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METHODS OF WEBSITES LOCALIZATION
METODY LOKALIZACE WEBOVÝCH STRÁNEK

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Methods of websites localization

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The aim of the bachelor thesis is to conduct a search on methods and process of website localization and, based on the literature, describe how to adapt websites (product) to a different culture and language and how to how to translate/localise professional terminology.

RECOMMENDED LITERATURE:

JIMENÉZ-CRESPO, M. A. Translation and Web Localization. Routledge 2013. ISBN 978-0-415-64328-4.
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ESSELINK, B. A Practical Guide to Localization. John Benjamins Publishing, 2000. ISBN 9027298181.
SINGH, N. Localization strategies for global e-business. Cambridge: CUP, 2012.

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ABSTRACT

The phenomenon of companies seeking to expand their markets to a global scale has been a trend for a long time. In the early days of international trade, it was quite difficult to establish connections between countries due to the lack of reliable communication systems. However, the situation changed when the Internet became a global means of communication. It introduced a new way of selling products and services using websites. The purpose of this paper is to expand the current understanding of web localization. In this paper, the definition of web localization, its origins and the difference between localization and cultural adaptation are presented. It also defines the process of localization within Translation Studies. Furthermore, it describes the most crucial methods of localization, examines typical localization errors, and provides best practice guidelines. The practical part analyzes the localization of selected websites with a focus on their functionality. This would help developers and translators to better understand the process of website localization and prevent further mistakes in their future work.

KEYWORDS

ABSTRAKT

Podniky se už dlouho snaží rozšířit své trhy do globálního měřítka. V počátcích mezinárodního obchodu bylo poměrně obtížné navazovat spojení mezi jednotlivými zeměmi kvůli nedostatku spolehlivých komunikačních systémů. Avšak situace se změnila, když se internet stal globálním zdrojem komunikace. Internet zavedl nový způsob prodeje výrobků a služeb pomocí webových stránek. Cílem této práce je rozšířit současné znalosti o lokalizaci webových stránek. V práci je definován proces lokalizace v rámci translatologie, její vznik a rozdíl mezi lokalizací a kulturní adaptací. Kromě toho se bakalářská práce popisuje klíčový metody lokalizace, se zabývá typickými chybami při lokalizaci a poskytuje doporučené postupy. Praktická část provádí analýzu lokalizace vybraných webových stránek s důrazem na jejich funkčnost. Výsledky práce by pomohly vývojářům a překladatelům lépe porozumět procesu lokalizace a vyhnout se chybám v budoucích projektech.

KLÍČOVÁ SLOVA

Web, metody lokalizace, internacionalizace, kulturní adaptace, translatologie, pragmatika v lokalizaci, chybovost v procesu lokalizace

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PROHLÁŠENÍ

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LIST OF ABBREVIATIONS AND ACRONYMS

AI   Artificial Intelligence

ASCII   American Standard Code for Information Interchange

SCM   Supply Chain Management

CA   Canada

CAD   Canadian Dollar

CSS   Cascading Style Sheets

ERP   Enterprise Resource Planning

EU   European Union

EUR   Euro

FAQ   Frequently Asked Questions

FR   France

GBP   Pound Sterling

HR   Human Resources

ISO   International Organization of Standardization

IPrA   International Pragmatics Association

IL   Israel

IT   Information Technology

JP   Japan

JPY   Japanese Yen

LTR   Left-to-right

PC   Personal Computer

RTL   Right-to-left

SI   International System of Units

SL   Source language

TL   Target language

TS   Translation Studies

UK   United Kingdom

US   United States

USD   United States Dollar

UX   User Experience

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INTRODUCTION

Since the introduction of the Internet to the public in the late 1980s there has been an observable increase in the utilization of the Internet as a reliable source of information (Internet, 2022). The Internet has undergone a multitude of architectural and technological advancements over the years to reach its current state. It can be seen that the advent of two major technological developments has enabled businesses to broaden their scope and commence selling their goods via the Internet. The first is the concept of online shopping which was introduced in 1979. In the initial stages, it was primarily used for business-to-business commerce. However, the emergence of Amazon in 1995, which provided an online bookstore, enabled consumer-oriented online shopping to gain traction and become more widespread (The History of Ecommerce, 2020). The second was the introduction of the smartphone, which enabled users to access the Internet directly from their mobile devices (Internet, 2022). The establishment of online shopping capabilities, accessible from mobile devices, enabled businesses to expand their customer base and increase sales.

The earliest websites were written and designed for the English-speaking audience, and to this day, English is the most widely used language online, comprising around 25% of Internet users worldwide (Sitsanis, 2021). As the Internet usage has increased, businesses have deemed it requisite to provide multilingual versions of their websites to extend their reach to a global consumer base. This is where the localization procedure begins.

The notion of localization is not novel. Website developers and translators often localise websites in the course of their work, even without being aware of it. However, despite its significance in successful multilingual websites, the process of localization of a website to a different culture still remains unclear. Additionally, the efficacy of localizing technical terms remains uncertain.

The study presented in this paper aims to address this need by defining the concept of localization within Translation Studies, elucidating the reasons for its implementation as well as various methods that can be used to achieve it. The thesis outlines the key localization methods, describes how to adapt websites to a different culture, and explains how to localise professional terminology. The practical part examines the localization of two selected websites, with particular emphasis on their functional aspects.

This paper is divided into four main chapters. Chapter 1 outlines the theory of localization in regard to its definition and associated linguistic principles. Chapter 2 presents illustrative examples and provides practical guidelines to ensure the successful localization of a website. Chapter 3 presents the chosen website and the methodology that will be used for analysis. Chapter 4 applies this methodology to two selected company websites and presents the findings of the practical analysis.

1 LOCALIZATION

Since the early days of the Internet, it has been a common strategy for companies to extend their market into other regions. It has become increasingly popular for websites of large technology companies and e-commerce websites to offer their services and products in at least two languages. When an average user visits the website, they might assume that the website's creators just needed to translate the content, but in fact, a complex process of localization has to be done in order to ensure that the website is accessible to the target audience. Osman (2017) describes the process of translation as an 'activity in which a meaning of given linguistic discourse is rendered from one language to another'(Osman, 2017: para. 1). In the translation procedure, there is a distinguishment between the source language (SL) and the target language (TL). To produce the most accurate translations, it is essential for translators to have a strong understanding of both the source and target languages, as well as other skills such as the ability to convey the original author's intent (Osman, 2017). The translation of the content is a vital part of the process, but there are other important tasks involved as well. This chapter will introduce the reader to the importance of the company website and mission statement. Subsequently, this chapter will acquaint the audience with the definition, history, and pragmatics of localization. It will also explain the concept of localization within Translation Studies, adaptation together with transliteration procedures, and the difference between localization and cultural adaptation.

1.1 Company website and mission statement

At present time, the Internet has become a central part of many people's lives. As it has become more widely used, businesses have begun to move their operations online (Ehsan, 2021). However, according to Kaplan (2020), even today, 'some businesses still don't realize that a majority of their customers will visit their website before making a purchase' or finalizing a partnership. If a customer is unable to find a company's corporate website, it is less likely they will purchase a product from that company. The company website can help create a positive image for the company and is also the best place to showcase the company's mission statement.

The credibility of a company can be improved by having a corporate website (Kaplan, 2020). At present, most people search for information using search engines like Google, Bing, and Baidu (Law, T. J., 2022). It is estimated that around 93% of business decisions begin with a basic search on a search engine. As a result, if companies do not have a corporate website, they are limiting the potential size of their market (Importance of Website, n.d.). Moreover, Kaplan (2020) claims that when people cannot find a corporate website for a company, they may doubt the legitimacy of the business. Website presence allows businesses to be found by anyone in the world. With online shopping becoming more popular, having a corporate website gives businesses the opportunity to reach foreign customers (Importance of Website, n.d.). A website can also serve as an informational tool for a company, where updates and announcements about new products and services can be posted (Ehsan, 2021; Kaplan, 2020).

Many experts believe that a company's mission statement is one of the most important aspects of a company. Berry defines it as 'a simple action-oriented statement that explains' (2023: para. 4) the purpose of the company. The statement is typically a single sentence, up to the length of a paragraph, that constitutes the company's goals (Gorton, 2022). Usually, it is written on the About us page of the company website, but it can appear in other places as well.

Having a clear and confident mission statement is key to the success of the business. First, it 'helps the organization focus and stay on track' because the statement describes exactly the goal and the future vision of the company (Gorton, 2022: para. 13). Second, it is used to inspire and attract new customers. Finally, it helps to describe the purpose of the company in terms of the solutions it offers to various problems. As an example, consider the mission statement of Tesla, an American multinational company. The company statement is 'Accelerating the World's Transition to Sustainable Energy' (About Us – Tesla, 2023). Tesla claims that one of the world's problems is a lack of sustainable energy and their solution to resolve it is by 'building a world powered by solar energy, running on batteries and transported by electric vehicles' (About Us – Tesla, 2023).

It can be concluded that a corporate website can have a significant impact on a company's success. A website gives the company a more credible appearance and can be easily found by anyone in the world. Additionally, the company website usually contains the mission statement, providing potential customers with an explanation of the company's purpose.

1.2 Definition of localization

The term "localization" is used in a variety of applications across different disciplines, such as medicine, linguistics, business, marketing, and software development. Different resources will provide different definitions for the term, depending on the context in which it is used. As a result, without knowing the context in which a term is being used, it is difficult to ascertain its meaning. For example, according to Cambridge Dictionary (n.d.), localization is 'the process of organizing a business or industry so that its main activities happen in local areas rather than nationally or internationally' (Localization, n.d.). The definition above is a term used in the field of business. It refers to the concept of a target market.

In the field of the Web, one can find not only several definitions of localization, but also multiple terms such as e-localization, web-content localization, website translation, and translation of web products (Jimenez-Crespo, 2013: 12). According to the Globalization and Localization Association, web localization can be defined as follows:

> Localization (also referred to as l10n) is the process of adapting a product or service to a specific locale. The aim of localization is to give a product or service the look and feel of having been created specifically for a target market, no matter their language, cultural preferences, or location (GALA, 2020).

It can be seen from the definition that process localization might be a challenging and time-consuming process that not only involves translating the text, but also requires some research of the local market. Typical locale process includes customizing features like currency and payment methods, date and time, images, and layout.

Different companies have different localization processes, depending on what their teams and project managers consider to be ideal (Kasiouras, 2022). However, since the early 2000s, there have been several standards and conventions introduced for translation processes and services. For instance, in 2015, the International Organization of Standardization (ISO) introduced the ISO 17100 standard which 'provides requirements for the core processes, resources, and other aspects necessary for the delivery of a quality translation service that meets applicable specifications' (ISO 17100, 2020: para. 1s). Furthermore, with the enhancements in software, the localization of websites has become easier and more straightforward.

1.3 Beginning of localization

The notion of localization was first introduced in the late 1970s and early 1980s (Jimenez-Crespo, 2013: 8). In the past decade, there have been significant advancements in the field of information technology (IT). These include improvements in the hardware, software, and operating systems. Consequently, there was a huge leap forward in the personal computer (PC) industry because it was the time when computers finally became 'inexpensive enough to be purchased by individuals for use in their homes' (Britannica, 2022). As the popularity of these products increased, tech companies decided to expand their market beyond the US and start selling them worldwide. This allowed them to tap into new markets and increase their sales (Jimenez-Crespo, 2013: 8). At this point, companies realized that in order to be successful, their products needed to be translated and culturally adapted to the local market. However, it turned out to be a challenging task, and from the very beginning, software vendors faced many difficulties caused mainly by the wrong approach to the localization process.

Initially, the translation and localization processes were performed either by the in-house teams of translators or external linguists. In both instances, the localization process was held at the end of the development cycle. Esselink (2003) in his article *The Evolution of Localization,* described the very first process of website localization as the following:

> In both cases, the localization effort remained separated from the development of the original products. Development groups simply handed off the software code and source files for supporting documentation to those responsible for localization (Esselink, 2003: 22).

