difficulty in reaching the local community because they do not offer any content in Spanish. Human writers currently produce all of its content in both English and Spanish.

#### Learnlife faces several challenges:

- Language barrier, where Spanish is the primary language spoken in Spain, but English is the dominant language in the global market and the current target international audience residing in Spain. Content needs to be accurate for both audiences.
- 2. Cultural differences between English-speaking and Spanish-speaking audiences require that we ensure that the content we produce is culturally relevant and appropriate for each audience, taking into account differences in humour, values, and social norms, although both of our audiences reside in the same location. The goal of content would be for transactional browsing and inbound market.
- 3. Budget, where producing content for multiple audiences can be expensive, especially for smaller companies like Learnlife, with limited budgets. Currently all of writing for blogs and social media is outsourced. We will test how costly it is to translate and transcreate content through machine translation and AI, compared to human employment.
- 4. Marketing strategy, where we must ensure that their content reaches the relevant target audience, through the right channels and at the right time. Learnlife will provide necessary details on the audience, the channels and the timing of the campaign.

We will try to address these challenges, where will test large language models to transcreated Learnlife content from English into Spanish.

#### III. Evaluation

In this part of our research, we are going to focus on the practical steps to test out transcreation by AI. We will compare it to human and machine translation using both automated tools and human evaluation.

#### 1. Methodology and Hypothesis

For this research we will select texts in the formats, most frequently used in business marketing and will use three different techniques on them: human transcreation, machine translation and machine transcreation through Chat GPT.

The key stages of our methodology will include the following:

- 1. Select texts of different categories for testing in English. See Table 1
- 2. Translate texts in Spanish using human and machine translation.
- 3. Generate transcreation prompts for ChatGPT.
- Transcreate each text from English into Spanish using ChatGPT through a series of prompts.
- 5. Compare source text in English and transcreated target texts in Spanish using machine tools and human evaluation. Create a comparative table.
- 6. Make conclusions based on analysis.

Our hypothesis is that AI would be able to successfully transcreate text for business relying on a brief, the corpus of text on the internet, and it will be able to convey the cultural and contextual nuance of the source text. We also suggest that it will be able to do this task better than an automated translation model – DeepL.

By testing the Al's ability to transcreate a variety of marketing and online business content texts, we will also be able to analyse its strengths and weaknesses and identify areas for improvement.

We will then make conclusions whether this hypothesis is accurate and to what degree.

#### 2. Preparation of materials

Since our research plans to test business content texts. We will select a text from each category of the standard marketing content package. We will describe them in the sections, following below.

#### 2.1 Product Description

A product is a purchasable, downloadable, or freely attainable entity - be it something physical, downloadable, or accessible online - that delivers value. It can be a physical, a virtual item, or a service.

Product descriptions are essential marketing tools for businesses. We will select a product currently offered by Learnlife – Summer Camp, which is an educational service; create a description for it in English and then transcreate it into Spanish.

#### 2.2 Landing Page

A landing page is a webpage designed to persuade users to take one specific action.<sup>10</sup> The landing page we will be testing is the page for the Learnlife Summer Camp.

#### 2.3 Social Media Post

Social media is most efficient marketing driver channel for businesses, and incorporates a different number of content formats, from video to graphics and educational texts. We will be researching informational and promotional text-based content highlighting the benefits of our product – the Summer Camp. You can test the Al's ability to transcreate social media posts by selecting different types of content, such as promotional posts, informational posts, and customer engagement posts.

#### 2.4 Email Campaign

Email campaigns are a popular way to connect with customers and promote products to clients, who subscribed to receiving newsletters or promotional emails from a particular company. This

kind of text is supposed to be engaging, interesting and bring value to the client, otherwise they will inevitably click on the "unsubscribe" link.

We will choose promotional kind of email for our AI transcreation testing.

#### 2.5 Google Ad Copy

This is a short text, which motivates a client to take a specific action on an offer. It must be simple, short and have conviction value.

### 2.6 Blog Post

This type of text has to bring high value to the client, include a magnetic headline, a compelling lead subheads and engaging body.

#### 2.7 Flyer

A flyer is a small sheet of paper containing printed text that advertises an event, product, or service. Print material Flyers are considered very effective for advertising because they are easy to design, cheap to produce, and can be distributed in a large number of ways.<sup>11</sup>

Below we can see a table of all the categories:

	Category	Words	Characteristics	Medium of publication
1.	Product Description	129	Short descriptive text, precise	online
2.	Landing page	565	Short phrases, aimed at taking an action, may include action buttons (call to action)	online
3.	Social media post	137	Promotional text, highlighting benefits, fun and engaging	online
4.	Email campaign	111	High value	online
5.	Google ad copy	42	Simple, short, memorable	online
6.	Blog post	501	Magnetic title, subhead, body	online
7.	Flyer	175	Short informative phrases	print

Table 1. Source texts for research

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#### 3. Evaluation

There are several evaluation systems used to assess the quality of translations that we can attempt to use to measure transcreation. These systems aim to measure the accuracy, fluency, and overall fidelity to the purpose of the source text.

#### 3.1 Machine Evaluation: advantages and shortcomings

As we mentioned in the Theoretical Framework, we will be using the BLEU system as our reference.

We will not be employing BLEU due to the major shortcomings in its evaluation approach, based on similarity. There are several challenges and difficulties to this approach. Some key issues include inability to evaluate contextual understanding, where machine-generated output may appear similar to the reference text at a surface level, but it may lack a deep understanding of the content, resulting in inaccuracies or misinterpretations.

Another difficulty involves overlooking issues related to fluency and naturalness in the generated text. Machine systems may produce sentences that appear similar to the reference but lack the natural flow, coherence, or idiomatic expressions present in human-generated text.

Similarity-based evaluation also fails to capture the creativity aspect of human language as well as the use the cultural and stylistic variations across different languages and contexts. Language is not merely about reproducing existing patterns, but also about generating new and innovative expressions. Machines may struggle to demonstrate originality and creativity in their output, making similarity-based evaluation inadequate for assessing these aspects.

Finally, machine evaluation does not account for subjective aspects and the expertise required in certain domains. Some texts may require domain-specific knowledge or specialized terminology that cannot be accurately assessed based solely on similarity metrics.

Because of these difficulties, we will create our own evaluation method – a human evaluation of transcreated text by ChatGPT, and then use machine comparison systems for two pairs of texts: ChatGPT transcreated text in Spanish against human transcreated text and machine translated text against human transcreated text, and record the differences.

To date human translation of texts with emotional impact is still the gold standard and so is human evaluation, as it is capable of considering not only similarity but also fluency, coherence, creativity, cultural adaptation, and subject matter expertise. Although it is subjective, human judgement is a crucial part of any text assessment.

#### 3.2 Human Evaluation

Human evaluators, typically bilingual or multilingual experts, assess the quality of translations based on specific criteria. They provide subjective judgments and ratings, taking into account factors such as grammar, vocabulary, clarity, and overall coherence. The main shortcomings of human evaluation are subjectivity, heavy time and resource consumption, inconsistency and lack of scalability. For those reasons, we will complement the human evaluation with an automated tool to monitor consistency and reduce the time for systematization of the results. We will cover the details of that tools in the "Method" section below.

#### 3.1.1 Parameters for human evaluation

When human translators evaluate a finished target texts, there are several parameters that are important to consider:

- Accuracy, Fluency and Naturalness: we can identify any unnatural phrasing, grammatical errors, or inconsistencies that may affect the quality of the transcreation.
- Terminology and Vocabulary: we will assess whether the terms used in transcreation are correct and appropriate for the context.
- 3. Context and Cultural Appropriateness: we will assess whether the transcreation effectively conveys the intended meaning, tone, and cultural nuances of the original text in the target language. This is crucial for ensuring accurate and culturally sensitive translations.
- 4. **Style and Creativity:** we will evaluate whether the transcreation captures the desired style, voice, or creative elements of the original text. This aspect is often subjective and is based on human judgment.
- 5. **Overall quality:** general assessment of whether the target text has the same impact as the source text, based on all the parameters above.

#### 3. Method

First, we carry out the translations – through different approaches: human and machine. For human we will ask a professional translator, and for the machine translation, we will use DeepL.

After that, we will engineer prompts in preparation for the transcreation task for ChatGPT. The prompts will be an equivalent to a brief, that in some cases are given to a human translator, and they will be different for each type of text (please see column "ChatGPT Prompt" in the Annex 1).

We will have three texts (please see section "Texts" in the Annex 1):

#### Source text - EN

- 1. Target text 1 machine translation ES
- 2. Target text 2 human translation ES
- 3. Target text 3 ChatGPT transcreation ES

Once we have the three texts, we will begin the evaluation process.

First, we will ask three independent translators, native Spanish speakers with degrees in philology to evaluate target text 3, transcreated by ChatGPT based on the following criteria:

Evaluation Parameters	Description	Scoring
1. Accuracy	Evaluates the precision of the translation in terms of vocabulary and terminology. An accurate translation should use appropriate words and expressions without introducing errors or mistranslations.	5: Highly accurate, appropriate choice of vocabulary and terminology. 4: Mostly accurate, minor inaccuracies or inconsistencies. 3: Moderately accurate, noticeable errors in vocabulary or terminology. 2: Significant inaccuracies, incorrect word choices or mistranslations. 1: Very poor accuracy, severe mistranslations or nonsensical output.
2. Fluency	Assesses the grammatical correctness and naturalness of the translated text. A fluent translation should read smoothly and coherently.	5: Very fluent, reads naturally and smoothly. 4: Mostly fluent with minor grammatical errors. 3: Moderately fluent, occasional grammatical errors present. 2: Noticeable lack of fluency, significant grammatical errors. 1: Very poor fluency, difficult to understand.
3. Grammatical correctness	Evaluates the precision of the translation in terms of vocabulary and terminology. An accurate translation should use appropriate words and expressions without introducing errors or mistranslations.	5: Highly accurate, appropriate choice of vocabulary and terminology. 4: Mostly accurate, minor inaccuracies or inconsistencies. 3: Moderately accurate, noticeable errors in vocabulary or terminology. 2: Significant inaccuracies, incorrect word choices or mistranslations. 1: Very poor accuracy, severe mistranslations or nonsensical output.

