العنوان:

استخدام الذكاء الاصطناعي في ترجمة وسائل التواصل الاجتماعي

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The use Of Artificial Intelligence In Translating Social Media Case Study: Facebook

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Academic year :2021–2022

Dedication

We dedicate our dissertation work to my family. First, we thank God

for His blessings with special feeling to our parents for their

encouragement, support and prayers were behind our success, we

thank our parents on their continuous effort to reach to our

achievement.

To strong and gentle soul who taught me to trust in Allah, believe in

hard and be always proud of me to my parents .

To all friends whom have been standing by our side through their

prayers and help

To all our teachers in English department

Acknowledgements

Primarily all thanks to Almighty Allah for giving us strength, ability to understand and patients to complete this dissertation. We deeply and sincerely appreciate our parents for their unconditional love and support through all these years. We would like to thank our relatives and friends who shared their support in one way or another. We would like to express our sincere gratitude to our supervisor **YAHIAOUI Leila** for her kindness, patience guidance, enthusiastic encouragement, useful advices and critiques that were very helpful. We would like to thank our teachers who taught us for their efforts and hard work since 1st year. Finally, we would also like to thank the jury members for their time and precious remarks.

List of observations

MT: Machine translation

NLP : Natural language processing

NP: Noun phrases

UNMT : Unsupervised neural machine translation

MTA : Machine translation application

FTA : Facebook translation application

AI : Artifficial intelligence

FMT: Facebook Machine Translation.

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Chapter 1 Human introduction to artificial intelligence

Introduction :

   We live in a world where computers, phones and technology (Artificial Intelligence) have accessed and dominated most, if not all, aspects of life both personal and professional.

At the personal level, social media takes a huge part of our life growing to be almost a necessity in our daily routine. As a consequence of that growth, it felt the need to develope and improve the experience to meet the expactations of its user; using many tools to keep them satisfied with the services it provides. And since the main reason why people are attracted to social media platforms is the ability to know what's happening around the world and keep up with it, making the world connect together and let people from different nationalities and different cultures come together and that what made social media so popular and so successful.

   In the other hand, the diversity of nationalities and languages obliged social media creators to come up with a way to overcome the obstacles presented by different languages so that everyone can use their platforms and communicate easily regardless of the language used. First, they made sure to add as many languages as they can and give the choice to use it in any language their users want and with this step they reach more customers and more people to use what they offer. This single step made social media go viral because it became easy for everyone to use it regardless of the language they speak which made it so attractive. Though, adding more languages was not enough to connect the world together because you may use these platforms in your language but if what is posted is in a different language that you can't understand what the others think, try to say about themselves or about the world.

   For this reason, social media developers started to work on adding an option for their users to make it easier to understand what people who speak different languages want to say and in order to do that translating their content is their

emergency exit. In other words, they have to add a translation option to their platforms.

Due to the immense amount of content posted every day, it is impossible to hire translators to translate manually which lead the creators to develop programs to do the job faster and more efficiently using what is called Artificial intelligent (AI).

The social media giant, Facebook, started in 2004 as a simple communication tool between students of Harvard University to develop to what we know now as the most famous app worldwide. To reach its known position, it had to go through multiple researches using AI in an attempt to understand the mechanisms of the human mind to provide accurate translations and proved suitable contentWe live in a world where computers, phones and technology (Artificial Intelligence) have accessed and dominated most, if not all, aspects of life both personal and professional.

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Statement of the problem :

Social media are exchange platforms for culture news and information , it got a big impact in changing world view about crucial subjects and opinions , social media have a huge responsibility to take because it can be harming as it can be useful , especially when it comes to translating people ideas or opions about each other or about something happing in the world , and that goes through providing correct translation of their content , social media platforms needs to pay more attention to this side .

Objective of the study:

   translating is a difficult task for humans who already understand that during translation they are not just transform words from a language to another. they are also transforming culture mindset emotions, and so on which automated translation or AI translator can't understand ,how far social media creators couldn't make an IA translator understand all what we mentioned above, is really will come the day that IA translator can replace human translators

Research questions:

 Main question :

- How Artificial Intelligent translation works in social media ?

Sub questions :

- What social media use AI for in their platform   ?
- What are the positive and the negative side of the IA translation in social media?

Hypothesis:

the analysis of the translation of Facebook posts hypothesizes that :

 Using AI translation it's not the perfect solution for post translation

The significant differences between social media translation and translation specialist

Literature review :

  The following is a revision of previous research on Artificial intelligence translation history and evolution .The story begins with a super simple invention it had cards in four different languages, a typewriter, and an old-school film camera. In 1933The USSR's Academy of Sciences received a presentation from Soviet scientist Peter Troyanskii entitled "the machine for the selection and printing of words

when translating from one language to another."Afterthe death ofTroyanskiiThe machine was unknown to the rest of the world until two Soviet scientists discovered his patents in 1956.It was just at the start of the Cold War.

The GeorgetIBM experiment began on January 7, 1954at IBM headquarters in New York.For the first time in history, the IBM 701 computer mechanically translated 60 Russian sentences into English.

For forty years, fruitless attempts to develop machine translation were made. In their renowned study from 1966, the US ALPAC committee branded machine translation "expensive, imprecise, and unpromising"
Instead, they suggested concentrating on dictionary creation, thereby eliminating US scholars from the race for over a decade.

A machine translation system that knew nothing about rules or linguistics as a whole was first demonstrated in early 1990 at the IBM Research Center. It looked at similar texts in two languages to see if there were any trends.

In 2006, everyone has been using this method. Until 2016, Google Translate, Yandex, Bing, and other well known online translators served as phrase based translators .Until 2016.No one
could have predicted that Google was already fanning its fires, preparing to transform our perception of machine translation.

In 2014, a research on the use of neural networks in machine translation was published,which was pretty humorous. Except for Google, the Internet was completely unaware of it, and they immediately grabbed their shovels and began   digging.

Google made a gamechanging statement two years later, in November 2016.Googl e enabled neural translation for nine languages in 2016. They came up with the mo niker Google Neural Machine Translation for their technology (GNMT).

In 2017, yandex launched their neural translation technology. Its key characteristic, as said, was hybridity. Yandex combines neural and statistical approaches to transl ate the sentence, then uses its preferred CatBoost algorithm to pick the best one.

Methodology

The present study uses the comparative analytical approach as a research method to compare between the translation of AI that social media use in their platforms in this case Facebook AI translation and the human translation to the common tongue language that users write their posts with, than we will observe how either AI and human understand it and translate it and which one of them is doing this process right .

structure of the study

the study divided into three chapters ,the first and the second part will be theoretical , will present the history of AI ,fields that AI is required and AI approaches , the second chapter will deals with the application of AI in Language and the use of AI in social media , in the third chapter will analyses the problem of AI translation in Facebook by analyzing some posts are taking from The Facebook

Chapter 1
human
introduction to Artificial
Intelligence

1-Introduction :

This chapter is divided into three parts, the first part deals with the evolvement of AI through history. The idea of making inanimate objects into intelligent beings . traces of the beginning of modern artificial intelligence can be seen as an attempt to define the classical philosophers' system of human thought as a symbolic system. However, the field of Artificial Intelligence was not formally established until 1956. In 1956, a conference "Artificial Intelligence" was held for the first time .

The second part aims to show the need to AI in making our life easier ,incredible progress has been made in computer science and AI recently it has been studied for decades and is still as one of the most elusive subjects in Computer Science. AI ranges from machines truly capable of thinking to search algorithms used to play board games. It has applications in nearly every way we use computers in society. The third part emphasis the approaches of AI ,the four approaches of AI

2-The historical development of AI :

The history of Artificial Intelligence it's all about humanoid robots and it have been carried out In the Ancient Greek era. As an example of this is Daedalus, the ruler of the wind mythology, trying to create artificial humans. History has come to regard modern artificial intelligence as a means of defining philosophers' systems of human thought. The 1884 is quite significant in the field of Artificial Intelligence where Charles Babbage has worked on a mechanical machine that will exhibit intelligent behavior.

However, he decided that he would not be able to produce a machine that would exhibit as intelligent behaviors as a human being, and he took his work suspended. In 1950, the idea that computers could play chess has been introduced by Claude Shannon . Artificial Intelligence continued slowly to develop until the early 1960s.

AI was officially emerged in 1956, a conference about Artificial Intelligence session at Dartmouth College was introduced for the first time. Marvin Minsky stated in his book "Stormed Search for Artificial Intelligence ".the problem of Artificial Intelligence modeling within a generation will be solved ".
During this period the first Artificial Intelligence applications were introduced and these applications were based on logic theorems and chess game, the programs developed during this period were distinguished from the geometric forms used in the intelligence tests , which has led to the idea that intelligent computers can be created.

Alan Turing study "Computing Machinery and Intelligence" the Turing test was first attempt to measure AI ,and addressed the fundamental question of "Can computers think?" Turing devised an imitation game, later known as the Turing test, in which if a machine can carry on a conversation that is indistinguishable from a conversation with a human being, then the machine is intelligent,.

AI got its name and mission in 1956 where . "AI period" began with the McCarthy coined the term "Artificial Intelligence, which became the name of the scientific field. The primary conference assertion was every aspect of any other feature of learning or intelligence should be accurately described so that the machine can simulate it .