The developers and translators eventually realized that this concept was inefficient and caused many problems. As a result, a new approach called GILT (Globalization, Internationalization, Localization and Translation) was introduced, which is used up to the present day. This approach emphasizes collaboration between all parties involved in the development process to ensure that the final product is localized for the global audience.

1.4 Localization within translation studies

Translation Studies (TS) is an interdisciplinary stream that studies the theory, description and application of translation processes and products. It intersects with other academic disciplines,

such as comparative literature, cultural and gender studies, linguistics, philosophy, and computer science. Furthermore, the study deals with the localization of the subjects (Burrow-Goldhahn, 2018; teachmint, 2022).

From the outset, there were several discussions surrounding the relationship between localization and the TS. The first, was a debate over where localization fits into the TS (Jimenez-Crespo, 2013: 21). Pym (2004) suggests that 'Translation Studies has met the concepts of localization rather late, starting in the late 1990s' (Pym: 1). In the early stages, the attempts to study localization were mainly in the industry discourse and based on previous concepts or theoretical approaches. Hence, some scholars believed that localization means translation, and therefore localization and translation practically represent the same concept. The second was dealing with the idea to make localization a 'completely new phenomenon due to technological, management or globalization issues' (Jimenez-Crespo, 2013: 21).

There is still much disagreement about the place of localization within the TS. Jimenez-Crespo points out that the decision on the matter is up to academics, institutions, and 'political-economic developments that determine the translation market'. The professor also defines localization as "technology-based translation" which, during work, requires collaboration with multiple teams in addition to translators (Jimenez-Crespo, 2013: 22).

1.5 Localization vs. cultural adaptation

In an international market, cultural adaptation has become a key factor for companies that desire to succeed beyond national borders. In the beginning, the cultural adaptation of a website was focused mainly on basic parameters such as colours, icons, page layout, dates, numbers, and measurement formats (Aloa, 2003: 5-6; Jimenez-Crespo, 2013: 31). However, these features account only for a small amount of the cultural-dependent factors. Other important regions, like textual structure, pragmatic differences, and genre-specific conventions, were previously neglected (Jimenez-Crespo, 2013: 31). Consequently, a new discipline of internationalization has been established. Jimenez-Crespo (2013) states that 'the internationalization discourse seeks to neutralize culture-specific features so as to make localization easier, often mentioning the goal of achieving the maxim possible cultural neutrality' (2013: 32). On the one hand, one might argue that the internationalization approach results in poor localization. On the other hand, from a business and technical perspective, the internationalization approach might be advantageous. This approach employs design

techniques that allow adapting a website to different locales without requiring changes to the underlying code and when done right, 'makes subsequent localization tasks much easier, faster, and less expensive' (GALA, 2020).

As published in Aloa's et al. paper (2003), Dutch cultural anthropologist and psychologist Geert Hofstede (1991) introduced five points to consider when designing a multicultural website:

1. Individualism – Collectivism: Specify if the people are more likely to see themselves as separate from others or part of a group. In this particular dimension, the images are probably the most important part, and the designers have to decide between images with a single person or a group.

2. Uncertainty Avoidance (Low uncertainty vs. High uncertainty): The extent to which the members of society feel threatened by ambiguous and unknown situations. In this aspect, the developers should concentrate on customer service, frequently asked questions (FAQ) and contact information.

3. Power distance (High vs. Low power distance): Refers to the distribution of power in society. To achieve the desired outcome, the focus should be primarily on website layout and modern design techniques.

4. Masculinity - Femininity: The degree to which a culture emphasizes traditional masculine or feminine values. In this area, colours are presumably the most important feature.

5. Low - High Context: Divides the cultures into two groups. First, cultures in which the rules are primarily communicated using contextual elements and are not explicitly stated (high context). Second, cultures that communicate information in a direct manner that relies mainly on words (low context). There must be considered the text itself and the extent to which it clearly provides the information.

(AFS-USA, 2022; Organizational Psychology Degrees, 2022; Jimenez-Crespo, 2013)

1.6 Pragmatics in localization

From the perspective of Murtafiah (2016), pragmatics has evolved in three main phases. The first was in the 1930s when pragmatics emerged as a part of Semiology that was focusing on the 'relationship between users, words and reference relationship'. The second was in the 1950s when J. Austin, J. Searl, and others established the theory of speech acts (Murtafiah, 2016: 4).

This theory argues that 'words can be used not only present information but also to carry out actions'. The third was the founding of the International Pragmatics Association (IPrA) in 1986, an 'international scientific organization devoted to the study of language use' (International Pragmatics Association, n.d.; Murtafiah, 2016). This event was noted as the official creation of the pragmatics field and since then, it has become an integral part of various disciplines of linguistics (Murtafiah, 2016: 6).

To explain the purpose of the field of pragmatics, Widdowson (2000) uses a comparison of semantics and pragmatics:

> Semantics is the study of meaning in language. It is concerned with what language means. This is not the same as what people mean by the language they use, how they actualize the meaning potential as a communicative resource. This is the concern of pragmatics (Widdowson, 2000: 61).

In other words, pragmatics is the study of the meaning in a particular context. Different people, especially from different cultures and with different language skills, can understand a specific utterance or a text in a variety of ways. Without knowing the context in which this information is said or written it is impossible to clarify its true meaning.

The same issues can occur when a reader browses a website that has been localized for a different region. To minimize localization issues, as well as pragmatic concerns, the website should undergo a process of quality assurance to ensure that it meets accepted standards. In website development, this process is called localization testing. United Language Group describes this process as follows:

> Localization testing is more than just seeing that a verbatim translation is correct; it checks the functionality, appearance, and regional specificity of a certain text, making sure that each aspect of an application is ready to be shipped off to the end user (United Language Group, 2022).

There are several approaches for testing the quality of the localization, translation as well as pragmatic correctness (Ehud Reiter's Blog, 2022). One of the approaches that are used in this area belongs to *textual and pragmatic approaches*. These methods focus on testing the full text within the finished website, rather than testing the string bodies individually (Jimenez-Crespo, 2013: 121). The advantages of these approaches compared to others are that they can focus on

pragmatic issues within the final product and that if an issue arises, it can be adapted based on the overall context of the website.

1.7 Adaptation and Transliteration in localization

This chapter will focus on the explanation of adaptation and transliteration, two of the many different translation procedures that can be used during website localization.

The adaptation method is usually applied when the TL does not 'have any lexical equivalents' or when there is a need to translate a piece of information that contains a cultural context (The concept of 'Adaptation' in translation, n.d.). The goal is to adapt the information so it would sound 'familiar or appropriate' in the TL and culture (Grassilli, 2015).

According to Devlin (2022), transliteration is the procedure of converting written content from one 'writing system into another'. This method involves converting each character in a piece of text into a 'different alphabet or script', using pre-defined rules (Fong, 2021). It is important to note that the outcome of this process is not a translation into another language, but a script that would be easier to read (Delvin, 2022). The Latin and Cyrillic alphabets are the most commonly used scripts for transcribing foreign text (Fong, 2021; Translation vs Transliteration: What's the difference, n.d.). Transliteration has developed over the years, and nowadays there are online transcription tables and tools that can automatically transliterate a piece of text. Furthermore, different programming languages provide automated transliteration frameworks for web developers. These can be useful for developing and localizing multilingual websites (Transliterator, 2023).

1.8 Summary

The aim of Chapter 1 was to introduce the notion of localization with its definition and brief history. It explained that a corporate website can have a significant impact on a company's success together with its mission statement. Moreover, it introduced the goal of website localization which lies in giving a product or service the look and feel of being created specifically for a target market, regardless of their language, cultural preferences, or location

(GALA, 2022). It was also noted that localization was introduced in the late 1970s when tech companies decided to start selling their products worldwide (Jimenez-Crespo, 2013: 8). Moreover, it indicated that there is still much disagreement about the place of localization within the TS (Jimenez-Crespo, 2013: 22). This chapter outlined that the neglect of some features during cultural adaptation resulted in internationalization, which seeks to make the localization process easier by achieving maximum cultural neutrality (Jimenez-Crespo, 2013: 32). Additionally, it is suggested that pragmatic issues can arise during website localization and with a brief overview of one of the methods used to solve these issues (Jimenez-Crespo, 2013: 121). The chapter ended with the definition of adaptation and transliteration procedures.

2 METHODS OF LOCALIZATION

In the previous chapter, it was noted that localization can be a challenging and time-consuming process that involves not only text translation but also the adaptation of many areas to make the website more appropriate to the target market. At the present time, there are a variety of website designs, ranging from those with very complex dynamic content to simple static websites (Jimenez-Crespo, 2013: 165). In general, the website localization process involves 29 stages that are typically divided among 'four different professional profiles: localizer, project manager, developer, and quality assurance operator' (Jimenez-Crespo, 2013: 164). Although web localization is usually performed using 'translation technology and management tools', the range of website complexity and responsibilities distribution during development may lead to localization mistakes in the final product (Jimenez-Crespo, 2013: 164).

This chapter will introduce the reader to various website areas which need to be considered during website localization. Furthermore, it will provide a detailed overview of the most common localization mistakes as well as best practice guidance. It will start by discussing the most noticeable features and will delve deeper into the smallest areas that might be overlooked.

2.1 Layout

The layout of a website is one of the first things that catches the attention of visitors. It is believed that the design layout is the key factor that encourages visitors to stay and learn more about the product (What is website layout, 2022). Giulian defines layout as follows:

> Web design layout is the process of planning, creating, and formatting the content and structure of a website. The layout of a website is important because it helps visitors navigate the site and find the information they need (Giulian, 2022).

Even though the layout stage is one of the most important steps during website development, some developers decide to omit it and start straight with the coding. This may result in a website with uncorrelated pages and an inconsistent style (What is website layout, 2022).

Poor design layout can decrease the popularity of a website and lead to additional issues in the future when the website will need to be adapted to the Middle Eastern market, for example. Over the last years, the demand for right-to-left (RTL) website development has grown due to

two major factors. The first is that Arabic has become the 4th most popular language worldwide. The second is that a majority of Arabic speakers prefer to browse internet content in Arabic even though they have knowledge of English (Mosiichuk, 2022). However, this is not only true for the Arabic language. In the world, there are 12 languages that are written from right to left. The most popular on the list are Arabic, Urdu, and Hebrew (Checklist: Right-To-Left Languages, 2022).