4. Terminology and Vocabulary	Checks the consistency of terminology usage throughout the translation. A consistent translation should maintain the same terminology for specific concepts and domain-specific terms.	5: Consistent and accurate usage of terminology throughout. 4: Mostly consistent, minor inconsistencies. 3: Partial consistency, occasional variations in terminology. 2: Inconsistent terminology, noticeable confusion in usage. 1: Poor consistency, frequent misuse or absence of appropriate terms.
5. Style	Assesses the appropriateness of the translation in terms of style, tone, and formality. The translation should match the intended register and reflect the stylistic choices of the source text.	5: Perfectly matches the style, tone, and formality of the source. 4: Mostly appropriate style and register, minor deviations. 3: Partially matches the style, some inconsistencies. 2: Significant mismatches in style and register. 1: Poor adaptation of style, tone, or formality.
6. Cultural Adaptation	Evaluates the adaptation of the translation to the target culture. It considers cultural references, norms, and customs, ensuring the translated text is culturally appropriate for the intended audience.	5: Perfectly adapted to the target culture, culturally appropriate.  4: Mostly adapted, minor cultural references incorporated.  3: Partial adaptation, limited consideration of cultural differences.  2: Insufficient adaptation, cultural references misunderstood.  1: No cultural adaptation lacks appropriateness for the target culture.
7. Overall Quality Assessment	Provides an overall assessment of the translation quality, taking into account all of the parameters above. This assessment reflects the overall effectiveness and suitability of the translation for its intended purpose.	5: Excellent translation meets or exceeds expectations in all aspects. 4: A very good translation with minor areas for improvement. 3: Fair translation with some notable weaknesses. 2: Below average translation that falls short of expectations. 1: Poor translation that significantly deviates from the original text and fails to meet basic requirements.

Table 2. Human evaluation criteria

Next, we will compare the two target texts (performed by ChatGPT and DeepL) in Spanish against human translation in Spanish, to detect the number of corrections and the percentage of similarity. Unlike the BLEU system, which compares target text with the source, we believe it would be more efficient to compare two target texts – ones created by AI and a human. We will do that through the online platform called Gotranscript, a professional transcription and translation company that provides services for a wide range of industries, including business, academia, media, and more.

After that, we will analyse the comparisons and make our conclusions about the quality of texts and our recommendation of what tools are the most accurate in transcreating texts for business.

## IV. Presentation of results and analysis

In this part of our paper, we will present the findings after carrying out the translations and the evaluations.

## 1. Target texts produced by ChatGPT

#### 1.1 Human evaluation

First, we carried out human evaluation on the text transcreated by ChatGPT. Below we can see the average score for each text by evaluation parameters, for more detailed scores, please see Annex 2. Human evaluation of target text produced by ChatGPT in Spanish.

Based on human evaluation results, we can see that ChatGPT demonstrates a rather average ability to capture the essence of the original marketing texts and convey it effectively in Spanish.

Based on these scores, we can see that ChatGPT overall quality ranges between 3 and 4.1, giving us the average score of 3.5. While we registered a relatively high score on accuracy – 4.4, the fluency of texts is rated at 3.7 points.

Evaluation Parameters		Evaluator 1	Evaluator 2	Evaluator 3	Average
1. Accuracy	1-5	4.1	4.7	4.5	4.4
2. Fluency	1-5	3	4.4	3.7	3.7
3. Grammatical Correctness	1-5	3.7	4	3.4	3.7
4. Terminology and Vocabulary	1-5	4.1	4	3.5	3.8
5. Style and Register	1-5	4.7	4	3.2	3.9
6. Cultural Adaptation	1-5	4	4	3.1	3.7
7. Overall Quality	1-5	3	4.1	3.4	3.5

Table 3. Average score of ChatGPT Transcreation by category - human evaluation

If we look closer at the text types in the table below, we notice that the blog post received the lowest score, we could assume that it is due to its length and subsequently higher possibility of error.

Evaluation Parameter	Scale	Product description	Landing page	Social media post	Email campaign	Google ad copy	Blog post	Flyer
Average	1-5	4	4	4	4	4	3	4

Table 4. Average score of ChatGPT Transcreation by text type - human evaluation

#### 1.2 Error analysis

In order to be able to analyze the errors we compared each text against our gold standard – human transcreation, using Gotranscript.

In the table below, we can see the number of corrections and the percentage equivalent for each text (for detailed results, please see Annex 1 – Texts).

Evaluation Parameter	Product description	Landing page	Social media post	Email campaign	Google ad copy	Blog post	Flyer
Number of corrections	10	36	28	21	8	68	29
Percentage of similarity to human text	93%	80%	81%	83%	82%	86%	84%

Table 5. Comparison of ChatGPT transcreation against human transcreation

While these figures are generally high, we understand that it would still require a moderate human revision and editing of these texts to bring them up to a standard.

Furthermore, upon closer analysis, we can see that the ChatGPT transcreation fails to convey the emotional appeal necessary for marketing content, by using formal word order, calls to action that are unengaging and awkwardly phrased - "¡Registrate ahora!

¡No dejes pasar esta oportunidad de brindar a tus hijos un verano lleno de diversión... ¡Apúntate ya y aprovecha el descuento Early Bird!

Another notable challenge is the generation of idiomatic and colloquial language that feels natural to Spanish speakers, in particular the audience based in Barcelona. While ChatGPT generally produced grammatically correct sentences, it lacked the colloquial flair and local nuances that are crucial for engaging with the target audience – for instance, it used a term "campamento" instead of "casal" for "camp", which is the more often used term in Barcelona (we specified the location of the target audience in the prompt). Some of the vocabulary errors included the choice of words (inscribete temprano, vs. pronto).

Additionally, the model has struggled with style and register – the target text in more formal and dry, failing to create a compelling call to action message, using inappropriate style for business – pushy and sales-oriented, while later introducing a supposedly emotionally inviting

sentence, of "we are waiting with our open arms", which appears exaggerated and inappropriate:

¡Te esperamos con los brazos abiertos!"

Another failure to generate an appropriate call to action is its repetition, something that target audience normally finds irritating (iInscríbete antes del 15 de abril y obtén un 10% de descuento! iNo te lo pierdas! iInscríbete ya! vs. Apúntate antes del 15 de abril y consigue un 10% de descuento por reserva anticipada.)

Overall, while ChatGPT demonstrates promising potential in transcreating marketing texts, it still requires human oversight and refinement to ensure high-quality outputs that truly resonate with the target audience. By leveraging the strengths of ChatGPT and addressing its limitations, we can use the power of AI to streamline the transcreation process while maintaining the creativity and impact of human-generated marketing content.

### 2. Target texts produced by DeepL

#### 2.1 Human evaluation

As with the previous translation, we carried out human evaluation with the target text, produce by DeepL. Before delving into the results on the average score, we can consult the more detailed score in the *Annex 2. Human evaluation of target text produced by DeepL in Spanish*.

From the start, we can see that DeepL results have superseded ChatGPT in nearly every aspect. Its overall quality ranges between 4,4 and 4.6, giving us the average score of 4.5, a whole point over its AI competitor. We see the highest scores for accuracy and style, and the minimal score of 4.3 for grammatical correctness is still a high result.

Evaluation Parameters	Score	Evaluator 1	Evaluator 2	Evaluator 3	Average
1. Accuracy	1-5	5.0	5.0	5.0	5.0
2. Fluency	1-5	4.9	4.3	4.0	4.4
3. Grammatical Correctness	1-5	4.3	4.3	4.3	4.3
4. Terminology and Vocabulary	1-5	4.1	4.0	4.0	4.0
5. Style and Register	1-5	5.0	5.0	4.9	5.0
6. Cultural Adaptation	1-5	4.6	4.6	4.4	4.5
7. Overall Quality	1-5	4.6	4.4	4.4	4.5

Table 6. Average score of DeepL translation by category - human evaluation

As for types of content, we see the best results for email campaign, Google ad copy and flyer.

Evaluation Paramete		Product description	Landing page	Social media post	Email campaign	Google ad copy	Blog post	Flyer
Averag	e 1-5	4.3	4.5	4.6	4.7	4.7	4.2	4.7

Table 7. Average score of DeepL translation by text type - human evaluation

#### 2.2 Error analysis

The results in the next table are surprisingly high for a machine translation that did not even aim at transcreation – all of them having over 90% similarity with the human transcreated text. In fact, the similarity rates are as high as 98% for some of the texts.