In the 1980s, AI was first deployed in major projects with practical applications. The AI will be tailored to solve real-life challenges the next time daylight passes. Even when consumers' needs are already satisfied by traditional techniques, AI has expanded its reach thanks to more cost-effective software and tools (MaadM.Mijwel ;2015).

Examples for AI solving problems including algebraic application problems, language translation, geometric theorem proving, etc. A list of several important AI breakthroughs of that period are.

In 1952s Checkers was the first program to show that computers can learn new things instead of just doing what they're told it made the news, and was taught to play at a level capable of challenging a competent amateur human player.In 1961 as Michiedescribe one of the first programs capable of learning to play a perfect game of Tic-Tac-Toe Machine Educable Nougats And Crosses Engine.

Also in 1965 Weizenbaum uses Eliza which is a natural language processing system impersonating a doctor, it answered questions in a psychotherapist-like manner. Some users believed they were conversing with another human being until the discourse hit its limits and became nonsensical .

Shakey 1969 'the Robot was the world's first general
purpose mobile robot that could think about its actions'.This project was the first to
 merge logical reasoning and physical action, as it linked robotics research with co mputer vision.

2-1 History of interactive machine translation :

As adigital computer application machine translation precede both computational linguistics and AI ,the two fields of computer science where it is now classed .The 1954 Georgetown MT demonstration received widespread media coverage, in dicating that MT was a fairly active study topic by 1956.Early machine translation research generated the subject of computational linguistics MT research was focused on crosslanguage models of linguistic structure, with concurrent theoretica l discoveries in generative linguistics by Noam Chomsky having some influence(Hutchins, J. 2000).the invention of the general-purpose computer during World War II and the advent of the Cold War stimulated the MT research.

the intersection is nowhere more relevant than in natural language processing NLP.

Specific example is language translation. In practice, experienced translators build final, high-quality translations using ideas from machine aids.

Human translators are increasingly using machine translation (MT) systems such as Google Translate to supplement their work.

But how do we go beyond simple machine error correction?

Recently, Stanford research groups,

Carnegie Mellon University and the European CasmaCat group have been research ing a human-machine model similar to the one displayed in Figure 01.

The baseline MT system suggests the Arabic translation غمس فاطمة الخبزfor the English input "Fatima dipped the bread," however the translation is erro neous since the main verb غمس (in red) has the masculine inflection.

By adding an affix ت, the user corrects the inflection.

The corrections also benefit the machine, upgrading its model in the future to offer higher-quality suggestions.(Spence Green et all,2015).
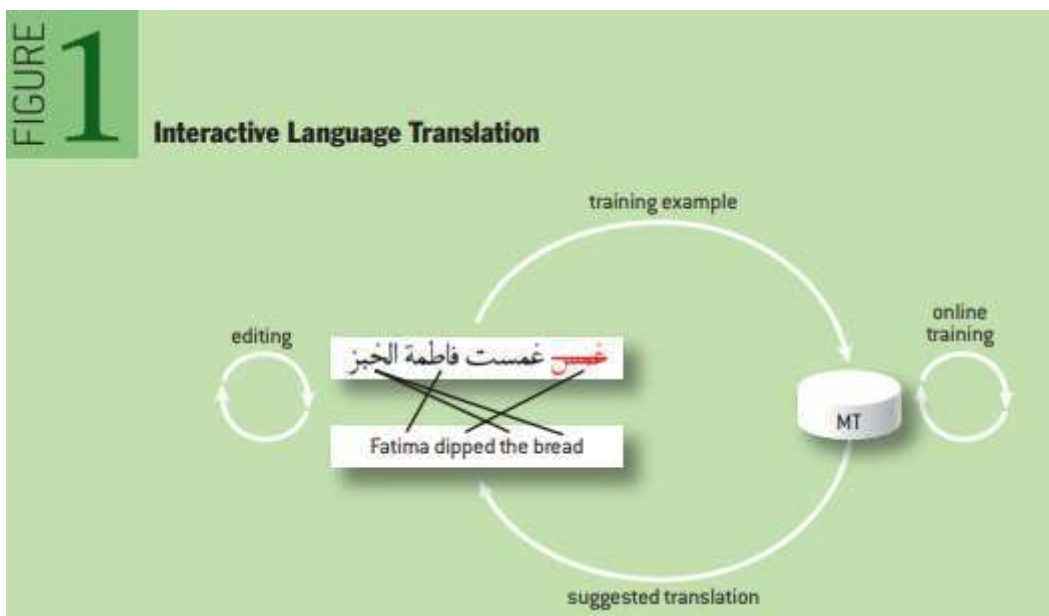
Figure 1 : Interactive Language Translation (Spence Green et all, 2015).

3- the fields in which AI is required

3 -1. AI Use in E-Commerce Personalized Shopping

Nowadays everything is done through or assisted by the internet even shopping . Artificial intelligence technology is helping to create recommendation engines, which allow you to engage with your customers more effectively. These suggestions are based on their browsing history, preferences, and interests. It aids in the improvement of your relationship with your customers as well as their loyalty to your brand and making shopping so easy and fast with best selling serves

3-1-1.Assistants with Artificial Intelligence

Chat bots which is the newest tool in the shopping business and virtual shopping assistants (chat bots) help the customers to improve its experience when shopping online. Natural Language Processing is employed in order to make the conversation sound as human and personal as possible. Although these assistants can interact with your customers in real time and with that as a business owner you don't need even to react with your customers directly

3-1-2. Preventing Fraud

With every new technology it comes with it positive and negative sides and some people always try to benefit from the mistakes that comes with technology such as using credit cards to bill online businesses. Credit card fraud and bogus reviews are two of the most serious concerns that E-Commerce enterprises face. AI can help lower the likelihood of credit card fraud by analyzing usage trends. Many people choose to acquire a product or service based on client reviews. Artificial intelligence can assist in detecting and dealing with fraudulent reviews.

3- 2. Artificial Intelligence Applications in Education

Times has changed and giving education by the old ways is not working with the new generation as it used to be even that the education sector is the one most

influenced by humans and it worked very well in previous centuries Artificial Intelligence has gradually begun to seep its roots into it as well. Even in the education industry, the delayed adoption of AI has increased faculty efficiency and allowed them to focus on students rather than office or administration tasks which helping both students and administration to preform better and keep up with technology and merge with it .

3-2-1.Administrative Tasks are Automated to Assist Teachers

Non-educational tasks such as facilitating and automating personalized messages to students, back-office tasks such as grading paperwork arranging and facilitating parent and guardian interactions, routine issue feedback facilitation managing enrollment courses and HR-related topics can all be aided by Artificial Intelligence.

3-2-2 Creating Intelligent Content

Artificial intelligence can be used also to digitize information such as video lectures conferences and text book guides. We can use different interfaces such as animations and learning content for students of various grades by customizing themthe the student or the public all that by AI .Artificial intelligence contributes to the creation of a rich learning experience by creating and delivering audio and video summaries as well as complete lesson plans.

3-3. Lifestyle Applications of Artificial Intelligence

Even the way that we are living our lifes this days it wasn't be easy as it is if it was't AI is created . Artificial intelligence has a significant impact on our way of life in asspacts that we may not even be aware of .

3-3-1.Vehicles that drive themselves

Many cars companies such as Toyota Audi Volvo and specially Tesla use machine learning to educate computers to think and evolve like humans when it

comes to driving in any environment and object detection to minimize accidents.so if wasn't for AI our cars plans and trains was not gone to be this easy to ride or to use .

3-3-2. Email Spam Detectors

The simplest way to spot how AI is changing our day routine and activities is the email we use every day that contains AI that filters out spam emails and sends them to spam or trash folders, allowing us to see only the filtered content. Gmail a major email provider has achieved a filtration capacity .

3-3-3. Recognition of Facial Expressions

Our favorite devices such as phones laptop and PCs use facial recognition technology to detect and identify users in order to give safe access and prevent stilling our document photos and videos from our devices . Aside from personal use facial recognition is a commonly used Artificial Intelligence application in a variety of businesses including high-security regions.And it is one of the newest and most advanced way of security that ever used in our time .

3-3-4. System of Recommendation

Various platforms that we use in our everyday lives, such as e-commerce, entertainment websites, social media, video sharing platforms such as YouTube, and so on, all use the recommendation system to collect user data and deliver personalized recommendations to users in order to enhance engagement. This is a highly common Artificial Intelligence application in practically every industry.

3-4. Applications of Artificial Intelligence in Robotics

The industry where Artificial Intelligence applications are widely used is robotics. AI-powered robots employ real-time updates to detect obstructions in their path and instantaneously arrange their route .

It can be used for a variety of things including transporting goods in hospitals factories and warehouses .Cleaning huge equipment and offices Inventory control is important.

3-5 . Healthcare AI Applications

Artificial intelligence has a wide range of uses in the healthcare industry. Artificial intelligence (AI) is being utilized in healthcare to create sophisticated machines that can detect diseases and cancer cells. Artificial Intelligence (AI) can assist in the analysis of chronic illnesses using lab and other medical data in order to ensure early identification. For the discovery of new medications, AI combines a combination of historical data and medical knowledge. We can with confident say that AI is saving life or helping saving lives as the doctors do .