Mosiichuk explains that even though the RTL languages primarily differ in the direction of writing, the localized website is not just 'a mirrored copy of an English one', since the change in direction affects the overall structure of the website, as well as typography, icons, and images (Mosiichuk, 2022). One way to illustrate the difference between LTR language and RTL language website layout is by means of an example.
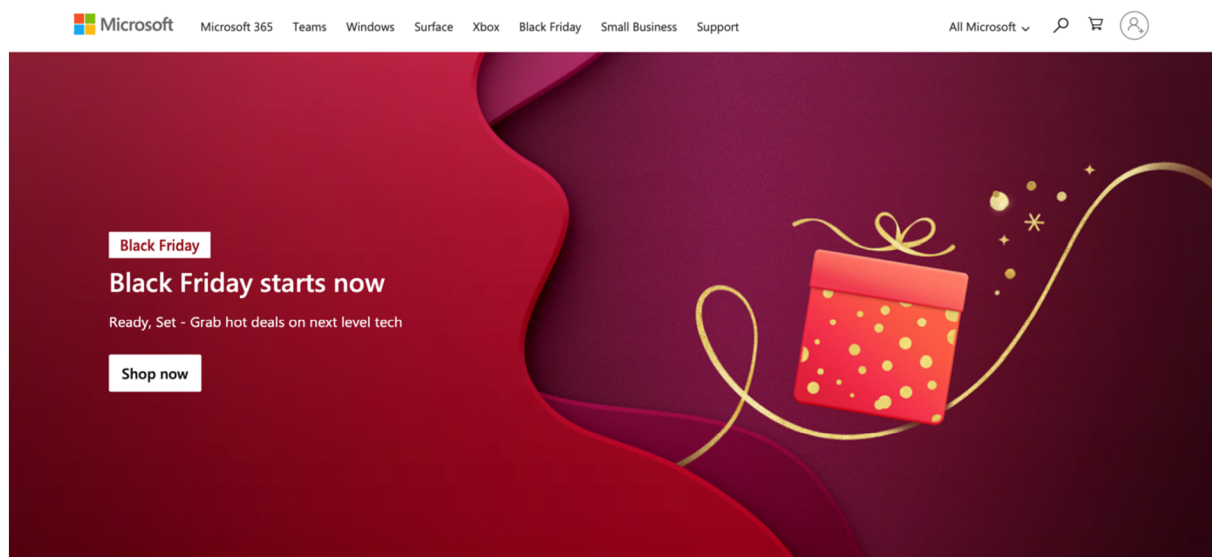

Figure 1. LTR website layout (Microsoft, 2022)
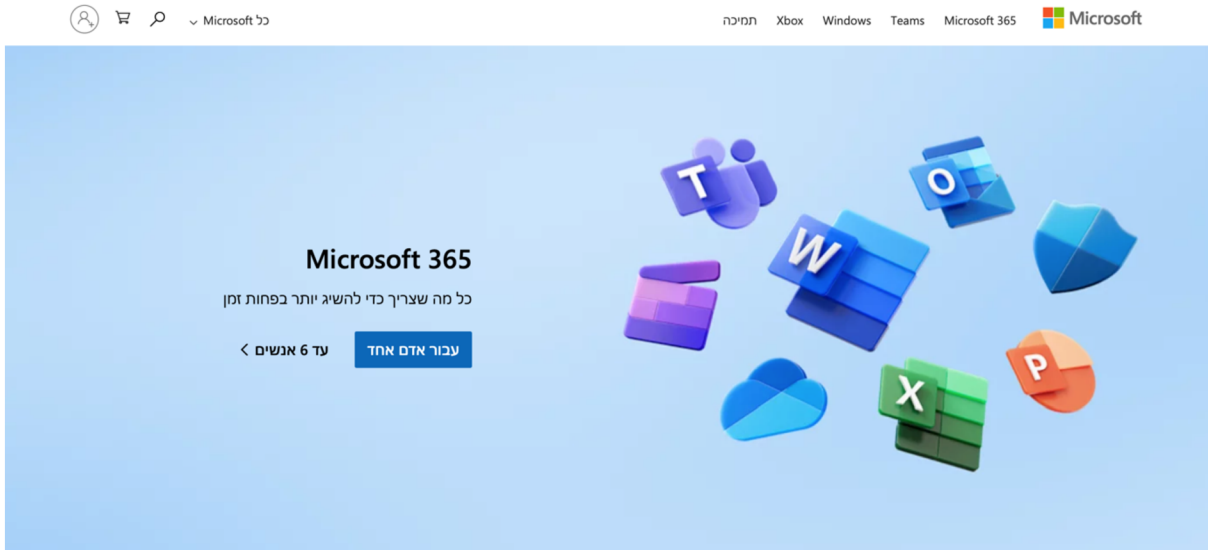
Figure 2. RTL website layout – Hebrew (Microsoft, 2022)

Figure 2 illustrates a website with the RTL layout design. There are two different aspects of the localized website that differ: the menu and the carousel image. The menu in the second figure is mirrored and contains fewer items than the original English version of the website in Figure 1. Regarding the carousel image, besides the fact that the inside image in the Hebrew version is different, the text inside the image is located and aligned to the left side, which seems to be an unexpected deviation from the usual alignment of website areas to the right.
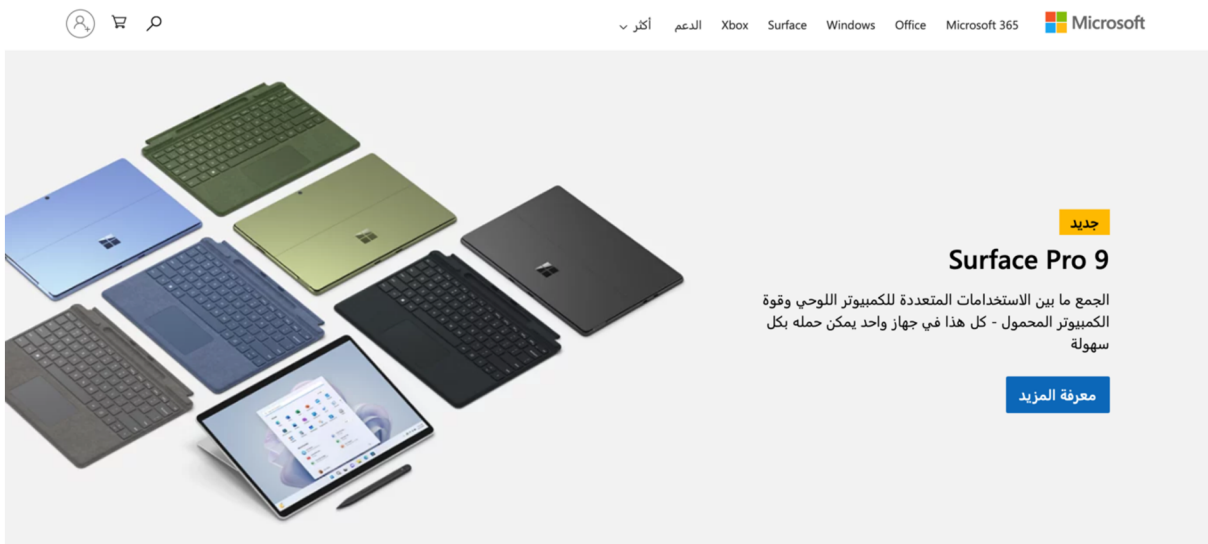

Figure 3. RTL website layout – Arabic (Microsoft, 2022)

Figure 3 illustrates the same website in another locale, the United Arab Emirates. This example shows that the text inside the carousel image is located and aligned to the right side as expected

in the RTL layout. As a result, when localization is done, not only the layout and text direction must be taken into account, but also the individual languages. While there are some similarities in the website layouts between RTL languages, there are also slight differences.

2.2 Encode and Font

In the world of computers, every piece of information is stored as a series of zeros or ones, which is known as a binary system. This is true for almost everything from a piece of code in any programming language, to websites and mobile apps. In webpages, written text is not an exception. The early years of the Internet saw the use of the American Standard Code for Information Interchange (ASCII) encoding system to convert characters into binary code. This was adequate for English-language data but posed difficulties for websites in other languages. To solve this problem, the Unicode system was created. Unicode is a more advanced mechanism that can represent up to a million characters in all languages including special characters and emojis. It uses a special code that starts with the letter U, 'followed by a unique string of characters to represent the character' (e.g. U+0041) which only afterwards is translated into binary code (Juviler, 2021: para. 18). When designing a multilanguage website it is essential to encode the website with proper Unicode to ensure that all characters and special characters will be supported. As a rule of thumb, UTF-8 is the best choice for character encoding, with the exception of Asian markets where UTF-16 is more commonly used (Rozwens, 2014).

Another area that can pose problems for multilingual websites is font choice. It is generally best to avoid uncommon fonts, as they may not support all the special characters needed for each language (Rozwens, 2014). However, if a company's website uses a special font, Bourhaouta (2020) proposes an advanced method that can solve compatibility problems. The vast majority of websites today use the Cascading Style Sheets (CSS) language for the configuration of the style of the web elements. Each web element has a property called *font-family* that is responsible for configuring the font. This property allows the developer to specify a list of fonts for an element, in order of priority. The advantage of this approach is that, if certain characters in the first font are not found, the browser will try to use other fonts from the list (Bourhaouta, 2020).

2.3 HTTP Cookies

The HTTP cookies were introduced for the first time in 1994 by Lou Montulli, the developer of the earliest web browser (Hill, 2015; Using HTTP Cookies, 2022). Hill states that cookies allow servers to identify and remember information about users (Hill, 2015). According to MDN (2022), web cookies are mainly used for three purposes:

1. Session management – storing information such as login details, shopping cart items, and game scores. For instance, if a user accidentally closes their browser while shopping, their selected items will be saved.

2. Personalization – storing user preferences including themes, language, location, and browser type.

3. Tracking – used mainly for advertisement purposes. These cookies collect 'your browsing habits, see what type of products you view, and what you purchase'. For example, online shopping sites use cookies to suggest similar products based on previous activity.

(Hill, 2015; Nazifa, 2021; Ultimate Guide to EU Cookie Laws, 2022; Using HTTP Cookies, 2022; Vistorskyte, 2020)

As time has passed, cookies have gained a negative reputation because they are believed to be used to track people, store personal information, and deliver targeted advertisements. The use of cookies in Europe generated so much concern that the European Union (EU) introduced the Cookie Legislation in 2011 to protect users against unwanted cookies (Hill, 2015). In order to be accessible in the European Union, websites must comply with the following guidelines set forth in the Ultimate Guide to EU Cookie Laws (2022):

- The website should inform the users that it uses cookies.
- The reasons for storing cookies should be thoroughly documented.
- The website should allow users to accept or reject the use of cookies.
- If the user refuses, the website is not allowed to store the web cookies on the device.

However, this does not mean that cookies will be completely removed. In practice, many websites use strictly necessary cookies, which are claimed to be vital for the core functionality.

These cookies group is enabled by default and cannot be disabled. Moreover, these cookies do not require user consent even in the EU (What are Strictly Necessary Cookies, 2022).
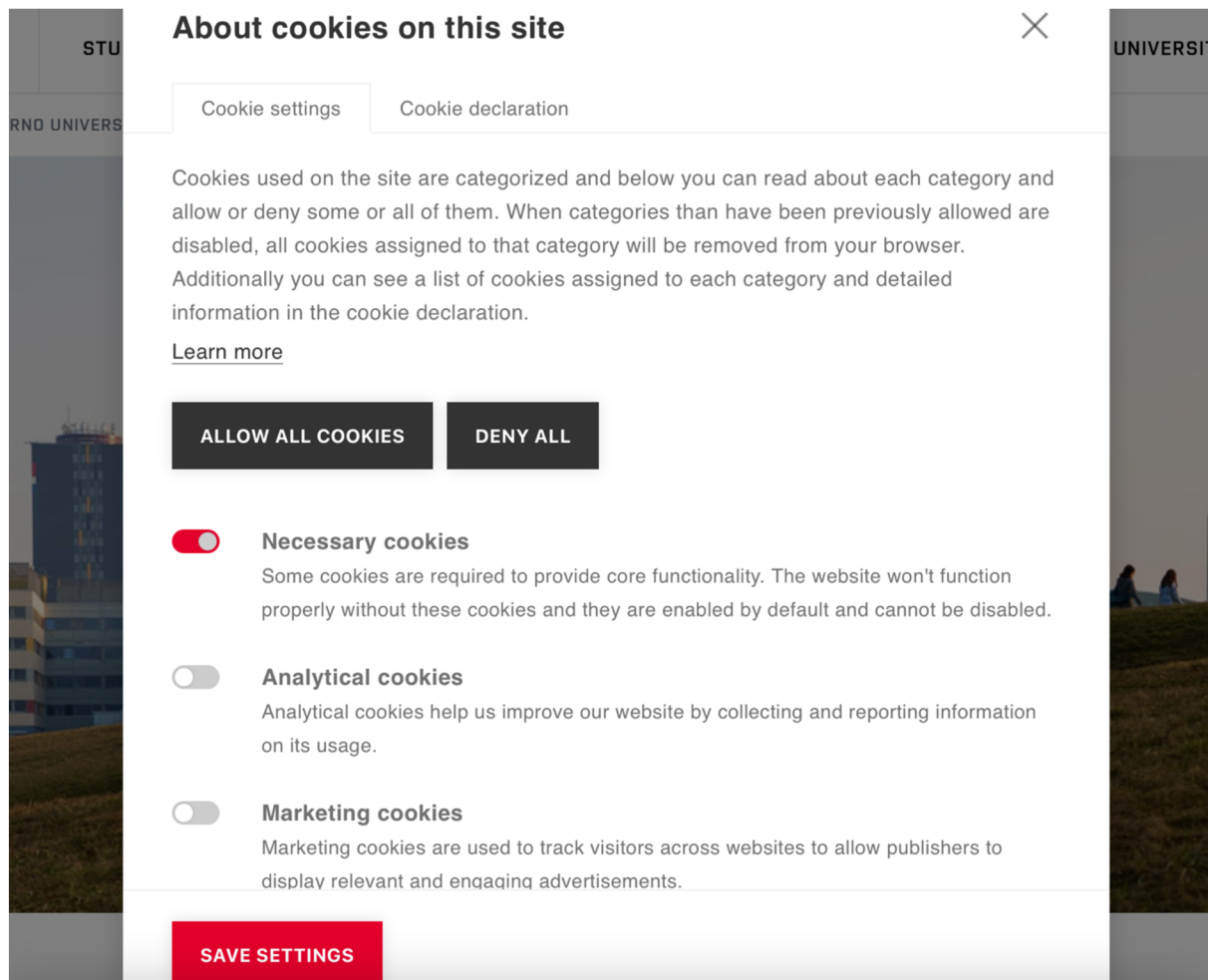
Figure 4. Cookie Consent (**BUT**, 2022)