Evaluation Parameter	Product description	Landing page	Social media post	Email campaign	Google ad copy	Blog post	Flyer
Number of corrections	10	15	5	5	1	13	7
Percentage of similarity to human text	93%	92%	97%	96%	98%	97%	96%

Table 8. Comparison of DeepL translation against human transcreation

Taking a closer look at the errors, we can see that DeepL had the most trouble with some of the vocabulary (campamento vs. casal, and estudiante vs. alumno), word order, which affects the style (integración adecuada vs. adecuada integración; Orientación experta para divertidos proyectos prácticos vs. proyectos prácticos y divertidos) and register (Inscríbase ahora vs. inscríbete ahora).

DeepL showed superior performance in translating nearly all calls to action, compared to ChatGPT – (Apúntate antes del 15 de abril y consigue un 10% de descuento (DeepL) vs. iInscríbete antes del 15 de abril y obtén un 10% de descuento! (ChatGPT)). It could be attributed to its specialization in machine translation and the fact that it has been trained on vast amounts of high-quality multilingual data, including domain-specific content such as marketing and advertising, especially in Spanish. This extensive training data enables the system to better understand the nuances of different languages and contexts, including the language typically used in marketing.

Overall, the evaluation results indicate that DeepL's English to Spanish translations are of excellent quality, with consistent high scores in accuracy, grammatical correctness, style, and cultural adaptation. The system demonstrates an impressive ability to handle diverse text types and maintain a high standard of translation even without a specific function for transcreation. While minor areas for improvement were identified in fluency and terminology, DeepL has produced a target text that requires very little effort of editing by a human.

As we have seen in figure 9, the proportion of training data for ChatGPT is nearly 50% more in English than in Spanish. Perhaps, if we reversed the translation from Spanish into English, ChatGPT would show different results. However, this is a subject for another research.

## V. Conclusions

The hypothesis in our thesis suggested that ChatGPT would outperform DeepL in the task of marketing content translation and transcreation. However, the evaluation results indicate that DeepL surpassed ChatGPT by nearly 10% in overall quality.

This unexpected outcome offers valuable insights into the strengths and limitations of different translation approaches. It is crucial to draw appropriate conclusions from this comparison to understand the translation landscape.

DeepL, as a machine translation system, based on the Neural Network Model approach specifically designed for high-quality translations across multiple domains, including marketing content. Its performance in this particular context highlights its specialization and effectiveness in catering to the nuances and requirements of marketing language.

ChatGPT, being a pretrained language model faced challenges in achieving comparable accuracy and fluency in the marketing domain. Marketing content often demands a deep understanding of the target audience, cultural aspects, and persuasive language techniques. DeepL's success in cultural adaptation and style demonstrates the importance of domain expertise in translation systems, as it can significantly influence the quality and effectiveness of the output.

While DeepL outperformed ChatGPT in marketing content translation and transcreation, it is worth considering that ChatGPT's versatility allows it to handle a broader range of tasks beyond translation. Its potential for creative writing, conversation generation, and general-purpose language understanding should be further explored for translation and transcreation tasks.

It is essential to consider the specific requirements, resources, and constraints of the translation project when selecting a translation approach. Factors such as time limitations, available training data, and the need for post-editing or human intervention should be considered to determine the most suitable translation solution.

In conclusion, understanding the strengths and limitations of each system can guide future decisions regarding translation and transcreation project and the distribution of human resources, ensuring optimal results based on specific project requirements. Based on our experiment, however, we have established that nearly 80% of transcreation work can be handled by AI, including using the free platforms, thereby significantly reducing the company costs, time and effort. In this case a human role is reduced to quality control and providing sound editorial judgement.

### 1. Answering questions from the introduction

Based on our research, we will now attempt to answer the questions we proposed in the beginning of this paper.

#### a. Is AI transcreation possible? For what type of content?

Al transcreation is indeed possible and has shown promising results. However, its effectiveness can vary depending on the type of content. Al transcreation is particularly suitable for marketing content that requires adaptation to different cultures, languages, and target audiences. It can handle slogans, advertisements, promotional materials, and creative texts that rely on persuasive language techniques and cultural understanding with about 10 to 20 percent of human intervention. Despite the difference of performance quality of various tools, it is still a considerable advance in saving time, effort and cost.

#### b. What does that process look like?

The process of AI transcreation involves elaborating precise prompts if it involved ChatGPT and fine-tuning them during the production process, and simply uploading the content into the free DeepL interface. Human post-editing is always the final stage for ensuring correct quality.

#### c. What metrics can be used to measure transcreation quality?

Several metrics can be used to measure the quality of transcreation: accuracy, fluency, grammatical correctness, cultural adaptation, style adherence, and alignment with the intended marketing objectives are important metrics to evaluate transcreation quality, however human evaluation is still the best judgement for transcreated texts.

Another important metric is user feedback as well as engagement and conversion rates, which we were not able to discover due to the lengthy process and time constraints.

# d. Can AI transcreate content with a Call to Action (CTA) to incentivize the reader to take an action?

We learned that AI can transcreate content with a CTA to encourage readers to take specific actions but with difficulty. AI systems can learn persuasive language techniques and adapt them to the target language and culture, however it is not able to judge the degree of intensity, so human involvement is crucial. DeepL performance showed much better results in "understanding" the context, cultural nuances, and audience preferences than ChatGPT.

# e. What prompts are the most efficient for transcreation of different types of content, and can they become standardized?

Efficient prompts for transcreation depend on the specific content type and target audience. Prompts that provide clear instructions, specify the desired tone and style, as well as output length or word limitation and include information about the target audience have shown to be effective. While certain prompts we used were copied from previous tasks, they require adaptation for each task in order to achieve optimal transcreation results.

#### f. Are there any downsides to using AI for content generation and transcreation?

Yes, using AI for content generation and transcreation has certain downsides. AI may lack the cultural and contextual understanding that human transcreators possess, leading to potential misalignment with source text, exaggerations or missed context. Language limitations, especially for languages that are not English can also be a challenge. Additionally, AI-generated content might lack the originality, creativity, and intuition that human transcreators bring to the process.

# g. What predictions for the future of transcreation can we make, based on the existing technologies and tendencies?

Based on existing technologies and tendencies, the future of transcreation is likely to see continued advancements in Al-driven solutions. As they are in continuous training and development, we predict that Al models will become more sophisticated in capturing cultural nuances, adapting to diverse audiences, and producing high-quality transcreated content. Increased integration with user feedback, iterative improvement processes, and human-Al collaboration are expected to enhance transcreation outcomes further. We also think it will improve performance for languages other than English.

#### h. Will the future internet be dominated by artificial texts?

While artificial texts will play an increasingly significant role in the future internet, our prediction is that it is unlikely that they will completely dominate it. Human-generated content will continue to be valuable, especially in areas requiring creativity, originality, and a deep understanding of complex subject matter. Artificial texts will complement human-generated content by automating certain tasks, improving efficiency, and supporting multilingual communication.

#### i. What effects will it have on the job market?

The use of AI for content generation and transcreation may have mixed effects on the job market. While certain repetitive tasks may be automated, there will still be a need for human transcreators who can provide creative input, ensure cultural relevance, and manage complex projects. The job market is likely to witness a shift toward human-AI collaboration and management, and other roles like content strategy, creative direction, and quality assurance. It is crucial for professionals to adapt to new opportunities and roles that emerge in the evolving landscape of AI-driven content generation and transcreation.

#### 2. Recommendations for future research

The world of AI and Large Language Models is constantly evolving and it is crucial to continue researching and testing these tools, as even in a matter of few months they could evolve so much that the performance dynamics would show completely different results.

As we only looked into two of the AI models, there is a vast plethora of other AI tools that need to be explored, therefore we recommend conducing more comparative studies between different AI models to explore their strengths and weaknesses, and identify scenarios where one model may outperform the others. We also recommend conducing testing of different language pairs, and reversing them during the same research.

It is important to investigate and test methods to fine-tune existing AI models specifically for marketing content transcreation. Explore techniques to enhance domain-specific adaptation, cultural sensitivity, and the ability to generate compelling calls to action.

One major field of research would be evaluating the performance and feedback for the target audience. If the content is published and diffused online, there are multiple tools to track the impact and effectiveness of AI-transcreated content on target audiences. Metrics such as user engagement, conversion rates, and brand perception can be used to assess the success of AI-generated content in achieving marketing objectives. We must keep in mind that this process requires at least 6 months of time and more from the moment of publishing the content, depending on the industry.