3-6. Games using Artificial Intelligence

The gaming industry is another area where Artificial Intelligence applications have gained attraction and it is one of the most important fields that played a huge role of getting AI it repetition . To interact with the players AI can be employed to generate intelligent human-like NPCs.It can also be used to predict human behavior which can help with game design and testing

3-7. Social Media AI Applications

3-7-1- Instagram

On Instagram AI takes into account your interests and the accounts you follow to determine which posts appear in your Explore feed and what attract you as a user and appear it on your Instagram feed .

3-7-2 - Facebook

Artificial Intelligence from Facebook is also used, as well as a tool called Deep Text. Facebook can better understand conversations with this tool. It can be used to

automatically translate posts between languages. And what have known with Facebook and now with Meta is using the same algorithm to study it customers and better their experience by it .

3-7-3 -Twitter

Twitter AI is used for fraud detection propaganda removal and hateful content removal . Twitter also employs AI to suggest tweets to users based on the types of tweets they engage with.

3-8 -Marketing Applications of AI

Artificial intelligence (AI) applications are also widely used in   marketing. With the help of behavioral analysis pattern recognition and other AI tools marketers can deliver highly targeted and personalized ads. It also aids in retargeting audiences at the appropriate time ensuring better results and a reduction in feelings of distrust and annoyance.Content marketing can be assisted by AI in a way that is consistent with the brand's style and voice. It can be used for a variety of tasks, including performance campaign reports and more.

3-9 Finance Applications of AI

Banks are aware of the advantages that AI can provide. Whether it's personal finance corporate finance or consumer finance. AI's highly evolved technology can help to significantly improve a variety of financial services. Customers seeking assistance with wealth management solutions through it can easily obtain the information they require via SMS text messaging or online chat both of which are AI-powered. Artificial intelligence can also detect changes in transaction patterns and other potential red flags that could indicate fraud which humans are prone to overlooking saving businesses and individuals significant money. AI can better predict and assess loan risks in addition to fraud detection and task automation.

4-Appraoches of AI :

There's a lot of technology that goes into building AI systems. Based on machines behaviour, four types of Artificial Intelligence approaches are recognaized – Reactive Machines, Limited Memory, Theory of Mind, and self-awareness.

4-1-Reactive machines :

The most basic form of AI applications are these machines Games like IBM's chess-playing (international business machine corporation)

supercomputer Deep Blue are examples of reactive machines. This is the same computer that defeated Gary Kasparov, the world's Grand Master at the time. The AI teams do not feed the machines any training sets, nor do the machines store data for future reference. The machine decides/predicts the next move based on the opponent's move.

4-2 Limited memory :

Self-driven cars are the perfect example of These devices that are classified as AI applications of class II .They are supplied with data and taught over time using other automobiles' speed are right and direction, lane markers, traffic signals, road curves, and other relevant criteria.

4-3 Theory of mind :

Now we are trying to make this notion work, but we haven't reach there yet. Theory of mind refers to the idea that robots will be apt to understand human emotions, thoughts, and feedbacks. Comprehension of human manners is sophisticated if AI-powered machines are ever to mingle and move around with us. The requirement is then to reflect appropriately to such activities.

4-4 -Self awerness :

These AI robots are an evolution of the Class III AI. It's one step closer to compreh ending human feelings. This is the point in which AI teams generate computers tha t have a selfawareness aspect built in. Selfaware machines appear to be a long way off from where we are now. Here's an example. The robots should be apte to detect reveal when someone honks from behind. That's when they get how it feels to hon k back at someone

5-Conclusion

As a conclusion of this chapter we've reviewed the development of AI in history from encient time to nowadays as we see the need of using AI to faciltate our daily life and commmunication where we can see the link of it with its approaches that AI is based on to understand the humen'sthouhts and emotions soi t can be abel to interact with it and satisfise it.

Chapter 2

The Relationship between

The language and Artificial

Intelligence

1 -Introduction :

Using AI in translation software focuses on translation management in the first place which means that AI is intimately linked to the concept of automated translation and is used to increase both translation efficiency and quality in specific situations. Smarting is continually analyzing language and project data in order to improve our services and capabilities . And one of the mean reasons for using AI in translation field .AI translation isn't about doing away with human translators it's about assisting them and making the process easier from start to finish .The second reason AI as an assistant translation tool is it help us to assist you in working smarter not harder while also increasing the quality of our translations. As a result of it'sassistant content may be delivered at faster without sacrificing quality.

2-The application of artificial intelligence (AI) to language translation:

2-1-Intelligent Knowledge Base-Based Thoughts and Practical Language

Language has no meaning by itself because it is merely a vehicle for human expression of idea. However humans have given it meaning, so the basic unit of translation should be text rather than word structure.

Langyage is a segment or a group of sentences can all be considered a text. It could also be a word. translation is a type of linguistic communication in which text from one language is replaced with text from another language with the same meaning. It is possible to replace it without having to look into word parity or grammar and that's according to Y. Wu and Y. Wei, "Analysis and development of intelligentialized welding CAPP system," Transactions of the China Welding Institute, vol. 36, no. 7, pp. 109–112, 2015.

As shown in Figure 1 that Published in 22 Sep 2021 from Hindawi website that the majority of translations are semantic, meaning they convert semantics from the source language to the target language rather than form.
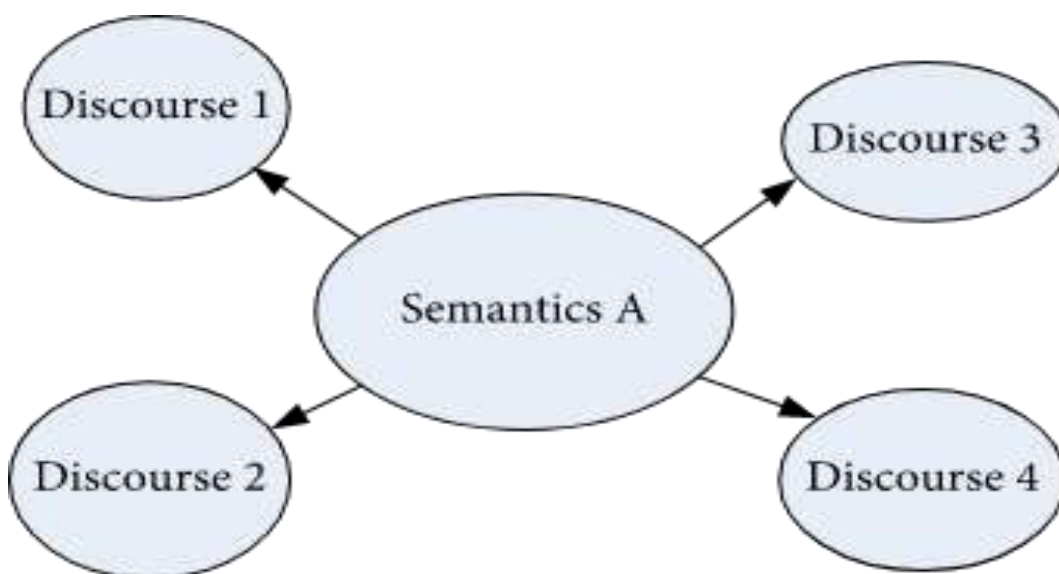
Figure 3: The relationship between semantics and text

Knowledge base-based translation is defined as translation that is always based on semantics ,with semantics as the goal, and searches the knowledge base for equivalent or similar texts according to K. Solic . This is more in line with human thinking. When a person translates "where are you from," he first searches his brain to see if the semantics of the text "where are you from" and "where are you from" are the same, and then returns the result immediately.

3-Machine Translation Model

3-1- Machine Translation System Based on Rules

According to C. Graham and N. B. Jones in the article "Intelligent virtual assistant's impact on technical proficiency within virtual teams" The main focus of machine translation research is highly consistent translation Although statistical-based methods have had an impact on rule-based methods, this has not slowed their development .

The rule-based method primarily relies on the language knowledge base, with linguists debugging and modifying the rules in terms of syntax   semantics and other related aspects on a regular basis. Traditional rule methods employ a smaller corpus, resulting in low rule coverage and rule conflicts .

It improves the methodology in accordance with the established rules,the setting of rules has increased the percentage of storage knowledge,common rules and method such as common error-based learning algorithms come from the compilation of multiple cases and analysis in data warehouses.

Furthermore, while the traditional rule-based method emphasizes coarse-grained natural language knowledge, globalization, and a large rule base, the current algorithm emphasizes "big dictionary, small rule base"which what A. Khadivar, A. Dolatkhah, and F. M. Amiri explained in his book "A fuzzy expert system for response determining diagnosis and management movement impairments syndrome".

Today's rule-making places a greater emphasis on the relationship between the source language and context than traditional approaches when it comes to displaying knowledge, the majority of traditional rule-based methods are based on the determinism principle, which states that either one or the other must be true, resulting in poor system robustness.

The current rule algorithm will be replaced with a scoring function or a probability function (like IBM's BLEU), which will have a greater impact on the system's robustness, the rule-based translation method usually requires multiple levels of order and adjusts the word order of the translation rules. Multiple rules, such as overlapping word rules, segmentation rules, syntax analysis rules, tagging rules, semantic analysis rules, word conversion rules, structural conversion rules, and others, are used in rule-based machine translation methods.