Figure 4 provides an example of a cookie consent notice that meets legal requirements. The website provides the user with the choice to either accept all cookies or to only select certain cookies. It also provides detailed information about the purpose of each category.

To sum up, it is vital to check the local cookie requirements when localizing a website. In the EU, it is important to remember to provide detailed information about the cookies used on the site. If cookies are necessary for the website to function properly, they should be classified as required. All other categories must be optional.

2.4 Region and Language Switcher

Region and language selection are among the most important elements to consider when creating a multi-language website. When visiting a website, users should have the option to switch to another locale or language. In website development, the button that allows users to change the region is called a language switcher. The language switcher is typically located in the header or footer of the page. It can take the form of a dropdown menu with country flags, or a dropdown menu of languages with their original name. Alternatively, the switcher may be found as a region button that opens another window or a list of languages in the footer of the page (Evertz, 2023; Peham, 2023).

One of the most important aspects of designing a website for a global audience is ensuring that the language selector is noticeably displayed. This way, even if the website loads in a foreign language, users will be able to easily find the language switcher and change to their preferred language. In an ordinary website, the most convenient place to place a language switcher is the header of the footer (9 tips for designing a multi-language website, 2023).
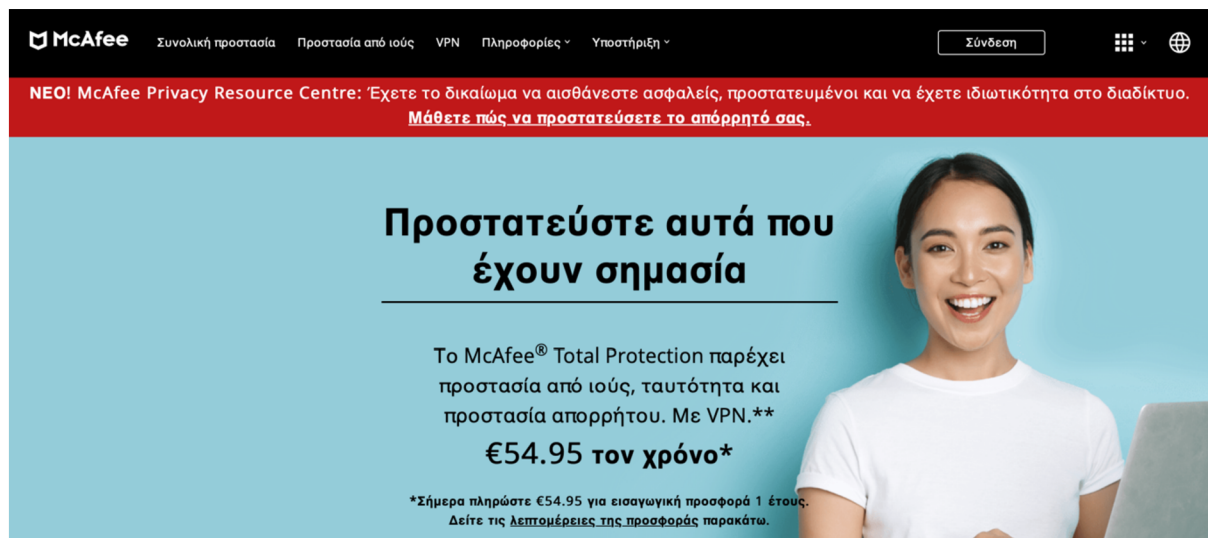

Figure 5. Language Switcher Location (McAfee, 2023)

Figure 5 displays an example of an easily locatable language switcher. A globe icon, situated in the header of the webpage, is used to switch between languages. Even though the page is in a foreign language, the button can still be found within a few seconds.

Another important factor to consider is the use of flags on websites. Many websites use flags to indicate the available languages. On the one hand, many languages are often associated with country flags, which can make it easier to find the desired language. On the other hand, using flags can be 'quite a sensitive topic as it can touch on a number of cultural issues' (Evertz, 2023: para. 5). There are several reasons to avoid the usage of flags in language switcher. The first reason is that flags represent countries, not languages. It is therefore only appropriate to use flags when selecting a country, not a language. Secondly, some countries have more than one official language. For example, in Switzerland, there are four national languages that are spoken throughout the whole country (Sumner, 2021). Additionally, a few languages (for example, English) are spoken in more than one country, so it would not be accurate to use the flag of one country as a symbol for the language. And, last but not least, it must be remembered that not all visitors are able to recognize a flag (9 tips for designing a multi-language website, 2023).

When the number of available regions and languages reaches a certain point, using dropdowns and a list of languages in the footer may not be ideal from a UX perspective. In this case, it may be better to use a dropdown with a search feature or a region selector button that opens a new page with available regions and languages.
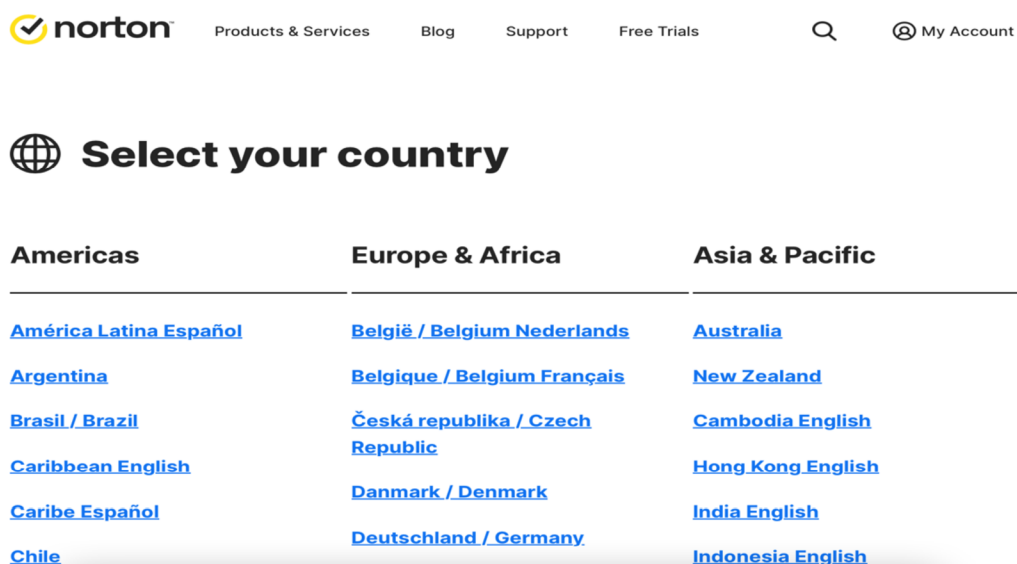

Figure 6. Region Selection Page (Norton, 2023)

Figure 6 illustrates an effective region selection page for a website. The website is available in three geographical sections, Americas, Europe and Africa, Asia and Pacific, and in a high number of languages. Some countries offer two or more choices of languages.

In conclusion, it is important to put a language selector in a prominent place on a multilingual website, so that visitors can easily find it. Additionally, it is best to avoid using flags to represent languages, and instead, use the actual names of the languages. For multinational corporate websites, the optimum solution is to use a region selector button that opens a new page with available regions and languages.
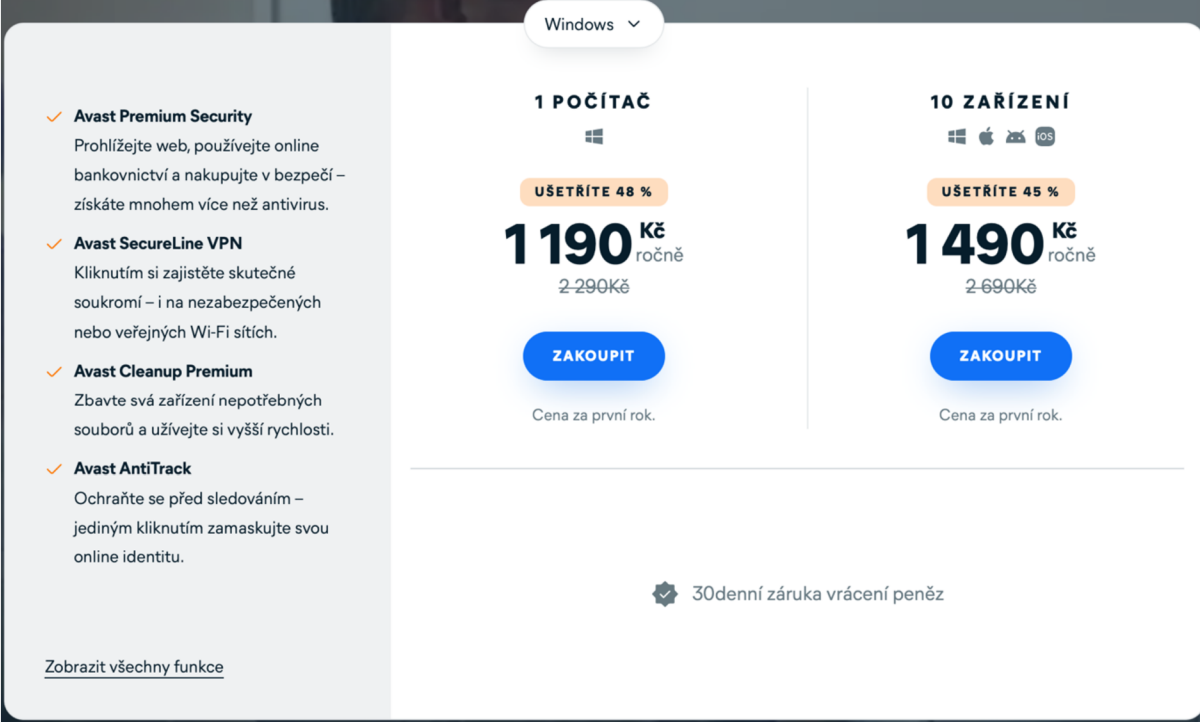
2.5 Currency

Pricing and currency play a vital role in every e-commerce website. A potential buyer always looks at the price of the product before deciding whether they can afford it (Dopson, 2022). If the price of a product is displayed in a foreign currency, shoppers may have difficulty converting the price into their local currency. Therefore, displaying prices in local currency can increase sales and the overall popularity of an online shop. When a website sells products in a foreign market, it needs to take into account various factors relating to currency and pricing.