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## VII. ANNEX 1 - TEXTS

## 1. Description

Source	Summer Camps at Castelldefels (Eco Hub) and Barcelona (Urban Hub) provide hands-on
rn.	learning experiences and excursions that empower kids to explore their passions in a
EN	welcoming and emotionally safe community with English-speaking international staff and
	kids. Our spaces are located in the heart of nature on the beachfront in Castelldefels and
	state of the art studios in central Barcelona.
	Our kids and teens come from local communities as well as the whole world. This is the ideal
	space to make new friends, practice English and explore your passions through hands-on activities and excursions.
	Learnlife is an emotionally safe place, as we understand the challenges of kids joining a
	multicultural environment and we pay special attention to make sure that each learner's
	needs are met and they are properly integrating. Come and join our big international family!
Machine	Los campamentos de verano en Castelldefels (Eco Hub) y Barcelona (Urban Hub) ofrecen
Translation	experiencias prácticas de aprendizaje y excursiones que permiten a los niños explorar sus
Deepl	pasiones en una comunidad acogedora y emocionalmente segura con personal y niños internacionales de habla inglesa. Nuestros espacios están situados en plena naturaleza, en
Всері	primera línea de playa en Castelldefels, y en estudios de última generación en el centro de
ES	Barcelona.
	Nuestros niños y adolescentes proceden tanto de comunidades locales como del mundo
	entero. Este es el espacio ideal para hacer nuevos amigos, practicar inglés y explorar sus pasiones a través de actividades prácticas y excursiones.
	Learnlife es un lugar emocionalmente seguro, ya que entendemos los retos de los niños que
	se incorporan a un entorno multicultural y prestamos especial atención para asegurarnos
	de que se satisfacen las necesidades de cada alumno y de que se integran adecuadamente. ¡Ven y forma parte de nuestra gran familia internacional!
Human	¡Casales de verano en Castelldefels (Eco Hub) y Barcelona (Urban Hub) que te harán vivir
transcreation	experiencias únicas y emocionantes! Ven y descubre un entorno lleno de diversión y
	aprendizaje práctico, donde los niños podrán explorar sus pasiones en una comunidad
ES	acogedora y segura, con un equipo internacional de habla inglesa. Nuestros espacios se
	encuentran en plena naturaleza, frente a la playa en Castelldefels, y en estudios profesionales en el centro de Barcelona.
	En nuestro casal, los niños y adolescentes vienen de todo el mundo. Es el lugar ideal para
	hacer nuevos amigos, practicar inglés y descubrir tus pasiones a través de actividades prácticas y excursiones emocionantes.

	En Learnlife, creemos en un entorno emocionalmente seguro, entendiendo los desafíos que encuentran los niños al integrarse en un entorno multicultural. Por eso, nos aseguramos de atender las necesidades de cada alumno y garantizar su integración adecuada. ¡Ven a formar parte de nuestra gran familia internacional!
ChatGPT transcreation prompt	Prompt: Transcreate this product description for an international school in an informal and engaging tone, specifically targeting local parents who live in Barcelona. The transcreation should be in European Spanish and capture the essence of the original text while resonating with the local community and highlighting the unique benefits of the school.  Original Landing Page (English): Source text
Transcreated by Chat GPT ES	¡Campamentos de verano en Castelldefels (Eco Hub) y Barcelona (Urban Hub) que te harán vivir experiencias únicas y emocionantes! Ven y descubre un entorno lleno de diversión y aprendizaje práctico, donde los niños podrán explorar sus pasiones en una comunidad acogedora y segura, con un equipo internacional de habla inglesa. Nuestros espacios se encuentran en plena naturaleza, frente a la playa en Castelldefels, y en modernos estudios en el centro de Barcelona.
	En nuestro campamento, los niños y adolescentes provienen de las comunidades locales y de todo el mundo. Es el lugar ideal para hacer nuevos amigos, practicar inglés y descubrir tus pasiones a través de actividades prácticas y emocionantes excursiones.
	En Learnlife, creemos en un entorno emocionalmente seguro, entendiendo los desafíos que enfrentan los niños al integrarse en un entorno multicultural. Por eso, nos aseguramos de atender las necesidades de cada estudiante y garantizar su adecuada integración. ¡Ven y forma parte de nuestra gran familia internacional!

#### Comparison of ChatGPT transcreation – human transcreation



Comparison of Machine Translation – human transcreation



### 2. Landing page

Source	Summer Camps
EN	Get ready for an epic summer adventure with Learnlife
	Our summer camps are safe and welcoming spaces that inspire kids & teens to unleash their creativity, learn new skills, and make friends from all over the world. This year, we're taking it to the next level at our two fantastic locations - the Urban Hub in Barcelona and the Eco Hub in Castelldefels. Both our summer camps are in GB English, with multilingual facilitators. So, whether your child is a fluent speaker or just starting out, they're welcome to join the fun!
	Our Summer camps include:
	Lunch, Fun excursions twice a week, Creative project-based learning, Learners from all over the world
	This year's highlights include:
	Extra beach activities
	<ul> <li>Exciting excursions to Tibidabo Amusement Park</li> <li>Regular trips to the inflatables at the Canal Olímpic water park</li> </ul>
	Swap the city for the beach once a week and vice versa
	Learn more about Urban Hub Summer Camp For Ages 11-17
	Got questions? Get in touch below
Machine Translation	Campamentos de verano Prepárate para una aventura épica de verano con Learnlife

#### Deepl

ES

Nuestros campamentos de verano son espacios seguros y acogedores que inspiran a niños y adolescentes a dar rienda suelta a su creatividad, aprender nuevas habilidades y hacer amigos de todo el mundo. Este año, lo llevamos al siguiente nivel en nuestras dos fantásticas ubicaciones - el Urban Hub en Barcelona y el Eco Hub en Castelldefels.

Nuestros dos campamentos de verano se imparten en inglés en GB, con monitores multilingües. Así que, tanto si su hijo habla inglés con fluidez como si está empezando, ¡será bienvenido!

Nuestros campamentos de verano incluyen:

Almuerzo, Excursiones divertidas dos veces por semana, Aprendizaje creativo basado en proyectos, Alumnos de todo el mundo.

Lo más destacado de este año incluye

- Actividades extra en la playa
- Emocionantes excursiones al Parque de Atracciones Tibidabo
- Excursiones regulares a los hinchables del parque acuático Canal Olímpic
- Cambia la ciudad por la playa una vez a la semana y viceversa

Más información sobre el campamento de verano Urban Hub para niños de 11 a 17 años

¿Tiene alguna pregunta? Póngase en contacto con nosotros

## Human transcreation

#### Casal de verano

Prepárate para una aventura épica de verano con Learnlife

ES

Nuestros casales de verano son espacios seguros y acogedores que inspiran a niños y adolescentes a desarrollar su creatividad, aprender nuevas habilidades y hacer amigos de todo el mundo. Este año, lo llevamos al siguiente nivel en nuestras dos fantásticas ubicaciones - el Urban Hub en Barcelona y el Eco Hub en Castelldefels.

Nuestros dos casales de verano se imparten en inglés, con monitores multilingües. Así que, tanto si su hijo habla inglés con fluidez como si está empezando, ¡será bienvenido!

Nuestros casales de verano incluyen:

Almuerzo, excursiones divertidas dos veces por semana, aprendizaje creativo basado en proyectos, y alumnos de todo el mundo.

Lo más destacado de este año incluye

- Actividades extra en la playa
- Emocionantes excursiones al Parque de Atracciones Tibidabo
- Excursiones regulares a los hinchables del parque acuático Canal Olímpic
- Cambiar la ciudad por la playa una vez a la semana y viceversa

Más información sobre el campamento de verano Urban Hub para niños de 11 a 17 años.

¿Tiene alguna pregunta? Póngase en contacto con nosotros.

## ChatGPT transcreation prompt

Prompt: Transcreate a landing page for an international school in a fun and engaging tone, specifically targeting local parents who live in Barcelona. The transcreation should be in Spanish and capture the essence of the original text while resonating with the local community and highlighting the unique benefits of the school.

#### Original Landing Page (English): Source text

# Transcreated by Chat GPT

Camps de Verano

¡Prepárate para una aventura de verano épica con Learnlife!

ES

Nuestros campamentos de verano son espacios seguros y acogedores que inspiran a niños y adolescentes a liberar su creatividad, aprender nuevas habilidades y hacer amigos de todo el mundo. Este año, vamos a llevarlo al siguiente nivel en nuestras dos ubicaciones fantásticas: el Urban Hub en Barcelona y el Eco Hub en Castelldefels. Ambos campamentos de verano son en GB inglés, con facilitadores multilingües. Así que, sin importar si tu hijo es un hablante fluido o está comenzando, json bienvenidos a unirse a la diversión!

Nuestros campamentos de verano incluyen:

Almuerzo, Excursiones divertidas dos veces por semana, Aprendizaje creativo basado en proyectos, Estudiantes de todo el mundo

Los aspectos más destacados de este año incluyen:

- Actividades adicionales en la playa
- Emocionantes excursiones al Parque de Atracciones Tibidabo
- Visitas regulares a los inflables en el parque acuático Canal Olímpic
- Cambia la ciudad por la playa una vez a la semana y viceversa

Obtén más información sobre el Campamento de Verano en Urban Hub para edades de 11 a 17 años.

¿Tienes preguntas? Ponte en contacto a continuación.