3-2-Machine Translation System Based on Examples

To figure out how machine translation is programed to do it'sjob ,in Figure 2taking from Hindawi website down belong depicts the system's fundamental structure. The main idea is to first construct a large-scale bilingual corpus (translation memory), then match the most similar example sentence in the constructed example database according to the matching principle, determine the corresponding target language of the similar sentence example, correct and reform the target sentence, and finally obtain the target sentence that corresponds to the source language sentence.
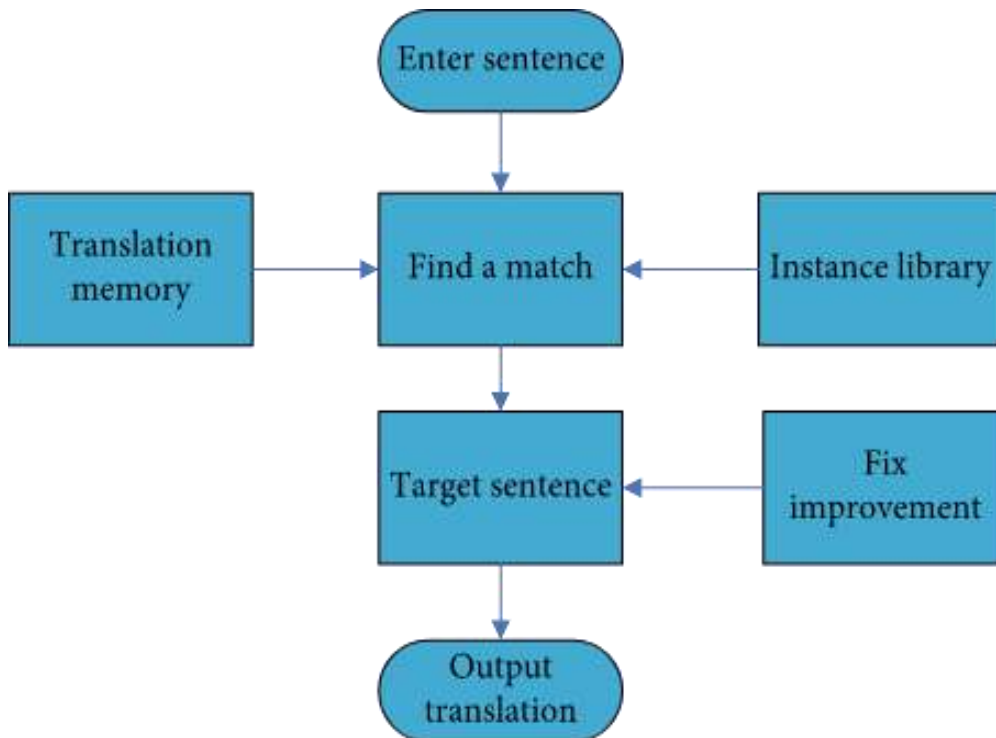
Figure 2: Structure of example-based machine translation.

The most important task in the example translation process is to locate the matching process, the source language does not need to be analyzed during the search process; only analog matching is required and that according to S. Oramas.

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V. C. Ostuni. and T. Di Noia in their book "Sound and music recommendation with knowledge graphs", introduces the similarity research method and sentence similarity calculation in case-based machine translation,information retrieval, search engines, and machine translation systems all use sentence similarity in natural language processing.

The main idea is to extract the sentence's keywords, then remove the sentence's redundant knowledge before calculating the sentence's similarity by comparing the keyword similarities,calculate the sentence's similarity by comparing the keyword similarities. Translation systems are made up of translation models and translation knowledge in general. Translation knowledge is the most important component of the system, and how to analyze and synthesize translation knowledge has become a key issue in system development

3-3-Machine Translation Fusion

The basic idea behind sentence-level translation fusion as C. Rubert B. León and A. Morales in "Characterisation of grasp quality metrics," for Journal of Intelligent and Robotic Systems machine translation fusion is to combine the N-best input translations from multiple translation systems for the same original language sentence and reorder them in the integrated set with the best translation becoming the output translation after reordering .

The sorting criteria can refer to a variety of information such as the Bayesian risk of the translation the score of the translation's language model or other statistical feature values among others, in most cases phrase-level translation fusion technology necessitates delving into the inner workings of machine translation systems. Taking note of the translation of phrases used by each translation system during translation, for example. The phrase-based translation fusion technology can achieve the fusion of translation system capabilities through recoding based on internal information.

The basic idea behind lexical-level translation fusion is that high-quality translation fragments are selected from N-best translations from different machine translation systems for the same source language sentence and then fused into a brand new higher-quality translation.

3-4-Machine translation based on Transformational

It was first used for part-of-speech tagging, with results that were comparable to those obtained using statistical methods. This self-learning method has been used by some to identify basic noun phrases (baseNP) in English. The transformation-based learning method's central idea is to alter the current local structural state using learned transformation rules and current transformation trigger conditions.

The input's initial state is usually set to an optimal default value. The greedy algorithm is used in the training, and the rules are tweaked in each iteration to reduce the error rate. This algorithm has a significant flaw , the training time is excessively long, especially when the training corpus is large , it performs much better.

On the assumption that performance is unaffected, some people have proposed an improved algorithm (nTBL), and the training time can be greatly reduced. Its central idea is that after selecting the best conversion rule and applying it to the corpus, scoring all of the rules is unnecessary because only a portion of the rules applied to the converted corpus will change the corpus, their scores will change.

The scores for the majority of the rules have remained unchanged, and the rules for this section are as follows, First examples that uses the best conversion rules are found in the corpus to make changes, so that these examples can be found. Because neighbor examples affect each other, context is also known as neighbor examples. The rules containing these examples apply to the transformed corpus, which may cause the corpus to change, so we only need to rescore these rules, which reduces the training time.

4-The application of AI translation in social media

Usually, when Facebook is in the news we change our passwords and update our privacy settings so our colleageus don't see what we're truely doing all day! nowadays, though, we're speaking about Facebook's latest AI breakthrough. Just a couple days ago, the tech mogul's Artificial Intelligence research team (FAIR) published a paper explaining that Facebook has evolved new technology that will surely enhance their potentiels to translate quickly between two languages, especially when one language is sort of more mysterious back in the day,machines could translate between two languages when they have "knowledge" of both languages. as "We are going out," in English to "Salimos," in Spanish.

However, doing that, the language for both sentences must be stored on the machine's server so it could recall the information. Then, the machine could translatfaster and build its own vocabulary over time with the aide of human. Until now, Google translate has dominated the online translation scene with their system being the most successful, reliable, and learning quickly.

Unsupervised Neural Machine Translations (UNMT)has been evolved by facebookit gives machines learning algorithms that permit the translation of sentences without pairing the sentences themselves. It may look like magic but Facebook's algorithms can understand language and translate it without recalling stored words in their systems. Systems now at leading research institutions are apt to learn languages, and it's going to revolutionize the translation industry,as we believe.

Manual translations can be time consuming , expensive and
usually paid for by humans. we still feel that a human translation, or at the very
 least a onceover for proofreading, is importent before publishing anything online o
r in print, but it doesn't rule out the possibility that technology can help.

This shows that technology may be able to assist us in translating strange language s into more widely spoken languages. Machines could teach us what humans have forgotten by using neural signals in the brain when certain phrases are heard by des cendants or weak speakers of disappearring languages, as if reading hieroglyphics.

By providing free access to the coding for this new technology .Facebook has also helped developers . Anyone can contribute to the system's improvement, maki ng it a collaborative worldwide endeavor that will ideally benefit all of humanity, the business is cooperating with academic institutions and will continue to disclose its discoveries publicly,To improve the technology.
Our journal details have been made public on Facebook, and we'll be publishing them shortly on our social media outlets, but for now, stay tuned for more UNMT(unsupervised neural machine translation) news. We'll be looking to see how we can integrate this new technology into our existing systems to make our translators as productive and cost-effective as possible!(amper translation,18 September 2018.

4 -1 The role of AI in keeping data of social media :

According to World Economic Forum estimations, by 2025, the amount of data created by humans each day will be about 463 exabytes (one exabyte is equal to one billion gigabytes), which equates to more than 200 million DVDs per day. With such large quantities of user-generated content, humans will hardly be able to keep pace.

AI, on the other hand, can handle data in a scalable and real-time manner across numerous channels. In terms of the sheer size and volume of user-generated content it can analyze and detect, AI can outperform humans. AI can scale on demand and process enormous volumes of data quickly .

4 -2. Content Filtering And Automation:

With so much user-generated data, manually social media content becomes a task that requires scalable solutions. Social media Content powered by artificial intelligence can detect harmful content in texts, images, and videos. AI may also help prevent inappropriate content from being posted by filtering and classifying it, assisting human in the content review process and assisting marketers in keeping their content clean and safe.