First and foremost, it is essential to research the local market to ascertain which currency is used in the country. If a company's currency is different from the currency used in its home country, it should use exchange rates to exchange between the two. There are currently several tools available to developers to assist with currency conversion. An example of such a tool is Google Exchange API, which provides live currency conversion. However, it is important to keep in mind that the 'price is only approximate'. Exchange rates fluctuate, and the final amount is determined at the time of the payment by the credit card company, bank, or payment provider that the client used (Nerush, 2018).

Secondly, it is important to remember that each currency has its own symbol. Therefore, after the currency exchange, the website should display the price in the local currency, along with the notion of the currency. However, this is not as straightforward as it may seem, due to the fact that some currencies use symbol codes to represent the currency, while others are represented by letters in their locale's language. However, the biggest problem with currencies is that one symbol can represent multiple currencies, depending on the context. To avoid this issue, one might say that the safest solution is to use the ISO code of the currency (Ashour, 2022).

Lastly, when displaying prices on a website, it is important to be aware of the local conventions regarding the representation of large numbers and fractions. In English-speaking countries, thousands are typically separated by commas, and fractions are denoted by a point (Ashour, 2022). By way of comparison, in the Czech Republic, fractions are denoted by a comma and thousands are usually not separated (Decimal Separators: Points or Commas, n.d.).

Figure 7. Pricing and Currency (Avast, 2023)

Figure 7 shows an example of a product cost in Czech koruna currency. The price is shown in local currency using its currency symbol. The symbol is placed on the right of the amount which is typical for this country.

To conclude, it is imperative to research the local market and check the currency and number conventions used there. If the currency differs from the original, it should be exchanged according to the exchange rate. The amount should be denoted with the appropriate currency symbol or ISO code.

2.6 Systems of Measurement

The dimensions of products are an important factor for consumers when shopping online, as this information is necessary for estimating shipping costs. Systems of Measurement (2020) states that at the present time, nearly all counties use the metric system. The metric system is made up of three base units: kilogram, meter, and litre. According to Helmenstine (2019), the metric system is often used interchangeably with the International System of Measurement (SI), which is made up of seven basic units of measurement and is frequently used in scientific measurements. The only country that does not use the metric system is the United States, which uses the English system of units (Systems of Measurement, 2020). The English system uses other units like inches and cups. For this reason, when designing a website that will be accessible in parts of the world, the developers should take into account that people living in the US are probably not familiar with the metric system and the particular localized version of the website should convert the dimensions into the English system.

2.7 Images

Images play an important role in any website. Austin (n.d.) points out that 'a picture is worth a thousand words when it comes to global marketing' (Austin, n.d: para.1). However, the use of visual components is a sensitive topic because images and other graphical components can be interpreted differently depending on the culture in which they are viewed (9 tips for designing a multi- language website, 2023). As a result, it is essential to approach the process of image localization with care to avoid any potential cultural issues. This section will provide an overview of best practices for image localization.

The first step in localizing images for a website is to research the target market. Different cultures may have different understandings of the same term. Consider, as an example, the usage of gestures in images. The thumbs-up gesture is a positive signal that is commonly used in many cultures to signify a job well done. At the same time, in the Middle East, this gesture represents hitchhiking (Cotton, 2013). Consequently, the best practice is to 'avoid hand gestures and symbols, and body parts in general' when creating images for a website that will be viewed by people from a variety of cultures. (Dino, 2022).

When creating marketing material for different regions, it is important to use images of people that will be recognizable to the local audience. For instance, in Asia, this would entail using images of Asian people, while in the Middle East, pictures of people from the region are more likely to be relatable to viewers. In the United States (US), the best practice is to use photos 'with multi-ethnic and multiracial people' to present diversity (Dino, 2022). Gender equality is also a sensitive topic, and it is therefore recommended to only use images depicting gender equality in countries where homosexuality is legal or widely accepted (9 tips for designing a multi- language website, 2023).

Figure 8. McDonald's Career Page in Japan (McDonald's Japan, 2023)

Figure 8 displays an accurate portrayal of a recruiting page from an Asian website. The individuals pictured appear to be of Asian descent, and it seems as though the company has made a significant effort to ensure the image is culturally relevant.

Another critical factor to consider is the use of colour. Austin (n.d.) observes that 'colors are interpreted differently in different regions', and it is important to consider this when choosing colours for images and websites. An example of a colour that can be problematic is red. This colour can represent different things in different cultures, such as love, prosperity, or death (9 tips for designing a multi-language website, 2023). Another example is the yellow colour, which is 'considered to be lucky in most Western countries', while, in France, it might express jealousy (Austin, n.d: para. 8).

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To sum up, it is vital to use culturally appropriate images when localizing a website. This includes avoiding hand gestures, symbols, or body language that could be interpreted differently in different cultures. When a website uses images of people, the recommended approach in the US is to depict individuals of multiple races, whereas in other regions, it is advised to display images of individuals from the same cultural background. Lastly, web designers should not forget about colours as they can be interpreted differently in different regions.

2.8 About Page

The About page is a section of a website where the users can learn more about the company. It is highly recommended that corporate websites include this page as it provides an overview of the company. There is no single prescribed format for an about page on a website, but there are some generally accepted best practices that website creators may follow. According to Hernandez (2022), an about page 'should offer an up-front and honest portrayal of your company, its story, and your values'. The first paragraph should start with the mission statement or a short history of the company. Hernandez (2022) suggests keeping the information simple and avoiding the usage of 'industry jargon and confusing' words (Hernandez, 2022). Then, the company should provide a summary of services offered to customers, as well as support statistics such as the number of customers, revenue, and market share. This part of the website should have an 'aesthetically pleasing design' to encourage the readers to read more about the company (Hernandez, 2022). In the final part, the page can include future plans, information about the leadership team, the number of employees, location of the headquarters and contact details (Craig, 2023; Hernandez, 2022).

Unfortunately, many companies neglect to localize this section of their websites. This can be confusing for users who might be redirected to the main (usually English) version of the page after clicking on the assigned hyperlink. One of the reasons for this could be that this page is rarely visited compared to other parts of the website.

In conclusion, if the company wants to localize its website, it would be more effective to localize all parts of the site, including the About us page. The 'About page' should include basic information about the company such as history, mission statement, main locations and contact details.

2.9 Abbreviations, acronyms, and terms

There are two main challenges when localizing abbreviations, acronyms and terms. First, it can be difficult to distinguish between abbreviations, acronyms and terms. Second, the words in the SL and TL may be spelt differently (Localizing Acronyms, n.d.).

There is potential for confusion among these three types, as they may appear similar. Turkel (2023) defines an abbreviation as a 'way to shorten a phrase, while an acronym is the a new pronounceable word' that is formed by a combination of the 'first letter (or letters) of each word' in the initial phrase. For instance, the word *exam* is an abbreviation for 'examination', whereas *NASA* is an acronym, and it stands for National Aeronautical and Space Administration (Turkel, 2023). A term, on the other hand, is a 'word or expression with a particular meaning'. For example, the term *multimedia* refers to any technique that combines sound and images (Term, n.d.).

Internationalization can help to make words that belong to this group sound the same in many languages, but there is still a great deal of them that sound and are written completely differently in the TL. Localizing Acronyms (n.d.) discusses three different types of situations that can occur during the translation process. The first type is when the acronym in the SL and TL are written the same (e.g. EU is used in both English and Czech languages) or when the terms are commonly used in daily life (e.g. MRI). The second situation is when the acronym is written completely differently in the TL and the translator needs to find the equivalent. For example, the World Health Organization (WHO) in the Czech language is called *Světová zdravotnická organizace* (SZO). Finally, there is a case when the term is 'fully translated because there is no localized version of it in the TL'. For example, the acronym of POW (Prisoners of War) does not have an equivalent in the French language, thus the meaning of it should be literally explained (Localizing Acronyms, n.d.).

To sum up, it is important to understand the difference between an abbreviation, an acronym, and a term to be able to find the appropriate equivalents in the TL. The abbreviation is a shortened form of the original word, the acronym is a new word formed from the first letters of the original word, and the term is a word or expression with a specific meaning (Term, n.d.; Turkel, 2023). There may be cases where the words in the SL and TL differ, which is why the translator may need to explain the meaning of the original value in a few words (Localizing Acronyms, n.d.).

2.10 Summary

The main goal of Chapter 2 was to present a range of website components that must be considered during the localization procedure. It was suggested that, although some languages share the same direction of text, there may still be slight variations in the website design. The chapter also presented the fact that the US version of a website should show the customer dimension in English units because most people living in the US are not familiar with the metric or SI system of measurement. Furthermore, it mentioned the importance of the local cookie requirement with an example of the EU Cookie Legislation. Next, the chapter discussed the best practice in terms of the location of a language selector, highlighting the recommendation to refrain from utilizing flags as a representation of languages. As far as currency is concerned, it is vital to research the local currency market and understand the currency and number agreement used in that market. Companies that use images on their corporate website should avoid using images that contain hand gestures, symbols, or body language that have the potential to be construed diversely within various cultural contexts. It also recommended to localize all aspects of the site, such as the 'About Us' page, which provides basic information about the company. The chapter ended with a reminder of the difference between an abbreviation, an acronym, and a term. It also noted that some acronyms may not exist in the TL, which means that sometimes the literal meaning of the word needs to be explained.

3 METHODOLOGY

The practical application of this thesis will focus on evaluating the accuracy of selected companies' corporate websites, identifying significant factors proposed in Chapter 2. It is important to note that the goal of this analysis is not to appraise the superiority of one website over another but rather to ascertain whether the two corporate websites adhere to the principles of the localization methods as outlined in the theoretical part of the thesis.

3.1 Selected companies overview

The two companies that were chosen are SAP and Salesforce. These two companies were chosen because they are both multination corporations that work in the same industry of enterprise software and cloud computing. They also both have professional corporate websites that are localized for multiple regions and languages. What is interesting is that the companies were founded in two different parts of the world – SAP in Europe, and Salesforce in North America. This makes it an interesting case study to see how companies from different regions approach localization.

SAP is a leading multinational company that specializes in the development and deployment of enterprise application software for management and business purposes. The IT company was founded in 1972 by a group of five former IBM employees and was the first to establish the 'global standard for enterprise resource planning (ERP) software' which is used up to date (Livingston, 2022; Hasso Plattner, n.d.; What is SAP, n.d.). Before the invention of ERP, data was maintained locally at each department within an organization (e.g. sales, finance, inventory). This storage method was ineffective as it complicated the process of data exchange between the various departments. For example, the sales department in a company did not have real-time information about the availability of a certain product in the warehouse, and the only way to check it was through a series of phone calls which resulted in delays and loss of revenue. The idea of SAP was to develop a centralized system where the data is kept in a central server and shared with all departments in a company. The introduction of SAP software products represented a major breakthrough in enterprise software, and by 2010, these products were being used by more than 75,000 customers in 120 countries around the world (Livingston,

2022). In 2015, the company introduced a newer version of their ERP system, SAP S/4HANA Cloud, which included cloud capabilities, artificial intelligence (AI), and machine learning (SAP S/4HANA, 2022; What is SAP, n.d.). According to the corporate website of the company, nowadays, 'SAP has more than 230 million cloud users, more than 100 solutions covering all business functions' including finance, human resources (HR), and supply chain management (CRM). The company employs a large workforce of over 105,000 employees with its primary office located in Wallforf, Germany (What is SAP, n.d.).