#### Comparison of ChatGPT transcreation – human transcreation

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Removed Added
Corrections 36
Similarity of text is 80%
   Camps Casal de Verano
   Prepárate para una aventura épica de verano épica con Learnlifel Learnlife
   Nuestros campamentos casales de verano son espacios seguros y acogedores que inspiran a niños y adolescentes a liberar desarrollar su creatividad, apre
   nuevas habilidades y hacer amigos de todo el mundo. Este año, <mark>vamos e lievario l</mark>o llevamos al siguiente nivel en nuestras dos fantásticas ubicaciones fant
Urban Hub en Barcelona y el Eco Hub en Gastelldefels. Ambos campamentos Castelldefels.
             os dos casales de verano <mark>son-</mark>se imparten <mark>en <mark>se</mark> inglés, con <del>facilitadores</del> monitores multilingües. Así que, <mark>sin im</mark></mark>
                                                                                                                                                                              ortar tanto <mark>si tu su hijo es un hab</mark>
   habla inglés con fluidez como si <mark>está comenzando, ¡son bi</mark>
   Nuestros campamentos casales de verano incluyen:
Almuerzo, Excursiones excursiones divertidas dos veces por semana, Aprendizaje aprendizaje creativo basado en proyectos, Estudiantes y alumnos de todo el mundo
   Lo más destacados destacado de este año incluyen:
  incluye
Actividades adicionales extra en la playa