4-3. Less Exposure To Harmful Content:

Human moderators deal with difficult content on a regular basis, and their conclusions are frequently questioned by users who believe human moderators are prejudiced. Passing enormous amounts of immoral content makes moderation a difficult task for people, and it might even have harmful psychological consequences. AI can help human moderators by filtering suspicious content for human review, decreasing human exposure to distressing content and preventing content moderation teams from having to go through all of the content submitted by users. Human labor can be made more productive by using AI to assist employees handle web information more quickly, effectively, and with fewer errors

4-4. AI supervising Live Content :

AI could be utilized to assess live content in social media content . It is critical to control real-time data in order to offer users with a secure experience. By evaluating content quickly and automatically recognizing any hazardous cases before they go live, AI can assist with livestream content management.

4-5. Abusive Content:

Abusive content features all kinds of hate speech, cyber bullying, cyber aggression and abusive behavior. Many companies and social media platforms, including Facebook and Instagram, use AI automation to add reporting options and streamline the overall moderation process with the help of natural language processing and image processing

4 –6 The AI protection from Language profanity:

Profanity in social media is the use of language that's deemed offensive, impolite or rude and can include bad words and naughty jokes. Using natural language processing, AI can detect not only specific words that are dirty and inappropriate but also a string of random characters and symbols that represent swear words.

4- 7 -False And Misleading contant:

False content tries to aggressively propagate misleading information through social media channels for a variety of goals, including hiding the truth and influencing public opinion. Fake news and articles, as well as product reviews and comments generated by AI bots, are all examples of fake content.

5- Conclusion :

In this chapter we discussed the use of Artificial Intelligence in the field of languages and how it been assisted by AI , for the AI to learn about languages it needed to learn how humans procces the languages and how they break down it's meanings , to do that AI have to go through along rood and many measures to use such a tool as an assistant in social media it may help it users to a sertant degree but it needs more work .

Chapter 3

Corpus Analysis

1- Introduction :

Artificial Intelligence concerned almost all fields and every industry because of it advantages ,but as humans decided to use it in the translation field which a field it take more than programing to understand .because languages have to many elements and many aspects that only a human mind can understand and interpite ,even if Artificial Intelligence is been taught by human but it can never break languages like human do .

We can't deny that it is involve during the days in translation field and exactly what a platform like Facebook is trying to do .Facebook is currently giving it users an easier way to communicate internationally by providing the machine translator powered by AI . This feature automatically translates the posts on the users timeline that help them understand those posts.

However, translation cannot be separated from some aspects a textual grammatical and many others. Those terms are important to make our words understandable to be read in another language. For the above mentioned reason, errors in translation are often produced by Facebook's machine.

2- The corpus :

The present study analyze a number of Sourse Language samples that are a result of an inaccurate machine translation and its effect on Target Language meaning . The samples are taken from Facebook groups and Facebook accounts . The present study shows how Machine Translation effect the meaning in Facebook, and how provide the users with misleading translation.

3- Methodology :

In this research, we looked at some of the language issues that arise when using Arabic in Machine Translation Applications on the internet (MTA). This reaserch gives a linguistic examination of some of the issues that have arisen as a result of the usage of MT applications, such as Facebook .

Our research is based on a small samples that includes both formal and informal Arabic Facebook postings. The sample was chosen at random to demonstrate the diverse linguistic patterns seen in Arabic and English. The samples are displayed as screenshots taken from Facebook. The also goes across the challenges facing the Arabic language on internet based on MTA Facebook .

4- Data analysis

Machine Translation Applications used by Facebook produce several problems in meaning while translating into Arabic. Our samples are organized according to predetermined criteria, with the goal of demonstrating the many language patterns seen in Arabic samples that are problematic in Machin Translation in Facebook . They consist of lexis, phrases, and long sentences or utterances.

Consider the following screenshots below illustrate how the Arabic samples was translated into English using Facebook translate application .

Pattern 1: from "facebook page خلية الاعلام مديرية التربية puplished on 15 june at 2: 14 .

Analysis :

In this pattren, MT system suggests the English translation midlle center مركز متوسطة and may allah make it in the balance of their good deeds جعلها الله في ميزان حسناتهم.

Whereas the translation is erroneous since the usage of the main verb wants change de meaning of the sentence.

The accurate translation : may allah accept it as a good deed , middle school

Pattern 2 :from the خلية الاعلام مديرية التربية **on 15 june at 7: 56 AM**

خلية الاعلام مديرية التربية ورقلة
Yesterday at 7:56 AM · 🌐

زيارة تفقدية للسيد مدير التربية لمركز متوسطة الشهيد تخة ابراهيم أمسية اليوم الثالث من ايام إجراء امتحان شهادة البكالوريا دورة جوان 2022

An inspection visit to Mr. Director of Education of the Martyr Takha Ibrahim Secondary Center, on the third day of the exam of the baccalaureate June 2022

⚙ · Hide original · Rate this translation

Analysis:

In this pattern,MT system suggests the English translation secondery center مركز متوسطة, An inspection زيارة تفقدية

Whereas the translation form Arabic into English is erroneous both at the grammatical level and the choice of words.

The accurate translation would be:Midlle school متوسطة , Visited زيارة تفقدية

Pattern 3 :fromFacebook page named by خلية الاعلام مديرية التربية **on june 15 at 8:10 .**

Analysis:

In this pattern, MT system suggests the English translation specific visits to the centers زيارة تفقدية

the translation erroneous is semantic

The accurate translation of this clause would be :survey to the centers زيارة تفقدية

Pattern 4 :from face book page named by تسريحات شعر للاطفال روعة**puplishedin june 7 at 8:11 pm**

Analysis:

In this pattern, MT system suggests the English translation "the best real air perfumes from an amazing experience"for the Arabic input " احسن معطرات الجو الحقيقة عن تجربة تحففففففة".

Whereas the translation is an unaccurate since the Arabic sentence is amibguous due to the lack of punctuation (spoken as written language) resalting in an erroneous translation.

The accurate translation for "احسن معطرات الجو, الحقيقة, عن تجربة, تحففففففة"would be: the best air perfumes, for real, from an experience, it is amazing fascinating.

Pattern 5 :from Facebook group named by أجمل تسريحات شعر الأطفال **theface book page puplished on7 th ofmay 10:09 Am.**
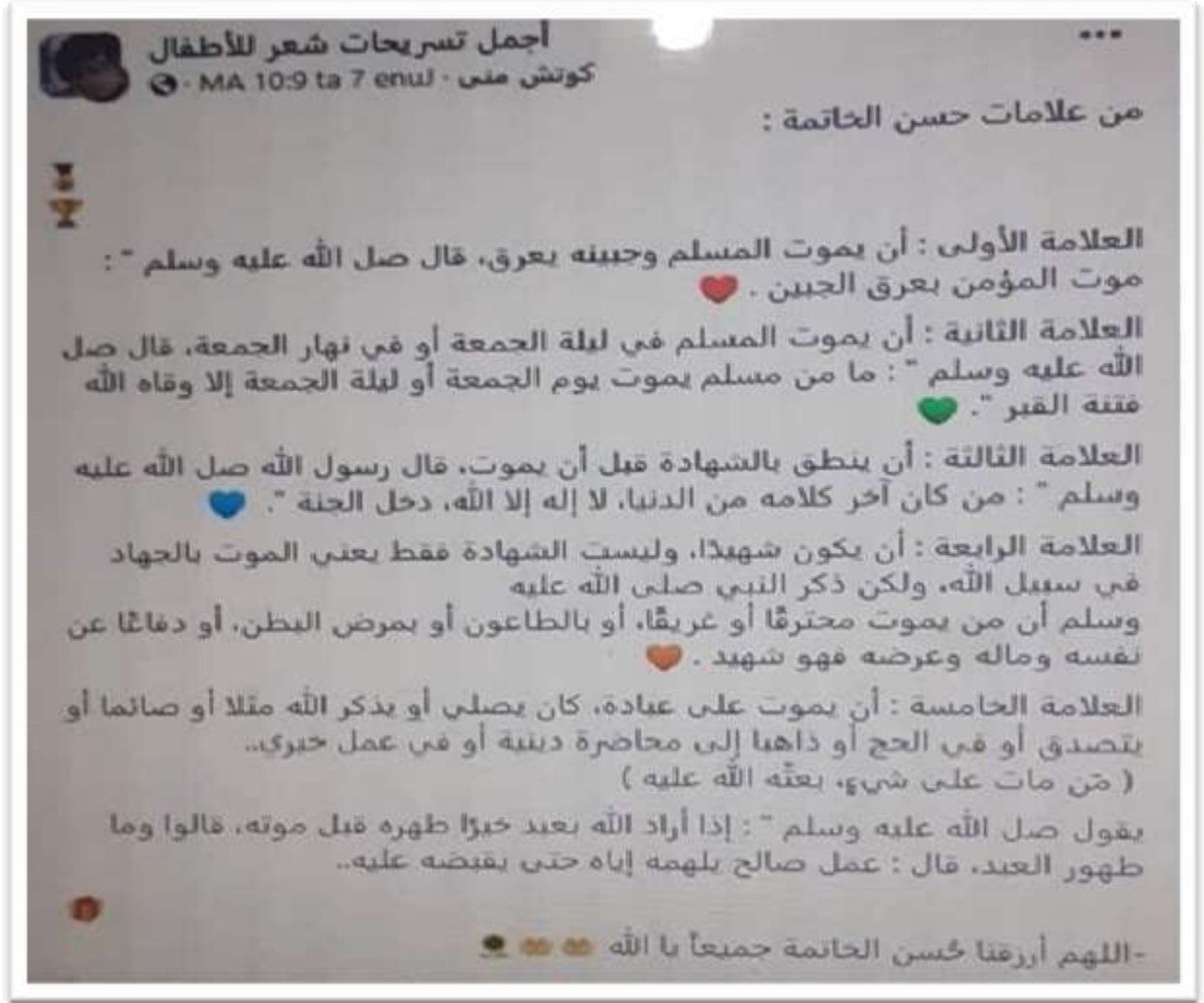
Analysis: In this pattern, MT system suggests the English translation "he said peace be upon him: "the death of a believer is caused by the sweat of his forehead" for the Arabic input " "قال صل الله عليه و سلم:" موت المؤمن بعرق الجبين".