Salesforce is an international company that is renowned for its innovative CRM platform. Beal (2022) describes CRM as 'software that manages all the ways a customer interacts with a business' used mainly 'by the sales and customer service departments' within a company (Beal, 2022). The company was established in 1999 by a group of four developers in San Francisco, California (The History of Salesforce, 2022). Since the creation, the company has undergone several changes that have helped to shape its product into its current form. The first is the production of Sforce 2.0, 'the world's first platform for creating, hosting and executing client/service applications'. The application allowed developers to customize the business logic and user interface of the core service to support the specific requirements of each business (Sforce 2.0 — Industry's First On-Demand Application Server, 2003). The introduction of the AppExchange service in 2005 was the second change (The History of Salesforce, 2022). AppExchange is a cloud marketplace with various add-ons such as third-party applications, tools that help to build custom pages without code, and pre-build baseness processes and templates (What is the APPEXCHANGE? n.d.). Last but not least, there is the launch of Einstein in 2017 which marked a major milestone in the development of artificial intelligence (AI) technology for CRM applications (The History of Salesforce, 2022). Salesforce was ranked as the number one CRM provider between the years 2017 and 2022. Moreover, according to Glassdoor UK, in 2023, Salesforce is considered one of the best places to work in the UK, coming in the ninth place after Google and Mastercard (Best Places to Work UK 2023, 2023).

3.2 Methodology of analysis

Each website will undergo analysis and evaluation to determine its compliance with the recommended localization methods. The analysis will mainly focus on the following methods of localization: Encode and Fonts, HTTP Cookies, Region and Language Switcher, Currency,

and Images. In the case of Encode and Fonts, the utilization of UTF-8 encoding, which is considered the optimal choice for multinational websites, will be scrutinized. The analysis will evaluate the encoding of the websites across five distinct locales commonly accessed by both sites, namely Canada, Brazil, the United Kingdom, India, and Japan. The character encoding of the website will be verified by executing the command *Document.characterSet* in the console of Safari developer tools (Document characterSet property, 2023). With regards to HTTP Cookies, the evaluation will be conducted on websites to ensure that they conform to all provisions of the EU Cookies Law, except for the fourth provision which prohibits the storage of web cookies on the user's device in case of refusal. Due to the legislation's focus on the websites operating within the EU, an assessment must be performed on a locale within the EU. Nevertheless, it was noted that the cookie notification was displayed in the local version when accessing the websites in one of these regions. Consequently, the United Kingdom locale was chosen for analysis. Regarding the methodology of the Region and Language Switcher, the assessment will be conducted to ascertain whether the switcher is readily accessible and the avoidance of the use of flags as a representation of languages on the website. Furthermore, during the practical phase, it will be ascertained whether the websites accurately display prices in the local currency. The analysis will examine the prices in three distinct locales that use currencies other than the USD and EUR, specifically focusing on the United Kingdom, Canada, and Japan. In order to ascertain the prices of SAP products, it is necessary to access a separate SAP Store website where individual users and companies can purchase the products offered by the company. For evaluation of the price in SAP, the page of *SAP Digital Boardroom* will be tested. In Salesforce, the *Sales Cloud* product page will be analyzed. Ultimately, the assessment will be conducted to ascertain whether the websites refrain from employing hand gestures, symbols, or body language in their imagery, and if individuals belonging to the identical cultural group as the chosen locale are depicted. Similar to encoding, the website shall be subjected to image analysis in five distinct cultural locales across the globe. In SAP, the analysis will be conducted on the page of *Small and Midsize Enterprise* as it exhibits a high degree of similarity across selected locales. In Salesforce, the analysis will focus on the primary webpage of the website, specifically a small section that displays the most frequently visited product categories.

4 CHOSEN COMPANY WEBSITES ANALYSIS

4.1 SAP website analysis

The first point of the analysis deals with the issue of **encoding** across the five selected locales.
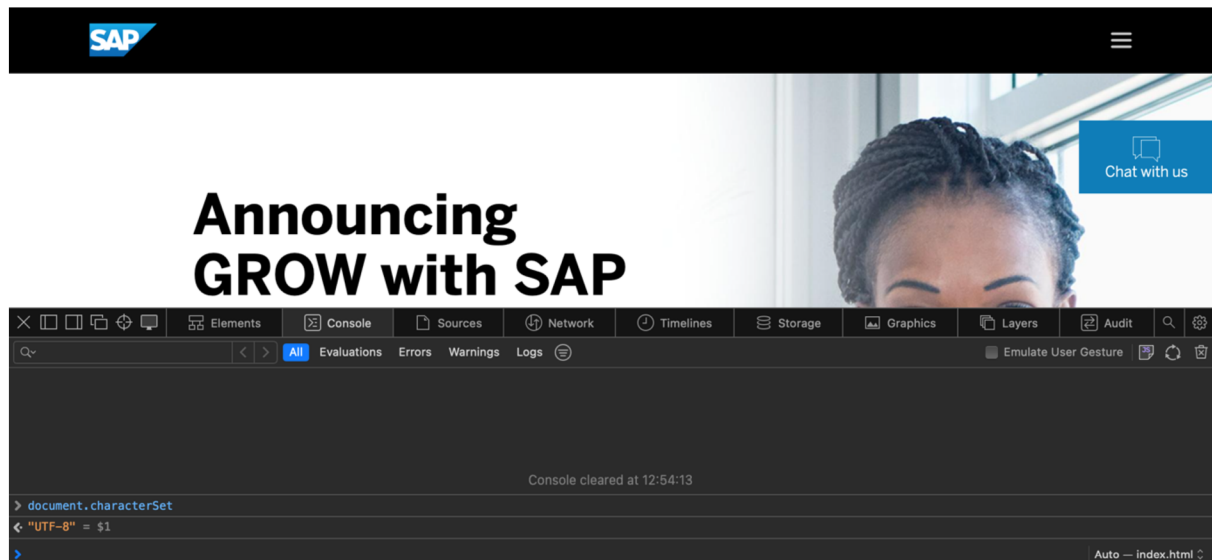

Figure 9. SAP Encoding Developer Tools (SAP Encoding, 2023)

Figure 9 presents an example of obtaining the encoding of SAP United Kingdom (UK) using the browser developer tools. The displayed result confirms that the website is using UTF-8 encoding. After executing the same command on other versions of the website it was verified that all five locales use the best approach of UTF-8 encoding.

The second point of my analysis addressed the issue of adherence to all stipulations of the **EU Cookie Law**. When opening the SAP website for the first time, at the bottom of the page, it informs the users that it uses cookies. Upon selecting the "View and change cookies preferences" option, the website displays a subsequent window.
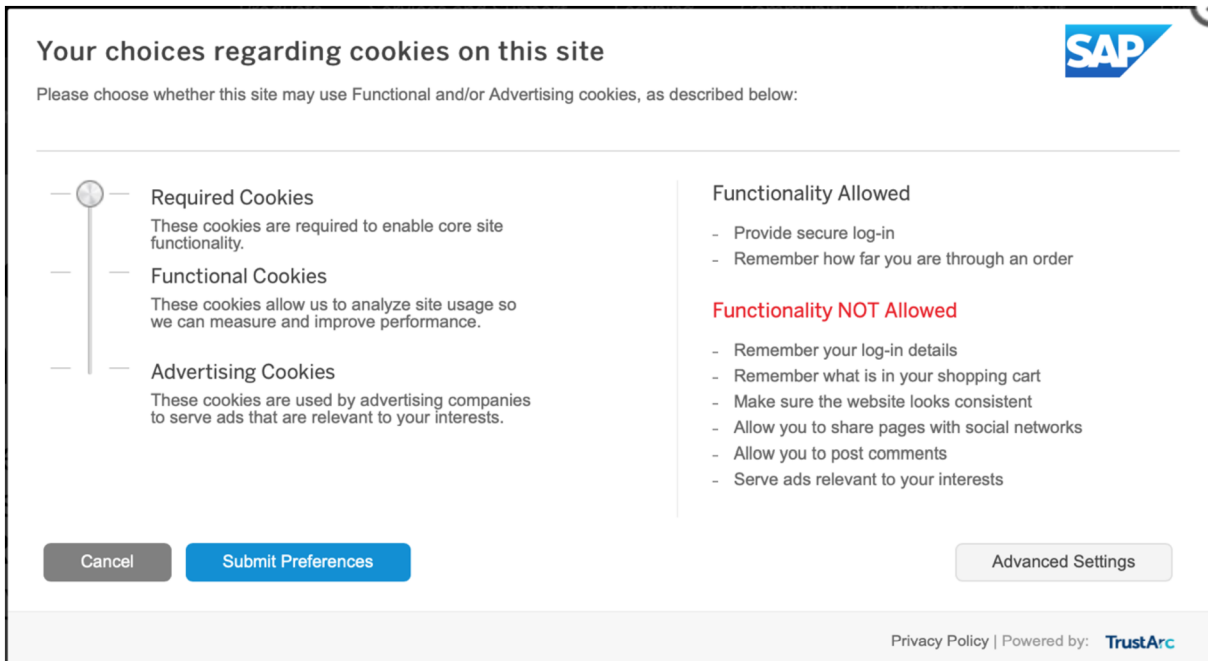
Figure 10. SAP HTTP Cookies (SAP UK, 2023)

It can be seen in Figure 10 that the website allows users to accept or reject the use of cookies and it represents the reasons for storing cookies. As a result, it can be said that the corporate website of SAP multinational company complies with the EU Cookies Law.

The third point of the analysis deals with the issue of the **language switcher** in terms of the easy access and use of national flags that symbolize languages. For example, upon accessing the SAP website with RTL Israel language, the language switcher featuring the Israeli flag is situated at the upper left-hand corner of the page.

Figure 11. SAP Region Swither (SAP IL, 2023)

Figure 11 illustrates an example of clicking the European region. The website subsequently displays a list of countries with their origina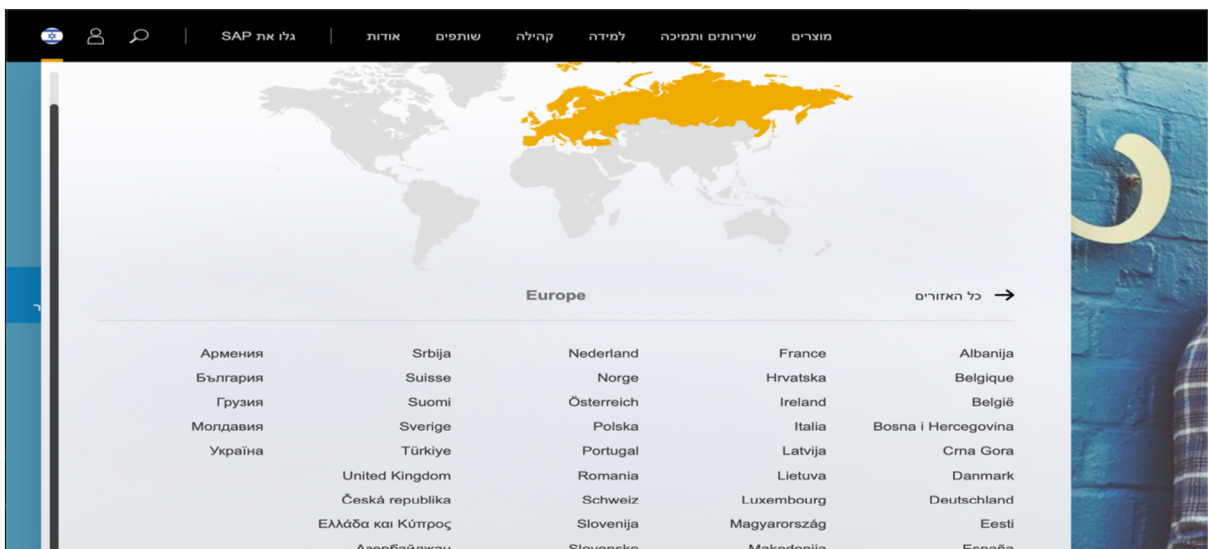l names. It can be stated that the language switcher is easily accessible even in a foreign language. Furthermore, the website designers used regions and country names and avoided using flags.