- Emocionantes excursiones al Parque de Atracciones Tibidabo
- Visitas - Excursiones legulares a los inflabies en el hinchables del parque acuático Canal Olímpic
- Cambia - Cambiar la ciudad por la playa una vez a la semana y viceversa
- Obtén más Más información sobre el Campamento campamento de Verano en verano Urban Hub p
                                                                                          ana y viceversa
ento de <mark>Verano en v</mark>erano <mark>Urban Hub para <mark>edades niños</mark> de 11 a 17 años.</mark>
         <del>enes preguntas? Ponte ¿</del>Tiene alguna pregunta? Póngase <mark>en contacto <mark>a continuación.</mark>con nosotros.</mark>
```

#### Comparison of DeepL translation – human transcreation



## 3. Social media post

Looking for something exciting for your kids to do this summer?
Our Learnlife Summer Camps could be just what you're looking for! Choose between two
incredible hubs this year: Urban Hub in Barcelona and Eco Hub in Castelldefels. Carpentry,
cooking, painting, fashion, water sports, theatre, climate action workshops, and other
exciting things await kids at our camps!
Don't forget about the 10% early bird discount we're offering until April 16th. So sign them
up now for a summer of adventure they will never forget!
Click the link in our bio to learn more about our Learnlife Summer Camps 2023 and reserve
your spot before it's too late!
PS: Both our summer camps are in GB English, with multilingual facilitators. So, whether
your child is a fluent speaker or just starting out, they're welcome to join the fun!
¿Buscas algo emocionante para tus hijos este verano?
Nuestros campamentos de verano Learnlife pueden ser justo lo que estás buscando. Elige
entre dos increíbles centros este año: Urban Hub en Barcelona y Eco Hub en Castelldefels.
Carpintería, cocina, pintura, moda, deportes acuáticos, teatro, talleres de acción por el
clima, jy otras cosas emocionantes esperan a los niños en nuestros campamentos!
No te olvides del descuento anticipado del 10% que ofrecemos hasta el 16 de abril.
Apúntales ya a un verano lleno de aventuras que nunca olvidarán.
Haz clic en el enlace de nuestra biografía para obtener más información sobre nuestros
campamentos de verano Learnlife 2023 y reserva tu plaza antes de que sea demasiado
tarde.

	PD: Nuestros dos campamentos de verano se imparten en inglés en GB, con monitores multilingües. Así que, tanto si su hijo habla inglés con fluidez como si está empezando, ¡será bienvenido!
Human	¿Buscas algo emocionante para tus hijos este verano?
transcreation	
ES	Nuestros casales de verano Learnlife pueden ser justo lo que estás buscando. Elige entre dos increíbles centros este año: Urban Hub en Barcelona y Eco Hub en Castelldefels. Carpintería, cocina, pintura, moda, deportes acuáticos, teatro, talleres de acción por el clima, jy otras cosas emocionantes que les esperan a los niños en nuestros campamentos!
	No te olvides del descuento anticipado del 10% que ofrecemos hasta el 16 de abril. Apúntales ya a un verano lleno de aventuras que nunca olvidarán.
	Haz clic en el enlace de nuestra biografía para obtener más información sobre nuestros Casales de verano Learnlife 2023 y reserva tu plaza antes de que sea demasiado tarde.
	PD: Nuestros dos casales de verano se imparten en inglés británico, con monitores multilingües. Así que, tanto si su hijo habla inglés con fluidez como si está empezando, ¡será bienvenido!
ChatGPT transcreation	Prompt: Transcreate a social media post for an international school in a fun and engaging tone, specifically targeting local parents who live in Barcelona. The transcreation should be
prompt	in Spanish and capture the essence of the original text while resonating with the local community and highlighting the unique benefits of the school. It should generate a response, where readers click on the link.
	Original Landing Page (English): Source text
Transcreated	¿Buscas algo emocionante para que tus hijos disfruten este verano?
by Chat GPT	C
ES	¡Nuestros Campamentos de Verano Learnlife podrían ser justo lo que necesitas! Elige entre dos increíbles sedes este año: Urban Hub en Barcelona y Eco Hub en Castelldefels. ¡Carpintería, cocina, pintura, moda, deportes acuáticos, teatro, talleres de acción climática y muchas otras cosas emocionantes esperan a los niños en nuestros campamentos!
	No olvides el descuento Early Bird del 10% que ofrecemos hasta el 16 de abril. ¡Inscríbelos ahora para un verano lleno de aventuras que nunca olvidarán!
	Haz clic en el enlace de nuestro perfil para obtener más información sobre nuestros Campamentos de Verano Learnlife 2023 y ¡reserva tu lugar antes de que sea tarde!
	PD: Ambos campamentos de verano se llevan a cabo en GB inglés, con facilitadores multilingües. Así que, ya sea que tu hijo sea un hablante fluido o esté empezando, ¡son bienvenidos a unirse a la diversión!

 $Comparison\ of\ ChatGPT\ transcreation-human\ transcreation$ 



#### Comparison of DeepL translation – human transcreation



## 4. Email campaign

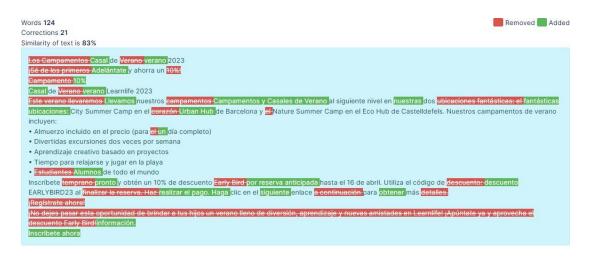
Source	Summer Camps 2023
EN	Be an Early Bird and Save 10%
LIN	, and the second
	Learnlife Summer Camp 2023
	We're taking our Summer Camps to the next level at our two fantastic locations: City
	Summer Camp at the Urban Hub in Barcelona and Nature Summer Camp at the Eco Hub in
	Castelldefels. Our Summer camps include:
	Lunch included in the price (for a full day)
	Fun excursions twice a week
	Creative project-based learning
	Time to relax and play at the beach
	Learners from all over the world
	Sign up early and get a 10% Early Bird Discount until 16th April. Use the discount code:
	EARLYBIRD23 at checkout. Click the link below for more details.
	Register Now
Machine	Campamentos de verano 2023
Translation	Adelántate y ahorra un 10
	Campamento de verano Learnlife 2023
Deepl	Llevamos nuestros campamentos de verano al siguiente nivel en nuestras dos fantásticas
	ubicaciones: City Summer Camp en el Urban Hub de Barcelona y Nature Summer Camp en
ES	el Eco Hub de Castelldefels. Nuestros campamentos de verano incluyen:
	Almuerzo incluido en el precio (para un día completo)
	Divertidas excursiones dos veces por semana
	Aprendizaje creativo basado en proyectos

	<ul> <li>Tiempo para relajarse y jugar en la playa</li> <li>Alumnos de todo el mundo</li> <li>Inscríbete pronto y obtén un 10% de descuento por reserva anticipada hasta el 16 de abril.</li> <li>Utiliza el código de descuento EARLYBIRD23 al realizar el pago. Haga clic en el siguiente enlace para obtener más información.</li> <li>Inscríbase ahora</li> </ul>
Human transcreation ES	Casal de verano 2023 Adelántate y ahorra un 10% Casal de verano Learnlife 2023 Llevamos nuestros Campamentos y Casales de Verano al siguiente nivel en nuestras dos fantásticas ubicaciones: City Summer Camp en el Urban Hub de Barcelona y Nature Summer Camp en el Eco Hub de Castelldefels. Nuestros campamentos de verano incluyen:  • Almuerzo incluido en el precio (para un día completo)  • Divertidas excursiones dos veces por semana  • Aprendizaje creativo basado en proyectos  • Tiempo para relajarse y jugar en la playa  • Alumnos de todo el mundo  Inscríbete pronto y obtén un 10% de descuento por reserva anticipada hasta el 16 de abril.  Utiliza el código de descuento EARLYBIRD23 al realizar el pago. Haga clic en el siguiente enlace para obtener más información.  Inscríbete ahora
ChatGPT transcreation prompt	Prompt: Transcreate this email campaign for an international school in a fun and engaging tone, which will go out to local parents who live in Barcelona. The transcreation should be in Spanish and capture the essence of the original text, highlighting the unique benefits of the school and generate a response by responding to the call to action.  Original Email Campaign text (English): Source text
Transcreated by Chat GPT ES	Los Campamentos de Verano 2023 ¡Sé de los primeros y ahorra un 10%! Campamento de Verano Learnlife 2023  Este verano llevaremos nuestros campamentos al siguiente nivel en dos ubicaciones fantásticas: el City Summer Camp en el corazón de Barcelona y el Nature Summer Camp en el Eco Hub de Castelldefels. Nuestros campamentos de verano incluyen:  • Almuerzo incluido en el precio (para el día completo) • Divertidas excursiones dos veces por semana • Aprendizaje creativo basado en proyectos • Tiempo para relajarse y jugar en la playa • Estudiantes de todo el mundo  Inscríbete temprano y obtén un 10% de descuento Early Bird hasta el 16 de abril. Utiliza el código de descuento: EARLYBIRD23 al finalizar la reserva. Haz clic en el enlace a continuación para más detalles.  ¡Regístrate ahora! ¡No dejes pasar esta oportunidad de brindar a tus hijos un verano lleno de diversión, aprendizaje y nuevas amistades en Learnlife! ¡Apúntate ya y aprovecha el descuento Early Bird!

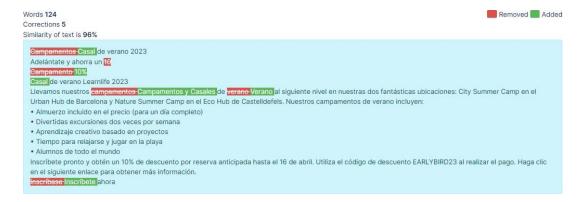
¡Te esperamos con los brazos abiertos!

Equipo de Learnlife

#### Comparison of ChatGPT transcreation – human transcreation



#### Comparison of DeepL translation – human transcreation



### 5. Google ad copy

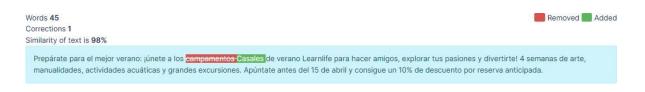
Source EN	Get ready for the best summer ever - join Learnlife Summer Camps to make friends, explore your passions and have fun! 4 weeks of arts, crafts, water activities and great outings. Sign up before April 15th and get 10% early bird discount.
Machine	Prepárate para el mejor verano: ¡únete a los campamentos de verano Learnlife para hacer
Translation	amigos, explorar tus pasiones y divertirte! 4 semanas de arte, manualidades, actividades
	acuáticas y grandes excursiones. Apúntate antes del 15 de abril y consigue un 10% de
Deepl	descuento por reserva anticipada.

ES	
Human transcreation ES	Prepárate para el mejor verano: ¡únete a los Casales de verano Learnlife para hacer amigos, explorar tus pasiones y divertirte! 4 semanas de arte, manualidades, actividades acuáticas y grandes excursiones. Apúntate antes del 15 de abril y consigue un 10% de descuento por reserva anticipada.
ChatGPT transcreation prompt	Prompt: Transcreate the source text into European Spanish for an international school in a catchy and engaging tone, which will run on google ad campaign targeting local parents who live in Barcelona. The transcreation should be in Spanish and capture the essence of the original text, highlighting the unique benefits of the school and generate a response to the call to action. Text length no more than 40 words.  Source text (English):
Transcreated by Chat GPT	¡Prepárate para el mejor verano de tu vida! Únete a los Campamentos de Verano de Learnlife y vive una experiencia inolvidable. ¡Haz amigos, explora tus pasiones y diviértete al máximo! ¡Inscríbete antes del 15 de abril y obtén un 10% de descuento! ¡No te lo pierdas! ¡Inscríbete ya!

## Comparison of ChatGPT transcreation – human transcreation



### Comparison of DeepL translation - human transcreation



### 6. Blog post

#### Source EN

#### Reigniting the passion for learning

"We want our kids to be happy" is the biggest lie told by parents. What they really want is for their kids to study! However, the 21st-century education is significantly disconnected from real life, and as a result, most kids and teens are bored at school and have very little interest in studying or learning.