Whereas the translation iserroneoussince the prepositionبwastranslatedwith ''iscaused by'' resulting in a total out of contextequivalent.

The accurate translation would be: he said peace be upon him: "the death of a believer with sweat on his forehead".

Pattern 6: from a Facebook group named by خلية الاعلام مديرية التربية **puplishen on june 16 at 8::00 AM**

خلية الاعلام مديرية التربية ورقلة
8h · 🌐

زار صبيحة اليوم (اليوم الرابع) من إجراء امتحان شهادة البكالوريا دورة جوان 2022 مركز متوسطة المجاهد مقدم احمد عين البيضاء، لتفقد ظروف المركز

Sabiha today (the fourth day) from the conduct of the baccalaureate certificate exam, June 2022 session, visited the Mujahid Intermediate Center, presented by Ahmed Ain Albayda, to check the conditions of the center.

⚙ · Hide original · Rate this translation

Analysis :

In this pattern, MT system suggests the English translation predecessor Sabihat today صبيحة اليوم , The translation was not correct because the MT system didn't choose the right equivalence for some words ,also translating latterly for other words because of the absence of equivalence for other words .

The accurate translation would be :Early mornig صبيحة اليوم

41

Pattern 7 :from Facebook group named by bent walad الجزائرpuplished in june at 7 :22 AM .

Analysis:

In this pattern, MT system suggests the English translation predecessor for **:**mount Adrian isجبل ادريان, and not put gador for متحطش جادور**,**

The translation was not correct because the MT system don't recognize all the syntax and morpholygy between languages , also can recognize transability

The accurate translation would be : The Adrian mountain for جبل ادريان and without hitting the love emojy for و ماتحطش جادور

Pattern 8 : from Facebook group named by فضاء ورقلة**puplished in june 6 at 12:48 .**

Analysis :

In this pattern, MT system suggests the English translation predecessor forالشهادتين is testimonies , destroyer of delights for هادم اللذات

The translation was not correct because the MT system The translation was not correct because the MT system not programed to translate words are related to isslam (religion) and not programed to brow words from other languages

The accurate translation would bechahada for الشهادتين and desires distroyer for هادم اللذات

Pattern 9 :from Facebook group named by كوتش منىPuplished In june 7 at 8:59

.

Analysis

In this pattern, MT system suggests the English translationpredecessor for good death is حسن الخاتمة, grant us for ارزقنا

The translation was not correct because the MT system not programed to translate words are related to isslam (religion) and not programed to brow words from other languages

The accurate translation would be: peacefull death for حسن الخاتمة, bless us

.

Pattern 10 :from Facebook group named by خلية الاعلام مديرية التربية
ورقلة**puplished in june 7 at 10:03 PM .**

Analysis : In this pattern, MT system suggests the English translation predecessor
forhonor is اشرف, director of Education for مدير التربية, municipality for بلدية

The translation was not correct because the MT system was translating latterly without matching
the words with their meaning .

The accurate translation would be supervised for اشرف,director of departement of
Education and township for بلدية

Pattern 11 : From Facebook page named by خلية الاعلام مديرية التربية **published on 16 june at 8:00**

Analysis : In this pattern, MT system suggests the English translation secondery school ain bayda ثانوية عين البيضاء

The accurate translation would be supervised for Hight school Ain Bayda

Pattern 12 : From Facebook bage named by خلية الاعلام مديرية التربية **on 16 june 8: 00**

Analysis In this pattern, MT system suggests the English translation

, النقائص difiencies , الحجرات Rooms , السيد مدير التربية Mr director of Education شهادة المرشحين condidates certificate

Correct Translation will be : head director of Education السيد مدير التربية , class

rooms الحجرات, inperfections النقائص , candidate witnesses شهادة المترشحين .

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5- General Conclusion :

It is obvious from the study's tiny sample of FMT of Facebook status from Arabic and English or the opposite, that the corpora presented in the form of screenshots analysis that there is a severe outstanding challenge connected to Grammatical, morphological, syntactic, and contextual recognition by FMT , the corpora's patterns .

1.Facebook Machine translation are insecure when used with different sorts of data. Performing poorly on corpora whose underlying features are unknown Those of the translation application data differ.

2. The majority of mistakes in FMT systems occur while dealing with Arabic corpora that are morphologically rich The FMT application (AI) will not be accept it . And it will not Create new word formations that they haven't seen before or programed to translate .

3. The corpora exhibit distinct verbal patterns that result in FMT representations that are insufficient and undesirable.

4.The corpora show that FTA are inadequate and unacceptable from a language standpoint. These incorrectly created results reflect poorly on these online applications.

5. Facebook's transliteration tools are inaccurate and not totally effective .

6. Undoubtedly the various flaws of FMTA shown in the corpus we used in this study prove that they are far from replacing professional translators.

7. Users of FMT should use their common sense, which may resolve translation ambiguities.

8. These translation services may provide us with database of parallel corpora or root words.

9. Arabic dual word form is mostly unrecognized in GTA and FSTA.

10. These translation services should focus on providing multiple parallel corpora to polysemous word input that has multiple possibilities of translation.

11. These translation services should update their input methods database, and add diacritical markers and context sensitive recognition systems for the Arabic language.

12. Morphology reveals a number of translational problems, not all of which are the same type

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ملخص البحث

1. المقدمة:

إن وسائل التواصل الاجتماعي كادت أن تكون لها تأثير كبير في حياتنا، وحتى نتمكن من الارتقاء إلى مستوى توقعات مستخدميها والمنافسة في صناعة وسائل التواصل الاجتماعي، والعديد من الأدوات من أجل الحفاظ على رضاه عن الخدمات التي تقدمها ولأن الهدف الرئيسي التأثير على عقول الناس مما يجعل الأشخاص ينجذبون إلى منصة التواصل الاجتماعي وهي القدرة على معرفة ما يحدث في جميع أنحاء العالم ومواكبة ذلك، هذا ما جعل العالم قرية صغيرة.

وهذا ما جعلها تلقى رواجا كبيرا، ولكن نظرًا لتنوع الجنسيات واللغات، كان على منشئي وسائل التواصل الاجتماعي التوصل إلى طريقة حتى يتمكن أي شخص من استخدام منصات عملهم.

وفهم ما يتم نشره في هذه المنصات بغض النظر عن اللغة المكتوبة بها ، ، وبهذه الخطوة يصلون إلى المزيد من العملاء ، وهذه إحدى الخطوات التي جعلت وسائل التواصل الاجتماعي تنتشر على نطاق واسع مما جعل وسائل التواصل الاجتماعي جذابة للغاية ، ولكن إضافة المزيد من اللغات لم يكن كافياً لربط العالم معًا لأنه يمكنك استخدام هذه المنصات بلغتك.

لذلك بدأ مستخدمو الوسائط الاجتماعية في العمل لإضافة خيار لمستخدميهم لفهم ما يحاول الأشخاص الذين يتحدثون لغات مختلفة و ذلك بترجمة المحتوى الخاص بهم أو أن يكونوا أكثر تحديدًا ترجمة إلى منصاتهم ، وتستخدم هذه البرامج بما يسمى بالذكاء الاصطناعي وهي أجهزة كمبيوتر فائقة الذكاء تمت برمجتها للقيام بذلك ما يفعله الإنسان.

2. الإشكالية:

وسائل التواصل الاجتماعي هي منصات لتبادل الأخبار والمعلومات و الثقافات ، وكما لها تأثير كبير في تغيير وجهة نظر الناس حول الموضوعات والآراء المهمة ، تتحمل وسائل التواصل الاجتماعي مسؤولية كبيرة لأن يمكنها أن تكون ضارة كما يمكن أن تكون مفيدة ، خاصة عندما يتعلق الأمر بترجمة الأفكار أو آراء الناس حول بعضهم البعض أو حول شيء يحدث في العالم ، وذلك من خلال توفير الترجمة المناسبة لمحتواهم ، تحتاج منصات وسائل التواصل الاجتماعي إلى إيلاء المزيد من الاهتمام في ما يخص هذا الجانب.

3. الغرض من الدراسة:

الترجمة مهمة صعبة للبشر و الفهم أثناء الترجمة لا يقومون فقط بتحويل الكلمات من لغة إلى أخرى. وإنهم ينقلون أيضًا مشاعر عقلية الثقافة، وهذا لا يمكن لمترجم الذكاء الاصطناعي أو الترجمة الآلية فهمه، وإلى أي مدى لم يتمكن منشئو فيسبوك من الترجمة.