The fourth item of the analysis verifies the accuracy of displayed **prices** in the page of SAP Digital Boardroom. The version of the United Kingdom demonstrates precise pricing with a suitable GBP code signifying the pound sterling currency. Upon transitioning to the Canadian locale, the amount and the ISO symbol transformed into CAD (Canadian dollar).
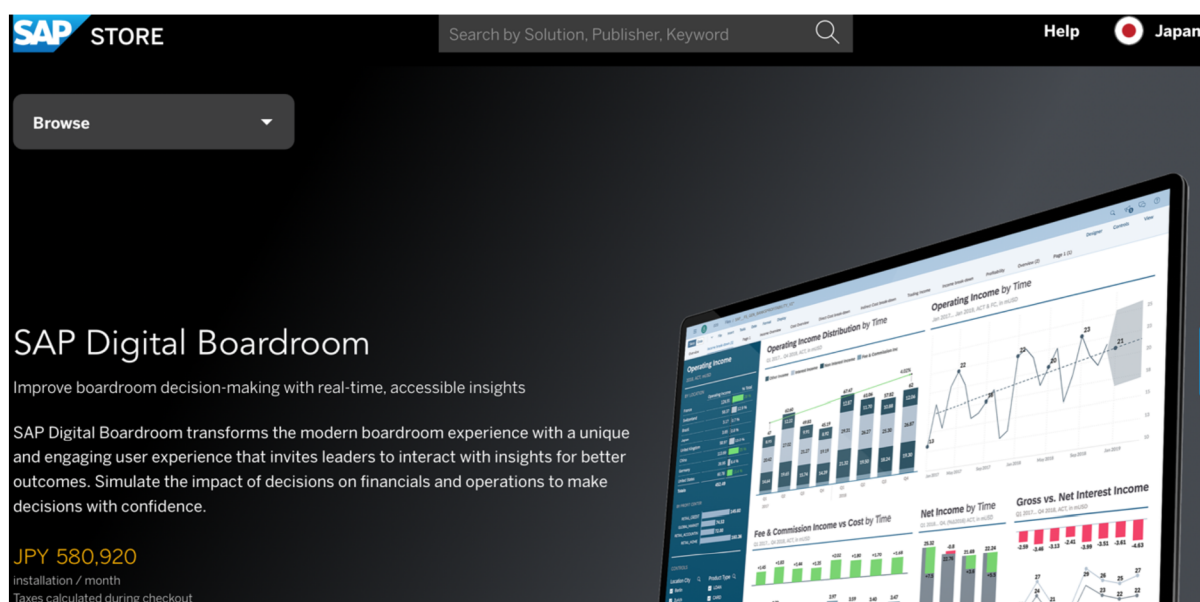
Figure 12. SAP Store – Japan (SAP Digital Boardroom JP, 2023)

Figure 12 demonstrates the third locale of Japan. The website displays a distinct amount and the JPY (Japanese yen) ISO currency code. Consequently, one might say that the online store of the SAP company is well-localized in terms of currency and pricing.

The last item in the analysis focuses on **images** and their adherence to the guidelines from Chapter 2. After looking at the UK version, it was observed that it portrays individuals with a European aesthetic. Following this, it was discovered that regions of Canada, Brazil, and India

employ comparable visual depictions featuring individuals of multiple ethnic and racial backgrounds to convey the concept of diversity (Dino, 2022).

Figure 13. SAP Images – Japan (SAP Small Enterprise, 2023)

What is surprising is that the Japanese version employs an identical depiction as its preceding three counterparts, as illustrated in Figure 13, instead of featuring individuals with an Asiatic appearance. Regarding hand gestures and symbols, all five locales avoid using any instances of them.
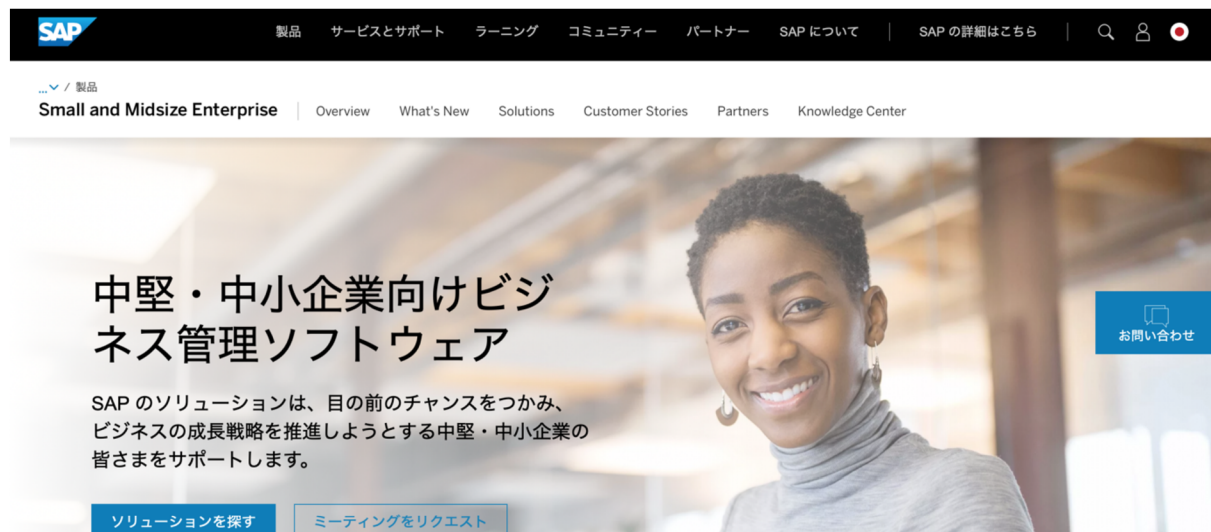
4.2 Salesforce website analysis

The first aspect of the analysis deals with the issue of website **encoding**. Similar to the evaluation process in SAP, the examination of the encoding is scrutinized through the utilization of browser developer tools.
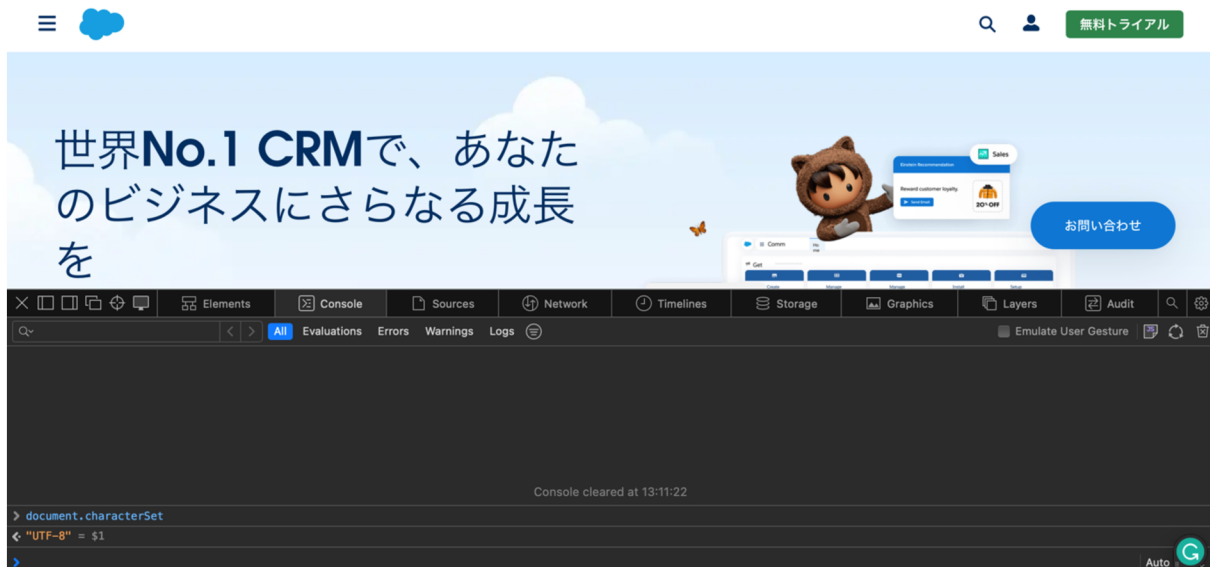
Figure 14. Salesforce Encoding Developer Tools (Salesforce Encoding, 2023**)**

Figure 12 shows an example of checking the encoding of the Japanese version of the Salesforce website. It has been confirmed that each of the five versions utilizes identical character encoding of UTF-8.

The second aspect of the examination pertained to the matter of compliance with all provisions of the **European Union Cookie Law**. Upon initial access to the website, a cookie notification is prominently displayed in the central area of the page. Upon selecting the "Cookies Consent Manager" button, the website displays a subsequent window.
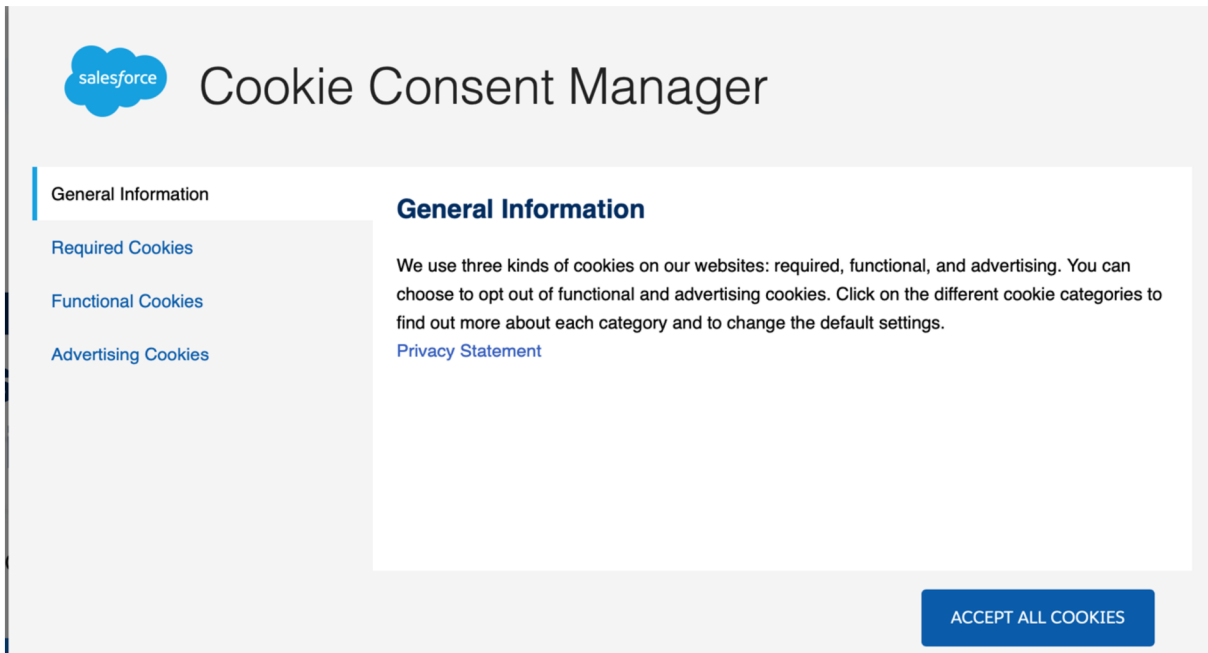
Figure 15. Salesforce HTTP Cookies Selection (Salesforce UK, 2023)

In accordance with the data presented in Figure 13, it could be argued that the corporate website of Salesforce multinational enterprise conforms to the regulations outlined in the EU Cookies Law.

The third item of the analysis deals with the issue of the **language switcher**. The Salesforce website has a language switcher situated in the header section of its pages, denoted by an icon depicting a globe. The icon remains in the same location across all locations, indicating its accessibility even in foreign languages.

Figure 16. Salesforce Region Switcher (Salesforce FR, 2023)

As shown in Figure 14, once clicking the switcher, users are presented with an option to choose their country of preference. The switcher does not display any flags to prevent potential cultural conflicts.