How do you learn best? Is it when someone chooses the subject for you, directs the process, and then tests you to see if you can regurgitate that information?

Or, do you learn best when you are in control of the direction your learning takes, being deeply engaged and passionate, going at your own pace and asking for help and support as and when you need it?

While the first option seems an obvious choice, traditional education simply cannot change fast enough to accommodate this way of learning. Teens continue to graduate from school totally underprepared for the world outside and will be searching for what sparks their passion for years if not decades.

The Learnlife education model offers a more direct route to that, and it could be life-changing for them.

#### H2 Experience a better way of learning

Learnlife has been selected from more than 3,000 innovations worldwide as one of the top 100 education innovations <a href="https://blog.learnlife.com/learnlife-selected-for-hundred-global-collection-">https://blog.learnlife.com/learnlife-selected-for-hundred-global-collection-</a>

<u>2023?utm\_source=Metropolitan&utm\_medium=partner&utm\_campaign=Afterschool-Programmes-22-23+</u> to watch in the year 2023 by HundrED.

At Learnlife individualized programmes are directed by learners themselves, based on their passions. This means that learners are encouraged to find the things that get them engaged and curious, accompanied all the while by supportive Learning Guides and 360-degree feedback. Progression to deeper levels of learning, and responsibility is not automatically based on where your birthday falls, but on the level of emotional maturity.

The results are revolutionary - kids previously uninterested and disengaged have become excited about learning.

Instead of memorization and multiple-choice, they get hands-on experience. Deep learning and core skills that reflect real life, instead of subjects separated in a way that the real world does not recognise. Developing the independent skills to learn and grow, instead of cramming information for tests that they will never care to remember. We could go on, but the point is that we have found a way to reignite the passion for learning and a vision for the future even in the most bored teenagers.

#### H3 Full-time programmes as an alternative to traditional schools

Learnlife offers a full-time alternative to traditional education for primary and secondary years at two of its centres - the Urban Hub and the Eco Hub. The programmes

run in English and also have inclusive modules for neurodiverse learners with ADHD and Dyslexia.

#### H4 Summer Camps - graffiti and sand cities

Another way for your child to explore their passions is to join the summer camp in June and July - we have a very diverse and open international community of learners, and our activities range from doing graffiti art in Barcelona to building cities of sand on the beach in Castelldefels.

#### Machine Translation

#### Reavivar la pasión por aprender

#### Deepl

ES

"Queremos que nuestros hijos sean felices" es la mayor mentira que dicen los padres. Lo que realmente quieren es que sus hijos estudien. Sin embargo, la educación del siglo XXI está muy desconectada de la vida real y, como resultado, la mayoría de los niños y adolescentes se aburren en la escuela y tienen muy poco interés en estudiar o aprender.

¿Cómo se aprende mejor? ¿Es cuando alguien elige el tema por ti, dirige el proceso y luego te pone a prueba para ver si puedes regurgitar esa información?

¿O aprendes mejor cuando controlas la dirección que toma tu aprendizaje, estás profundamente comprometido y apasionado, vas a tu propio ritmo y pides ayuda y apoyo cuando lo necesitas?

Aunque la primera opción parece obvia, la educación tradicional no puede cambiar lo bastante rápido como para adaptarse a esta forma de aprender. Los adolescentes siguen saliendo de la escuela totalmente mal preparados para el mundo exterior y seguirán buscando lo que les apasiona durante años, si no décadas.

El modelo educativo Learnlife ofrece un camino más directo hacia ello, y podría cambiarles la vida.

#### H2 Experimenta una forma mejor de aprender

Learnlife ha sido seleccionada entre más de 3.000 innovaciones de todo el mundo como una de las 100 principales innovaciones educativas https://blog.learnlife.com/learnlife-selected-for-hundred-global-collection-

2023?utm\_source=Metropolitan&utm\_medium=partner&utm\_campaign=Afterschool-Programmes-22-23+ a seguir en el año 2023 por HundrED.

En Learnlife, los programas individualizados están dirigidos por los propios alumnos y se basan en sus pasiones. Esto significa que se anima a los alumnos a encontrar las cosas que les despiertan el interés y la curiosidad, acompañados en todo momento por guías de aprendizaje de apoyo y comentarios de 360 grados. La progresión hacia niveles más profundos de aprendizaje y responsabilidad no se basa automáticamente en la fecha de cumpleaños, sino en el nivel de madurez emocional.

Los resultados son revolucionarios: los niños, antes desinteresados y desmotivados, se han entusiasmado con el aprendizaje.

En lugar de memorizar y elegir entre varias opciones, adquieren experiencia práctica. Aprendizaje profundo y competencias básicas que reflejan la vida real, en lugar de asignaturas separadas de una forma que el mundo real no reconoce. Desarrollar habilidades independientes

para aprender y crecer, en lugar de atiborrarse de información para exámenes que nunca recordarán.

Podríamos seguir, pero la cuestión es que hemos encontrado la forma de reavivar la pasión por aprender y la visión de futuro incluso en los adolescentes más aburridos.

#### H3 Programas a tiempo completo como alternativa a las escuelas tradicionales

Learnlife ofrece una alternativa a tiempo completo a la educación tradicional para los cursos de primaria y secundaria en dos de sus centros: el Urban Hub y el Eco Hub. Los programas se imparten en inglés y también cuentan con módulos inclusivos para alumnos neurodiversos con TDAH y dislexia.

#### Campamentos de verano H4: grafitis y ciudades de arena

Otra forma de que su hijo explore sus pasiones es apuntarse al campamento de verano en junio y julio: tenemos una comunidad internacional de alumnos muy diversa y abierta, y nuestras actividades van desde hacer grafitis en Barcelona hasta construir ciudades de arena en la playa de Castelldefels.

#### Human transcreation

Reavivar la pasión por aprender

ES

"Queremos que nuestros hijos sean felices" es la mayor mentira que dicen los padres. Lo que realmente quieren es que sus hijos estudien. Sin embargo, la educación del siglo XXI está muy desconectada de la vida real y, como resultado, la mayoría de los niños y adolescentes se aburren en la escuela y tienen muy poco interés en estudiar o aprender.

¿Cómo se aprende mejor?, ¿tal vez cuando alguien elige el tema por ti, dirige el proceso y luego te pone a prueba para ver si puedes entender la información?

¿O aprendes mejor cuando controlas la dirección que toma tu aprendizaje, estás profundamente comprometido y apasionado, vas a tu propio ritmo y pides ayuda y apoyo cuando lo necesitas?

Aunque la primera opción parece obvia, la educación tradicional no puede cambiar lo bastante rápido como para adaptarse a esta forma de aprender. Los adolescentes siguen saliendo de la escuela totalmente mal preparados para el mundo exterior y seguirán buscando lo que les apasiona durante años, si no décadas.

El modelo educativo Learnlife ofrece un camino más directo hacia ello, y podría cambiarles la vida.

H2 Experimenta una forma mejor de aprender

Learnlife ha sido seleccionada entre más de 3.000 innovaciones de todo el mundo como una de las 100 principales innovaciones educativas, https://blog.learnlife.com/learnlife-selected-for-hundred-global-collection-

2023?utm\_source=Metropolitan&utm\_medium=partner&utm\_campaign=Afterschool-Programmes-22-23+ a seguir en el año 2023 por HundrED.

En Learnlife, los programas individualizados están dirigidos por los propios alumnos y se basan en sus pasiones. Esto significa que se anima a los alumnos a encontrar las cosas que les despiertan el interés y la curiosidad, acompañados en todo momento por guías de aprendizaje

que les apoyan y por una retroalimentación de 360 grados. El progreso hacia niveles más profundos de aprendizaje y responsabilidad no se basa automáticamente en la fecha de cumpleaños, sino en el nivel de madurez emocional.

Los resultados son revolucionarios: los niños, antes desinteresados y desmotivados, se han entusiasmado con el aprendizaje.

En lugar de memorizar y elegir entre varias opciones, adquieren experiencia práctica. El aprendizaje se basa en la curiosidad por conocer aquellas cosas que les interesan. Podríamos seguir, pero la cuestión es que hemos encontrado la forma de reavivar la pasión por aprender y la visión de futuro incluso en los adolescentes que se aburren más.

H3 Programas a tiempo completo como alternativa a la escuela tradicional

Learnlife ofrece una alternativa a tiempo completo a la educación tradicional para los cursos de primaria y secundaria en dos de sus centros: el Urban Hub y el Eco Hub. Los programas se imparten en inglés y también cuentan con módulos inclusivos para alumnos neuro-diversos con TDAH y dislexia.

Casales de verano H4: grafitis y ciudades de arena

Otra forma de que su hijo explore sus pasiones es apuntarse al Casal de verano en junio y julio: tenemos una comunidad internacional de alumnos muy diversa y abierta, y nuestras actividades van desde hacer grafitis en Barcelona hasta construir ciudades de arena en la playa de Castelldefels.

# ChatGPT transcreation prompt

Prompt: Transcreate this blog article for an international school in a fun and engaging tone, which will be published in a magazine and read by local parents who live in Barcelona. The transcreation should be in Spanish and capture the essence of the original text, highlighting the unique benefits of the school and generate a desire to find out more information. Respect the length of original blog text in English and headlines and sub headlines.

#### Original blog text (English):

# Transcreated by Chat GPT

Reavivando la pasión por el aprendizaje

ES

"Queremos que nuestros hijos sean felices" es la mentira más grande que los padres cuentan. ¡Lo que realmente quieren es que estudien! Sin embargo, la educación del siglo XXI está desconectada de la vida real y, como resultado, la mayoría de los niños y adolescentes se aburren en la escuela y tienen muy poco interés en estudiar o aprender.

¿Cuál es la mejor forma de aprender? ¿Cuando alguien elige el tema por ti, dirige el proceso y luego te evalúa para ver si puedes vomitar esa información?

O, ¿aprendes mejor cuando tienes el control de la dirección que toma tu aprendizaje, te involucras profundamente y apasionadamente, avanzas a tu propio ritmo y pides ayuda y apoyo cuando lo necesitas?

Aunque la primera opción parezca la elección obvia, la educación tradicional simplemente no puede cambiar lo suficientemente rápido como para adaptarse a esta forma de aprendizaje. Los

adolescentes continúan graduándose de la escuela totalmente despreparados para el mundo exterior y pasarán años, e incluso décadas, buscando lo que despierte su pasión.

El modelo educativo de Learnlife ofrece un camino más directo hacia eso, y podría cambiarles la vida.