4. الفرضيات :

01 – الذكاء الاصطناعي و دوره في عملية الترجمة
02- تختلف ترجمة التواصل الاجتماعي عن ترجمة المتخصصين

5. الدراسات السابقة :

على مدى أربعين عاما إكتشف علماء السوفيات 1956 محاولات غير مثمرة لتطوير الترجمة الآلية، فتلقت عرض آلة اختبار وطباعة الكلمات عند الترجمة، ووصفت اللجنة الأمريكية بأنها باهظة الثمن وغير دقيقة ومن بين الأساليب العصبية والإحصائية لترجمة الجملة المفضلة لاختيار أفضلها ثم عرض تكرار الترجمات في عام 1984، و أنشاء مركز الأبحاث اللسانية في عام 1990، واستعدت لتغيير تصور الترجمة الآلية في عام 2014،

وأشادت كل دراسة بالترجمة القائمة على العبارات حتى عام 2016 واستخدام الخوارزميات في عام 2017.

الفصل الأول

هذا الفصل ينقسم الى ثلاثة نقاط اساسية حيث نتطرق في هذا الفصل اولا الي تاريخ نشاة ما يسمى بالذكاء الاصطناعي ومن هم الفاعلين في تقديمه إلى العالم و كذا تطويره ثم نتناول بعد ذلك استعمالات الذكاء الاصطناعي في حياتنا اليومية و في مختلف الجوانب الأخرى التي كان فيها للذكاء الاصطناعي الأثر الأكبر في تغيير جذري لحياة الإنسان بينما نتحدث في اخر نقطة عن مناهج الذكاء الاصطناعي في العمل و التطبيق.

01- تاريخ الذكاء الاصطناعي

فكرة الذكاء الاصطناعي لم تكن وليدة اللحظة بل كانت منذ قديم الأزل و ذلك في الحضارات اليونانية حيث حاولو صناعة رجال البين يفكرون و يعملون مثل البشر و ذلك ما تذكره الأساطير اليونانية .حيث كان عام 1884 مهم جدًا في مجال الذكاء الاصطناعي حيث عمل تشارلز باباج على آلة ميكانيكية تُظهر سلوكًا ذكيًا. ومع ذلك ، قرر أنه لن يكون قادرًا على إنتاج آلة تُظهر سلوكيات ذكية كإنسان و بقيت فكرة الذكاء الاصطناعي على حالها حتى عام 1950 قدم كلود شانون فكرة أن أجهزة الكمبيوتر يمكنها لعب الشطرنج. استمر العمل على الذكاء الاصطناعي ببطء حتى أوائل الستينات حيث ظهر الذكاء الاصطناعي رسميًا في عام 1956 و استمر في تطور مستمر حتى اصبح علما قائما في حد ذاته .

02-تاريخ الترجمة الآلية التفاعلية

لقد بدا الحديث عن الترجمة الالية عام 1956 ولدت أبحاث الترجمة الآلية في وقت مبكر و اصبح موضوع علم اللغة الحاسوبي حديث العالم و ركز بحث الترجمة الآلية على

نماذج عبر اللغات للبنية اللغوية مع الاكتشافات النظرية المتزامنة في علم اللغة ايضا .و اصبحت الترجمة الالية وسيلة مساعدة اساسية يستخدمها المترجمون المحترفون لانجاز اعمالهم .

03- استعمالات الذكاء الصطناعي

يستخدم الذكاء الاصطناعي في عدة مجالات مختلفة و متعددة و تكاد تكون في كل المجالات و من بين المجالات التي: يستخدم فيها الذكاء الاصطناعي هي

التسوق عبر الانترنت

التسويق الاكتروني

مجال السيارات

التعليم

انشاء المحتوى

الاجهزة الاكترونية

وغيرها من المجالات الاخرى و التي في تزايد يوم بعد يوم

04- مناهج عمل الذكاء الاصطناعي

للذكاء الاصطناعي عدة طرق للعمل و التفاعل وذلك حسب المهمة التي برمج من اجل القيام بها

05- الآلات التفاعلية:

أبسط أشكال تطبيقات الذكاء الاصطناعي هي تلك الأجهزة مثل ألعاب الشطرنج من شركة آي بي إم.

06- ذاكرة محدودة:

السيارات ذاتية القيادة هي خير مثال على هذه الأجهزة المصنفة على أنها تطبيقات ذكاء اصطناعي و التي يتم تزويدها بالبيانات ويتم تدريسهم بمرور الوقت باستخدام سرعة السيارات الأخرى.

07- نظرية العقل :

تشير نظرية العقل إلى فكرة أن الروبوتات ستكون قادرة على فهم المشاعر والأفكار والتعليقات البشرية و يصبح فهم سلوك الإنسان أمرًا بسيطًا.

08- الوعي الذاتي:

تعد روبوتات الذكاء الاصطناعي هذه تطورًا للذكاء الاصطناعي من الفئة الثالثة وتعد خطوة واحدة أقرب إلى فهم المشاعر الإنسانية.

هذه هي النقطة التي تقوم فيها الذكاء الاصطناعي بإنشاء أجهزة كمبيوتر بها جانب من الوعي الذاتي المدمج.

09- الخلاصة :

مع تطور التكنولوجيا يومًا بعد يوم تحل فيه الآلات التي تعمل بالذكاء الاصطناعي الذي حل محل الإنسان واستغنى عن خدماته واصبح يعتمد على التطور التكنولوجي في شتى المجالات الحياتية.

الفصل الثاني:

هذا الفصل يتضمن عنصرين يبين الأول فيه كيفية تطبيق الذكاء الاصطناعي على اللغة كما يتطرق إلى كيفية استعمال الذكاء الاصطناعي في وسائل التواصل الاجتماعي في هذه الحالة تطبيق الفايسبوك على ترجمة اللغة.

01- الأفكار المبنية على قاعدة المعرفة الذكية والترجمة العملية:

تُعرّف الترجمة القائمة على قاعدة المعرفة بأنها الترجمة التي تستند دائمًا إلى الدلالات مع كون الدلالات هي الهدف ، وتبحث في قاعدة المعرفة عن النصوص المكافئة أو المماثلةوهذا أكثر انسجاما مع التفكير البشري. عندما يترجم شخص ما "من أين أنت" ، فإنه يبحث أولاً في دماغه ما ليرى إذا كانت دلالات النص "من أين أنت" و "من أين أنت" هي نفسها ، ثم يعود للنتيجة على الفور

02- نظام الترجمة الآلية على أساس القواعد:

تعتمد الطريقة القائمة على القواعد بشكل أساسي على قاعدة المعرفة اللغوية ، حيث يقوم اللغويون بتصحيح الأخطاء وتعديل القواعد من حيث دلالات النحو والجوانب الأخرى ذات الصلة على أساس منتظم. تستخدم أساليب القواعد التقليدية مجموعة أصغر ، مما يؤدي إلى انخفاض تغطية القواعد وتعارض القواعد. يحسن المنهجية وفقًا للقواعد المعمول بها

03- نظام الترجمة الآلية استنادًا إلى الأمثلة:

الفكرة الرئيسية هي أولاً إنشاء مجموعة كبيرة ثنائية اللغة (ذاكرة الترجمة) ،وإن أهم مهمة في عملية ترجمة المثال هي تحديد عملية المطابقة ، ولا تحتاج اللغة المصدر إلى التحليل أثناء عملية البحث ؛ مطلوب فقط المطابقة التناظرية و الفكرة الرئيسية هي استخراج الكلمات الأساسية للجملة ، ثم إزالة المعرفة الزائدة عن الحاجة للجملة قبل حساب تشابه الجملة من خلال مقارنة أوجه التشابه بين الكلمات الرئيسية

04- دمج الترجمة الآلية:

تتطلب تقنية دمج الترجمة على مستوى العبارة الخوض في الأعمال الداخلية لأنظمة الترجمة الآلية. الإحاطة علما بترجمة العبارات التي يستخدمها كل نظام ترجمة أثناء الترجمة على سبيل المثال. يمكن لتقنية دمج الترجمة القائمة على العبارات أن تحقق اندماج إمكانيات نظام

الترجمة من خلال إعادة فك التشفير استنادًا إلى المعلومات الداخلية. الفكرة الأساسية وراء اندماج الترجمة المعجمية هي أن أجزاء الترجمة عالية الجودة يتم اختيارها من أفضل ترجماتمن أنظمة ترجمة آلية مختلفة لنفس جملة اللغة المصدر ثم دمجها في ترجمة جديدة عالية الجودة.

05- الترجمة الآلية على أساس التحويل:

تم استخدامه لأول مرة لوضع علامات على جزء من الكلام ، وكانت النتائج مماثلة لتلك التي تم الحصول عليها باستخدام الأساليب الإحصائية. استخدم البعض طريقة التعلم الذاتي هذه لتحديد عبارات الأسماء الأساسي تتمثل فكرتها المركزية في أنه بعد اختيار أفضل قاعدة تحويل وتطبيقها على المجموعة فإن تسجيل جميع القواعد ليس ضروريًا لأن جزءًا فقط من القواعد المطبقة على المجموعة المحولة سيغير المجموعة.