The fourth component of the analysis ascertains the precision of exhibited **prices** in the page of Sales Cloud. Within the United Kingdom locale, the appropriate £ symbol of the pound sterling is used to denote the amount, as it is the currency employed in that locale.
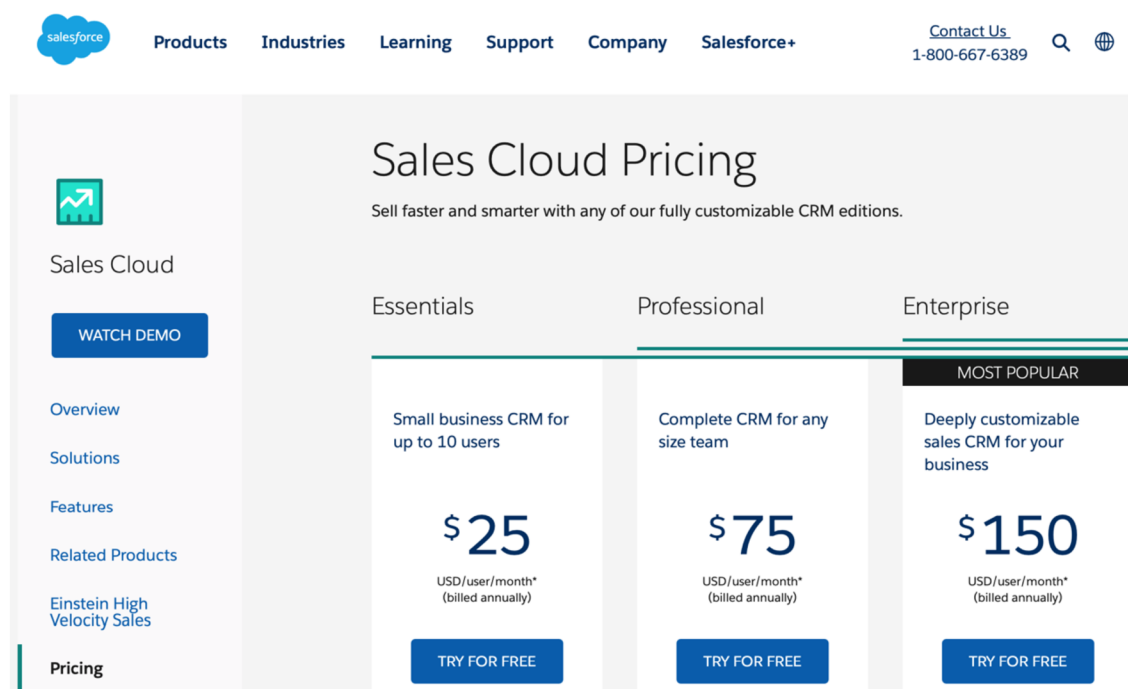
Figure 17. Salesforce Pricing - Canada (Salesforce Sales Cloud CA, 2023)

However, once the locale is switched to Canada, the $ dollar symbol is displayed alongside the UDS code which represents the United States dollar as shown in Figure 16. Despite the fact that the US dollar is extensively used and considered the 'official reserve currency of the world' since 1944, it would be more advantageous to display prices for customers in their local currency, which is more familiar to them in their everyday transactions (Best, 2022). Due to the Canadian dollar being the official currency of Canada, it can be concluded that the Salesforce website failed to localize the currency in this locale. As far as the Japanese locale is concerned, the corporate website displays the 円 symbol indicating the Japanese yen currency.

The fifth and last item in the analysis focuses on **images** and their adherence to the guidelines from the theoretical part of the paper. The regions of Canada, Brazil, and the UK utilized visual

representations that showcased individuals from diverse racial and ethnic backgrounds (Dino, 2022).

Figure 18. Salesforce Images - Japan (Salesforce Japan, 2023)

The depiction of individuals from indigenous cultures, as well as the inclusion of diverse gender and age groups, is demonstrated in both the Indian and Japanese locales of the Salesforce website. This is exemplified in Figure 18 of the Japanese locale. The images chosen in all five locations did not incorporate the use of body language or symbols, in alignment with the theoretical framework outlined in the thesis.

4.3 Summary

This chapter analyzed the localization accuracy of SAP and Salesforce corporate websites, identifying significant factors proposed in the first part of the thesis. Generally, both companies followed the rules with the deviation of currency and images. As far as the localization of currency is concerned, it has been found that the Canadian version of the Salesforce website has exhibited an error in terms of currency presentation, as it presented prices in US dollars, rather than the official currency of Canada, which is the Canadian dollar. Regarding the localization of images, it could be posited that the Japanese version of the SAP website exhibited a partial deficiency in adhering to the principles outlined in the theoretical framework. This version of the website maintained the same depiction used in its previous three locales, rather than portraying characters with an Asiatic appearance that would have been more suitable.

CONCLUSION

In conclusion, this paper discussed the importance of the localization process and introduced the readers to the most common methods of localization. The theoretical part of the thesis explained the importance of a corporate website and introduced the readers to the history, definition, pragmatics, and goal of localization. Furthermore, it explained the concept of localization within TS and other aspects such as the difference between localization and cultural adaptation. Moreover, it outlined the major localization methods and provided a detailed overview of the most common localization mistakes and recommendations for optimal best practices. The practical part of the thesis focused on evaluating the localization accuracy of SAP and Salesforce corporate websites and proposing areas for improvements.

The first chapter specified that web localization emerged in the late 1970s during the transition of the shopping industry to the Internet. It also noted that localization includes both content translation and product customisation for a specific target audience. Sometimes in the localization procedure, pragmatic issues may occur that can be solved by examining the content of the completed website, rather than focusing on individual components. Moreover, it explained the difference between localization and internationalization, which attempts to simplify the process by attaining maximum cultural neutrality. The paper also highlights the significant role that a corporate multilingual website and mission statement play in the success of any company.

The second chapter discussed the most crucial localization methods and elucidated the optimal strategy for localizing multilingual websites. Firstly, it suggested that it is crucial from the beginning to create a website that would support both LTR and RTL languages, as it can prove to be a challenging task in the final stages of website development. Secondly, it was recommended to refrain from using any character encoding schemes other than UTF-8 or UTF-16, as it is widely compatible with numerous languages. Thirdly, it presented the principles for constructing a website that utilizes cookies within the EU jurisdiction. Furthermore, the paper explained the importance of placing the language selector in a prominent place where visitors can easily find it even in a foreign language. The paper also highlighted that people living in a certain locale are accustomed to a particular currency and system of measurement. Therefore, it is advantageous to adapt the content to the chosen locale. Finally, depending on the locale,

the localizers are advised to use images of people from the same culture or from various ethnic and racial groups to effectively communicate the idea of diversity.

The final chapter scrutinized the degree to which the two designated corporate websites conform to the criteria set forth in the analysis methodology. The findings indicate that the website's translators and localizers effectively performed their tasks during the process of website localization. The analyzed localization was only found to have two imperfections, specifically in the areas of currency and images. These were observed in the Salesforce website for Canada, where prices were not displayed in the country's official currency, and in the Japanese edition of the SAP website, where individuals with Asiatic features were not depicted.

The debate regarding the optimal method for achieving a localized web presence has yet to be resolved. There is still a lot of work to be done. Further investigation into the area of theory and methods of localization is desirable. It would be advantageous to investigate additional localization strategies that encompass a range of factors such as delivery options, addresses and telephone formats, times and dates, and payment methods.

ROZŠÍŘENÝ ABSTRAKT

Podniky se už dlouho snaží rozšířit své trhy do globálního měřítka. V počátcích mezinárodního obchodu bylo poměrně obtížné navazovat spojení mezi jednotlivými zeměmi kvůli nedostatku spolehlivých komunikačních systémů. Avšak situace se změnila, když se internet stal globálním zdrojem komunikace. Internet zavedl nový způsob prodeje výrobků a služeb pomocí webových stránek. Cílem této práce je rozšířit současné znalosti o lokalizaci webových stránek. V práci je definován proces lokalizace v rámci translatologie, její vznik a rozdíl mezi lokalizací a kulturní adaptací. Kromě toho bakalářská práce popisuje klíčové metody lokalizace, zabývá se typickými chybami při lokalizaci a poskytuje doporučené postupy. Praktická část provádí analýzu lokalizace vybraných webových stránek s důrazem na jejich funkčnost. Výsledky práce by pomohly vývojářům a překladatelům lépe porozumět procesu lokalizace a vyhnout se chybám v budoucích projektech.

První kapitola je zaměřena na teoretickou část lokalizace. Tato kapitola zahrnuje definici lokalizace webových stránek, historický vývoj a praktické problémy, které se mohou objevit v kontextu vícejazyčných webových stránek. Kromě těchto aspektů je v této kapitole zmíněn význam webových stránek včetně poslání a funkce firemní značky. Tato část také vymezuje pojem lokalizace v oblasti translatologie a naznačuje, že existují značné neshody ohledně role lokalizace v TS. Někteří vědci tvrdí, že lokalizace zahrnuje pouhý lingvistický překlad, zatímco jiní se snaží lokalizaci přeměnit ve zcela nový fenomén. Kapitola rovněž uvádí a vysvětluje, že metoda adaptace se obvykle používá v případě, kdy je třeba přeložit informaci, která obsahuje kulturní kontext, zatímco transliterace je postup, který zahrnuje převod jednotlivých znaků do podoby textu, který by byl snáze čitelný.

Druhá kapitola teoretické části popisuje různé metody lokalizace, které je třeba zohlednit během procesu lokalizace webových stránek. Jedná se o rozvržení webu, kódování znaků a písma, HTTP cookies, přepínač jazyků, měnové a měrné systémy, obrázky, stránku o společnosti, zkratky, akronymy a odbornou terminologii. Každá metoda poskytuje podrobný přehled typických chyb při lokalizaci a také se zabávý doporučenými postupy. Tato kapitola dále zdůrazňuje, že během procesu lokalizace odborné terminologie mohou nastat případy, kdy se slovní zásoba používaná ve zdrojovém a cílovém jazyce liší. V důsledku toho překladatel potřebuje najít vhodný ekvivalent, použít parafrázi nebo vysvětlit zamýšlený význam

doslovným způsobem. Proto se zdůrazňuje doporučení zdržet se používání jiných schémat kódování znaků, než UTF-8 kvůli jeho rozsáhlé kompatibilitě s mnoha jazyky. Navíc bakalářská práce naznačuje, že uživatelé webových stránek z určité zeměpisné oblasti jsou zvyklí na určitou měnu a měrné jednotky. V důsledku toho je vždy užitečné přizpůsobit obsah webové stránky tak, aby vyhovoval preferovanému zeměpisnému místu.

Třetí kapitola uvádí krátký přehled vybraných webových stránek a popisuje metodologii analýzy, která se zaměřuje především na následující metody lokalizace: kódování znaků a písma, HTTP cookies, přepínač jazyků, měnové systémy a obrázky. Hlavním cílem analýzy je zjistit, zda jsou dvě zvolené webové stránky v souladu se závěry vyvozenými v teoretické části.

Čtvrtá kapitola provádí postupnou analýzu webových stránek pomocí uvedené metodologie a zjišťuje, zda obě zvolené internetové stránky dodržují zásady lokalizačních metod uvedených v teoretické části této práce. Výsledky naznačují, že obě společnosti zaměstnávají kompetentní překladatele, kteří prokazují specializované odborné znalosti v této oblasti. Byly identifikovány pouze dvě chyby, konkrétně v oblasti měnových systémů a obrázků.

 Téma zabývající se optimálními metodami pro dosažení vysoké úrovně lokalizace webových stránek je stále zajímavé pro lingvisty, překladatele, editory či pro provozovatele firemních stránek. Další výzkum a následné analýzy z oblasti teorie a metod lokalizace by se mohl zabývat rozšířením lokalizačních strategií, které zahrnují řadu faktorů, jako jsou možnosti doručení, adresy a telefonní formáty, časy a data, způsoby platby, a to všechno i s využitím umělé inteligence.

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