H2 Experimenta una forma mejor de aprender

Learnlife ha sido seleccionado entre más de 3.000 innovaciones en todo el mundo como una de las 100 mejores innovaciones educativas https://blog.learnlife.com/learnlife-selected-for-hundred-global-collection-

2023?utm\_source=Metropolitan&utm\_medium=partner&utm\_campaign=Afterschool-Programmes-22-23+ para seguir en el año 2023 por HundrED.

En Learnlife, los programas individualizados son dirigidos por los propios estudiantes, basados en sus pasiones. Esto significa que se les anima a encontrar aquellas cosas que los entusiasman y los despiertan la curiosidad, siempre acompañados de Guías de Aprendizaje de apoyo y retroalimentación de 360 grados. El progreso hacia niveles más profundos de aprendizaje y responsabilidad no se basa automáticamente en la fecha de cumpleaños, sino en el nivel de madurez emocional.

Los resultados son revolucionarios: niños que antes no estaban interesados y desmotivados ahora se sienten emocionados por aprender.

En lugar de memorización y opciones múltiples, ellos obtienen experiencia práctica. Aprendizaje profundo y habilidades fundamentales que reflejan la vida real, en lugar de asignaturas separadas de una manera que el mundo real no reconoce. Desarrollan habilidades independientes para aprender y crecer, en lugar de memorizar información para exámenes que nunca les importará recordar.

Podríamos seguir, pero el punto es que hemos encontrado una forma de reavivar la pasión por el aprendizaje y una visión de futuro, incluso en los adolescentes más aburridos.

H3 Programas a tiempo completo como alternativa a la educación tradicional

Learnlife ofrece una alternativa a tiempo completo a la educación tradicional para los años de primaria y secundaria en dos de sus centros: el Urban Hub y el Eco Hub. Los programas se imparten en inglés y también cuentan con módulos inclusivos para estudiantes neurodiversos con TDAH y dislexia.

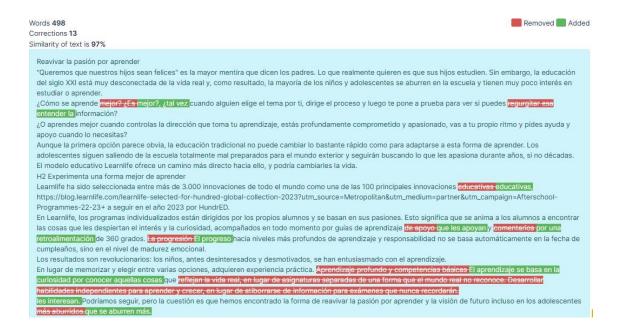
Campamentos de verano: arte urbano y ciudades de arena

¡Sumérgete en la creatividad y la diversión! Nuestros campamentos de verano en junio y julio ofrecen a tu hijo una oportunidad única para explorar sus pasiones. Contamos con una comunidad internacional de estudiantes diversa y acogedora, donde podrán expresarse a través del arte urbano en Barcelona y construir asombrosas ciudades de arena en la playa de Castelldefels.

#### Comparison of ChatGPT transcreation –human transcreation



#### Comparison of DeepL translation – human transcreation



#### 7. Flyer

Source	Explore your passions, have fun and make friends from all over the world! For teens aged 11-17, all levels of English welcome!  26 June - 21 July 2023 09:00-16:00  Learnlife Urban Hub, Carrer Enric Granados, 7, Barcelona  Week 1: 26-30 June - Street Art & Fashion 2 Outings: Canal Olímpic and Castelldefels beach  Week 2: 3-7 July - Photography & Carpentry 2 Outings: Tibidabo Amusement Park and Castelldefels Beach  Week 3: 10-14 July - Ceramics & Cooking 2 Outings: Barcelona Zoo and Castelldefels beach  Week 4: 17-21 July - Carpentry & Art 2 Outings: Canal Olímpic and Castelldefels beach  Price: €250/week including lunch and 2 outings a week  Save 10% if you book before 16th April 2023 using code EARLYBIRD23  Why Learnlife?  ■ Supportive child-led learning ■ Welcoming international and multicultural community ■ Expert guidance for fun hands-on projects ■ English & Spanish dual facilitation  Book your place: learnlife.com/summer-camps  "The children are treated with a lot of respect and love making them feel comfortable and confident with themselves." Parent
Machine Translation	¡Explora tus pasiones, diviértete y haz amigos de todo el mundo! Para adolescentes de 11 a 17 años, ¡todos los niveles de inglés son bienvenidos!
Deepl	26 junio - 21 julio 2023 09:00-16:00
ES	Learnlife Urban Hub, Carrer Enric Granados, 7, Barcelona
	Semana 1: 26-30 Junio - Street Art & Fashion
	2 Salidas: Canal Olímpic y playa de Castelldefels
	Semana 2: 3-7 Julio - Fotografía y Carpintería 2 Salidas: Parque de Atracciones Tibidabo y Playa de Castelldefels
	Semana 3: 10-14 Julio - Cerámica y Cocina 2 Salidas: Zoo de Barcelona y Playa de Castelldefels

Semana 4: 17-21 Julio - Carpintería y Arte 2 Salidas: Canal Olímpic y playa de Castelldefels

Precio: 250 euros/semana incluyendo comida y 2 salidas a la semana

Ahorra un 10% si reservas antes del 16 de abril de 2023 usando el código EARLYBIRD23

#### ¿Por qué Learnlife?

- Aprendizaje dirigido por niños
- Comunidad internacional y multicultural acogedora
- Orientación experta para divertidos proyectos prácticos
- Facilitación dual en inglés y español

Reserva tu plaza: learnlife.com/summer-camps

"Los niños son tratados con mucho respeto y cariño haciéndoles sentir cómodos y seguros de sí mismos". Padre

## Human transcreation

¡Explora tus pasiones, diviértete y haz amigos de todo el mundo!

Para adolescentes de 11 a 17 años, ¡todos los niveles de inglés son bienvenidos!

ES

26 junio - 21 julio 2023

09:00-16:00

Learnlife Urban Hub, Carrer Enric Granados, 7, Barcelona

Semana 1: 26-30 de junio - Arte callejero y moda 2 Salidas: Canal Olímpic y playa de Castelldefels

Semana 2: 3-7 Julio - Fotografía y Carpintería

2 Salidas: Parque de Atracciones Tibidabo y Playa de Castelldefels

Semana 3: 10-14 Julio - Cerámica y Cocina

2 Salidas: Zoo de Barcelona y Playa de Castelldefels

Semana 4: 17-21 Julio - Carpintería y Arte 2 Salidas: Canal Olímpic y playa de Castelldefels

Precio: 250 euros/semana incluyendo comida y 2 salidas a la semana

Ahorra un 10% si reservas antes del 16 de abril de 2023 usando el código EARLYBIRD23 ¿Por qué Learnlife?

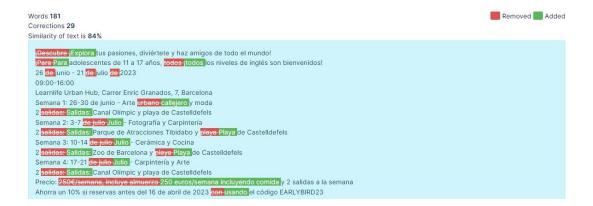
- Aprendizaje dirigido por los niños
- Comunidad internacional y multicultural acogedora
- Orientación experta para proyectos prácticos y divertidos
- Facilitación dual en inglés y español

Reserva tu plaza: learnlife.com/summer-camps

"Tratan a los niños con mucho respeto y cariño haciéndoles sentir cómodos y seguros de sí mismos". Padre

ChatGPT	Prompt: Transcreate this text for a flyer for an international school in a fun and engaging
transcreation	tone, which will be published in a magazine and read by local parents who live in
prompt	Barcelona. The transcreation should be in European Spanish and capture the essence of the original text, and generate a desire to enrol in the summer camp. Respect the length
	of original text in English
Transcreated	Original blog text (English):
by Chat GPT	¡Descubre tus pasiones, diviértete y haz amigos de todo el mundo! ¡Para adolescentes de 11 a 17 años, todos los niveles de inglés son bienvenidos!
FC	26 de invier 24 de inlie de 2022
ES	26 de junio - 21 de julio de 2023 09:00-16:00
	Learnlife Urban Hub, Carrer Enric Granados, 7, Barcelona
	Semana 1: 26-30 de junio - Arte urbano y moda
	2 salidas: Canal Olímpic y playa de Castelldefels
	Semana 2: 3-7 de julio - Fotografía y Carpintería
	2 salidas: Parque de Atracciones Tibidabo y playa de Castelldefels
	Company 2, 40,44 de julie - Confusion y Coning
	Semana 3: 10-14 de julio - Cerámica y Cocina 2 salidas: Zoo de Barcelona y playa de Castelldefels
	Semana 4: 17-21 de julio - Carpintería y Arte 2 salidas: Canal Olímpic y playa de Castelldefels
	2 sandas. canal omniple y playa de castendereis
	Precio: 250€/semana, incluye almuerzo y 2 salidas a la semana
	Ahorra un 10% si reservas antes del 16 de abril de 2023 con el código EARLYBIRD23
	¿Por qué Learnlife?
	Aprendizaje apoyado y liderado por el niño
	Comunidad internacional y multicultural acogedora     Orientación associata a proposition a subject de la contraction de la contracti
	<ul> <li>Orientación experta para proyectos prácticos y divertidos</li> <li>Facilitación bilingüe en inglés y español</li> </ul>
	Reserva tu lugar: learnlife.com/summer-camps
	"Los niños son tratados con mucho respeto y amor, haciéndolos sentir cómodos y seguros
	de sí mismos". Padre
	¡No pierdas esta oportunidad única! ¡Inscríbete ahora y déjate llevar por un verano inolvidable en Learnlife!

 $Comparison\ of\ ChatGPT\ transcreation-human\ transcreation$ 



#### Comparison of DeepL translation – human transcreation



## **VIII. ANNEX 2 – HUMAN EVALUATION RESULTS**

## 1. Human evaluation of target text by ChatGPT in Spanish

## Evaluator #1

Evaluation Parameter	Scale	Average Score	Product description	Landing page	Social media pos	Email camp aign	Google ad copy	Blog post	Flyer
1. Accuracy	1-5	4.1	5	4	4	4	4	4	4
2. Fluency	1-5	3	4	3	3	4	4	3	4
3. Grammatical Correctness	1-5	3.7	4	3	4	4	4	3	4
4. Terminology and Vocabulary	1-5	4.1	4	4	4	4	4	4	5
5. Style and Register	1-5	4.7	5	5	5	4	4	5	5
6. Cultural Adaptation	1-5	4	4	4	4	4	4	4	4
7. Overall Quality	1-5	3	4	3	3	3	4	4	4
Average score			4.2	3.7	3.8	3.8	4	3.8	4.2

### Evaluator # 2

Evaluation Parameter	Scale	Average Score	Product description	Landing page	Social media pos	Email campaign	Google ad copy	Blog post	Flyer
1. Accuracy	1-5	4.7	5	5	5	5	5	4	4
2. Fluency	1-5	4.4	4	5	5	4	5	4	4
3. Grammatical Correctness	1-5	4	4	4	4	3	5	4	4
4. Terminology and Vocabulary	1-5	4	5	3	4	3	5	5	3
5. Style and Register	1-5	4	4	4	4	4	4	4	4
6. Cultural Adaptation	1-5	4	4	4	4	3	5	4	4
7. Overall Quality	1-5	4.1	4	4	4	4	5	4	4

Average score		4.2	4.1	4.2	3.7	4.8	4.1	3.8

## Evaluator #3

Evaluation Parameter	Scale	Average Score	Product description	Landing page	Social media post	Email campaign	Google ad copy	Blog post	Flyer
1. Accuracy	1-5	4.5	4	5	5	5	5	4	4
1. Fluency	1-5	3.7	3	3	4	4	5	3	4
2. Grammatical Correctness	1-5	3.4	4	3	4	4	4	2	3
3. Terminology and Vocabulary	1-5	3.5	5	4	4	4	3	2	3
4. Style and Register	1-5	3.2	5	2	4	3	3	2	4
5. Cultural Adaptation	1-5	3.1	3	4	3	3	4	2	3
6. Overall Quality	1-5	3.4	4	3	4	4	4	2	3
Average score			4	3.4	4	3.8	4	2.4	3.4

## 2. Human evaluation of target text produced by DeepL in Spanish

## Evaluator #1

Evaluation Parameter	Scale	Average Score		Landing page	l media	Email campaign	Google ad copy	Blog post	Flyer
1.Accuracy	1-5	5.0	5	5	5	5	5	5	5
2. Fluency	1-5	4.9	5	5	5	5	5	4	5
3. Grammatical Correctness	1-5	4.3	4	4	4	5	5	4	4
4. Terminology and Vocabulary	1-5	4.1	4	4	4	4	4	4	5
5. Style and Register	1-5	5.0	5	5	5	5	5	5	5
6. Cultural Adaptation	1-5	4.6	4	4	5	5	5	4	5
7. Overall Quality	1-5	4.6	4	5	5	4	5	4	5

							4	ı
Average score	4.4	4.6	4.7	4.7	4.9	4.3		ı
							9	ı

## Evaluator #2

Evaluation Parameter	Scale	Average Score	Product description	Landing page	Social media post	Email campaig n	Google ad copy	Blog post	Flyer
1. Accuracy	1-5	5.0	5	5	5	5	5	5	5
2. Fluency	1-5	4.3	4	5	4	5	4	4	4
3. Grammatical Correctness	1-5	4.3	4	4	4	5	5	4	4
4. Terminology and Vocabulary	1-5	4.0	4	4	4	4	4	4	4
5. Style and Register	1-5	5.0	5	5	5	5	5	5	5
6. Cultural Adaptation	1-5	4.6	4	4	5	5	5	4	5
7. Overall Quality	1-5	4.4	4	4	5	4	5	4	5
Average score			4.3	4.4	4.6	4.7	4.7	4.3	4.6

## Evaluator #3

Evaluation Parameter	Scale	Average Score	Product description	Landing page	l media	Email campaign	Google ad copy	Blog post	Flyer
1. Accuracy	1-5	5.0	5	5	5	5	5	5	5
2. Fluency	1-5	4.0	4	5	4	4	4	3	4
3. Grammatical Correctness	1-5	4.3	4	4	4	5	5	4	4
4. Terminology and Vocabulary	1-5	4.0	4	4	4	4	4	4	4
5. Style and Register	1-5	4.9	5	5	5	5	5	4	5
6. Cultural Adaptation	1-5	4.4	4	4	5	5	4	4	5

7. Overall Quality	1-5	4.4	4	4	5	4	5	4	5
Average score			4.3	4.4	4.6	4.6	4.6	4.0	4.6