06- تطبيق الترجمة بالذكاء الاصطناعي في وسائل التواصل الاجتماعي:

إن تطبيق الفايسبوك من أكثر التطبيقات التي تستعمل الذكاء الاصطناعي استعمالا شبه كامل و تسعى دوما إلى تطويره و تطوير استخداماته و خدماته في تطبيقها و بما أننا نتحدث عن تطبيق فايسبوك للغة نشر فريق أبحاث الذكاء الاصطناعي بقطب التكنولوجياالبحث يوضح أن فايس بوك قد طور تقنية جديدة ستعزز بالتأكيد قدراتهم على الترجمة بسرعة بين لغتين ، خاصةً عندما تكون لغة واحدة نوعًا ما أكثر غموضًا و هذا ما يظهر مدى حرص الفايسبوك على تطوير هذا الجانب في تطبيقها.

هناك العديد من الاستعمالات التي يقوم بها الذكاء الاصطناعي في وسائل التواصل الاجتماعي منها

07- دور الذكاء الاصطناعي في الحفاظ على المعلومات :

للذكاء الاصطناعي دور فعال في الحفاظ على المعلومات حيث في عام 2025 سيكون نسبة معلومات كثيرة من طرف الانسان في وسائل التواصل الاجتماعي مما يتعدر عليه الحفاظ بها بدقة وسرعة وكفاءة عالية.

08- تصفية المحتوي :

المحتوي ياثر ثاثيرا كبيرا على المتلقي من خلال ما يعرض من صور وفيديوهات فلهذا تقوم وسائل التواصل الاجتماعي بعملية الفرز وتدقيق واخد كل ماهو جيد وذلك من خلال الاستعانة بالذكاء الاصطناعي

10- مراقبة البث المباشر :

يتاثر الفرد بالمعلومات التي تقدم له عن طريق البث المباشر والحي ويمكن لن يكون الموضوع المقصود بثه غير لائق فدور الذكاء الاصطناعي مراقبة البث الحي مراقبة دقيقة

11- دور الذكاء الاصطناعي في حظر المحتوي المهين :

ان خطابات المهينة التي تخلق نوعا من العنف السلوكي والتهجم على الغير من خلال المواضيع التي تطرح وتناقش تؤثر سلبا على المحتوي فدور الذكاء الاصطناعي حظر هذه المحتويات التي تدعو الى التمنر وخطاب

12- كشف الذكاء الاصطناعي للكلمات والرموز السيئة :

للتواصل دور مهم في نقل المشاعر والاحاسيس حيث في بعض الاحيان لها تاثير سيئ في نقل الرموز والكلمات السيئة

13- المحتوى المضلل :

ان الاعلانات التي تروج لها وسائل الاجتماعي في بعض المواقع احيانا تكون خاطئة وغير صحيحة فتنتقل من موقع الى موقع فيقوم الذكاء الاصطناعي من حظر هذه المعلومات

الفصل الثالث:

01- المقدمة

نظرًا لأن الذكاء الاصطناعي يهتم بجميع المجالات تقريبًا وكل صناعات و ذلك لكثرة مزاياه ، ولكن نظرًا لأن البشر قرروا استخدامه في مجال الترجمة وهو مجال يتطلب أكثر من البرمجة لفهمه لأن اللغات تحتوي على العديد من العناصر والعديد من الجوانب التي لا يمتلكها سوى العقل البشري يمكن أن يفهمها، حتى لو تم تعليم الذكاء الاصطناعي من قبل الإنسان ولكن لا يمكنه أبدًا تحليل اللغات مثل البشر، لا يمكننا إنكار مدا تطوره في مجال الترجمة.

توصلت هذه الدراسة والعديد من الدراسات الأخرى إلى أن الأخطاء التي تحدثها الترجمة الآلية تقع في هذه المجالات الثلاثة من علم اللغة اللغوي الثقافي والأسلوبي. في حين أن هذه الدراسات كانت تركز بشكل كبير على الترجمة الآلية بشكل عام ، تهدف الدراسة الحالية إلى التحقيق في الأخطاء التي تقوم بها الترجمة الآلية للفيسبوكوكيفية تأثيرها على المعنى.

02- العينات:

أخدنا هده العينات من فيسبوك وكانت بطريقة عشوائية واستعملنا فيها العديد من المجموعات التي تنشرها وقمنا بتحليل لنتائج الترجمة الآلية للفا يسبوك ويقوم بتحليل عينات من اللغة الأم إلى اللغة الهدف وكيفية تأثير الترجمة الآلية للغة المترجمة إليها ويبين هذا البحث كيفية التأثير على معاني اللغة مع توفير ترجمة مضللة لمستعملي الفايسبوك.

03- المنهجية:

في هذا البحث، نظرنا في بعض المشكلات اللغوية التي تنشأ عند استخدام اللغة العربية في تطبيقات الترجمة الآلية على تقديم هذا البحث فحصًا لغويًا لبعض القضايا التي نشأت نتيجة لاستخدام تطبيقات الترجمة الآلية ،و يعتمد بحثنا على عينة صغيرة من المؤسسات التي تتضمن منشورات عربية رسمية وغير رسمية على فيسبوك.و تم اختيار العينة بشكل عشوائي لبيان الأنماط اللغوية المتنوعة الموجودة باللغتين العربية والإنجليزية.و. يحتوي البحث على جميع لقطات الشاشة المجمعة. ويتخطى البرنامج أيضًا التحديات التي تواجه برامج الترجمة الآلية أثناء القيام بترجمتها للغة العربية.

04- تحليل البيانات:

يحتوي فايسبوك على تطبيقات الترجمة الآلية التي تعاني من العديد من العوائق النحوية أثناء ترجمة إلى اللغة العربية مثل عدم وجود مكافئات المعجمية أو الهيكلية. تم اختيار هذه العينات بهدف إظهار العوائق التي يعاني منها تطبيق الترجمة لدى فايسبوك.

الملخص

من خلال العينات التي تم دراستها لطريقة عمل تطبيق الترجمة لدى فايسبوك انه هناك مشاكل نحوية و صرفية تواجه هذا التطبيق خلال عملية الترجمة، وترجمة التي يقوم بها الفايسبوك تكون غير أمنة خصوص عند ترجمتها لعدد مختلف من اللغات ما يجعل أدائها ضعيف.

ومعظم أخطاء الفايسبوك في ترجمة تكون حين يترجم من العربية إلى الانجليزية و هذا نظرا للثراء النحوي للغة العربية فيقوم تطبيق فايسبوك للترجمة لأنه لا يستطيع ان يقوم بإنشاء كلمة جديدة لم يبرمج على ترجمتها تُظهر المجموعات أنماطًا لفظية مميزة تؤدي إلى ترجمات لتطبيق فايسبوك للترجمة غير فعالة وغير مرغوب فيها.

وأدوات الترجمة لدى فايسبوك غير فعالة وتفتقر إلى الكفاءة، ومما لا شك فيه أن العيوب المختلفة لتطبيق الترجمة لدى فايسبوك الموضحة في مجموعة النصوص التي استخدمناها في هذه الدراسة تثبت أنها بعيدة كل البعد عن استبدال المترجمين المحترفين .

ويجب على المترجم الاعتماد على المراجع العلمية في عملية الترجمة التي تسهل له نقل المعني الصحيح، ويجب أن تركز خدمات الترجمة متعددة المعاني ذات إمكانيات متعددة للترجمة.

ويجب أن تقوم خدمات الترجمة بتحديث قاعدة بيانات أساليب الإدخال ، وإضافة علامات التشكيل وأنظمة التعرف على السياق الحساسة للغة العربية الترجمة الآلية التي لا تعالج روح اللغة يمكنها فقط أن تضع جثة من النصوص المتوازية ولابد للمترجم أن يعتمد على بعض الآليات العلمية للترجمة الصحيحة والهادفة لتحقيق معاني وأفكار تصل إلى المعني الحقيقي.

المستخلص:

شهد العالم في المدة الاخيرة قفزة نوعية في التطور التكنولوجي وقد تمثل ذلك في توظيف الذكاء الاصطناعي الذي اخد حيزا كبيرا مكان الانسان وتعلقه به وتوظيفه في حياته اليومية وقد ساهم بطريقة او باخري في عملية التواصل مع العالم الخارجي ونقل اهتمامتهم لاخر وخلق نوعا من التقارب رغم اختلاف الثقافات والالسن .

ان الذكاء الاصطناعي سهل علينا عملية التواصل الاجتماعي، كما أن عملية الترجمة في عملية التواصل الإجتماعي كانت بفضل الذكاء الإصطناعي و نقل الخبرات و يبقى له الفضل الكبير في تطور تكنولوجيا رغم السلبيات التي تؤخذ عليه.

الكلمات الدلالية

فايسبوك – ترجمة – الترجمة الالية – الذكاء الاصطناعي – وسائل التواصل الاجتماعي ..

Abstract

with the evolution of technology day after day people say that it will come a time when machines that work with AI will take the place of humans take their jobs but is it really a machine that made by men can take his place think as he thinks feel like he feels specially when it comes to the language which is more than words beside each other that make a sentence ,a social media it's a way of communication people uses to transfer not just their thoughts but also their feeling, is really can AI understand the surface and the hidden meaning of the words that comes from the differences in cultures and mindset between people from different backgrounds tell now it couldn't but its not impossible only time can answer this question.

Keywords: