

THE ROLE OF DIGITAL DICTIONARY OF TRANSLATOR AR-ID IN MODERN ARABIC ERA SOCIETY 5.0

Baiq Wahyu Diniyati Hidayatillah^{1*}, Muallifah², Nur Hasaniyah³

^{1,3}Universitas Islam Negeri Maulana Malik Ibrahim Malang, Indonesia

²Universitas Islam Negeri Syarif Hidayatullah Jakarta, Indonesia

Article History:

Received : 27/07/2023
Revised : 26/04/2024
Accepted : 30/04/2024
Published : 30/04/2024

Keywords:

Digital Dictionary; Modern Arabic;
Society 5.0

*Corresponding Author:

ayudiniyati1205@gmail.com

Abstract: The all-digital era of society 5.0 is considered a concept of society, centered on humans and based on technology. Progress in these various fields has given rise to many new vocabularies, of course a dictionary is needed to know and understand the meaning properly and correctly. Thus, the dictionary has a very important role in learning, especially the Arabic dictionary. Advances in technology, dictionaries are no longer in the form of sheets of paper, but are already in digital form which can be accessed with various media in the form of smartphones, laptops, tablets and so on. The purpose of this study is to reveal how the sources of the formation of modern Arabic and how the role of Translator AR-ID in interpreting new terms of modern Arabic in the era of society 5.0. This type of research is descriptive research using the Literature study. The results of this study reveal the sources of the formation of Modern Arabic consisting of Arabicization, Derivation, Arabicization and Derivation Preferences, Merger. One of the modern tools that can help translate Indonesian-Arabic is to use digital applications; digital dictionaries have an important role in translating new terms and vocabulary in modern Arabic. Because the digital dictionary always gets the latest updates regarding new words and meanings in every language, especially modern Arabic.

الملخص:

يعتبر العصر الرقمي للمجتمع 5.0 مفهومًا للمجتمع ، يتمحور حول البشر ويعتمد على التكنولوجيا. أدى التقدم في هذه المجالات المختلفة إلى ظهور العديد من المفردات الجديدة ، وبالطبع هناك حاجة إلى قاموس لمعرفة وفهم المعنى بشكل صحيح وصحيح. وبالتالي فإن القاموس له دور مهم جدًا في التعلم وخاصة القاموس العربي. التقدم في التكنولوجيا ، القواميس لم تعد في شكل أوراق ، ولكنها بالفعل في شكل رقمي يمكن الوصول إليها من خلال وسائط مختلفة في شكل الهواتف الذكية وأجهزة الكمبيوتر المحمولة والأجهزة اللوحية وما إلى ذلك.

الغرض من هذه الدراسة هو الكشف عن مصادر تكوين اللغة العربية الحديثة ودور القواميس الرقمية في تفسير المصطلحات الجديدة للغة العربية الحديثة في عصر المجتمع ٥.٠. هذا النوع من البحث هو بحث وصفي باستخدام أسلوب المكتبة. تكشف نتائج هذه الدراسة عن مصادر تكوين اللغة العربية الحديثة المكونة من تفضيلات التعريب والاشتقاق والتعريب والاشتقاق والاندماج / نحت. إحدى الأدوات الحديثة التي يمكن أن تساعد في ترجمة اللغة الإندونيسية إلى العربية هي استخدام التطبيقات الرقمية ، وللقواميس الرقمية دور مهم في ترجمة المصطلحات والمفردات الجديدة إلى اللغة العربية الحديثة. لأن القاموس الرقمي يحصل دائمًا على آخر التحديثات فيما يتعلق بالكلمات والمعاني الجديدة في كل لغة ، وخاصة اللغة العربية الحديثة.

Introduction

The development of the times has an impact on the development of society, with this development, the implications are inseparable from the expansion of language. The existence of certain dictionaries cannot translate all terms or new vocabulary to meet the needs of naming something that is found scientifically (Aljasser & Vitevitch, 2018). Arabic like other languages, continues to develop over time. In the process of development, society often creates new words or uses terms that do not yet exist in official or standard dictionaries. Therefore, it is important to have a flexible mechanism for adding new vocabulary so that Arabic remains relevant and able to express new ideas in society (Asmara, 2019). Technological changes that move very quickly bring extraordinary complexity (Pansuri, 2018). Almost all fields are automated with today's technological advances. Without realizing it, all sources of information and communication have shifted many human roles (Habibah & Irwansyah, 2021). This is inseparable from robotization technology, artificial intelligence and the internet of thought, some of which have disturbed the public. Not having finished adjusting to the Industrial revolution 4.0, suddenly we were surprised again by the presence of Society 5.0 which was pioneered by Japan (Tavares et al., 2022).

The all-digital era in the era of society 5.0 is considered the concept of a human-centered society based on technology, in other words all technology is part of humans, the internet is not only used for information but to live life (Nugraha & Rahman, 2021). According to Japanese government literature, society 5.0 should be one of the advanced fusions of cyberspace and physical space, capable of balancing economic and social issues.

Needs regardless of place, age, gender or language (Deguchi, 2020). The community has been greatly helped by the existence of various special advances in learning and learning resources which of course are abundant in cyberspace. Of course you need basic knowledge to choose which learning resources are credible and can be used.

Progress in these various fields, led to many new vocabulary. Arabs feel the need to find equivalent words that match the new word terms so that they are not out of date. Various attempts have been made to achieve this even though it still has various kinds of shortcomings. The process of absorption of foreign terms has become a habit for all languages in the world. There is no single language that does not mutually influence one another. One of them is Arabic which is thousands of years old and still survives amid the development of science and technology (Ibrahim, 2022). In the process of learning Arabic, students often face challenges in understanding the meaning and vocabulary of complex sentences. In overcoming these difficulties, a dictionary becomes an indispensable tool. With the help of a dictionary, students can accurately understand the meanings of unfamiliar words and interpret sentences more precisely (Che Mat et al., 2023). The importance of a dictionary in learning Arabic cannot be denied, as through the dictionary, students can expand their vocabulary and deepen their understanding of Arabic language structures (Taufiqurrochman, 2020).

With the advancement of technology, dictionaries are no longer limited to conventional paper formats. Nowadays, dictionaries have evolved into digital forms that can be easily accessed through various electronic devices such as smartphones, laptops, tablets, and others (Abdullayeva, 2021). The existence of digital dictionaries provides convenience for students to access information whenever and wherever they need it. With additional features such as quick search, example sentences, and pronunciation guides, digital dictionaries become extremely useful tools in facilitating effective and efficient Arabic language learning (Hanif et al., 2023). Thus, digital dictionaries are not only auxiliary tools but also essential partners for students in their journey of learning Arabic. Through digital dictionaries, students can gain a deeper understanding of the Arabic language and accelerate their progress in mastering it (Taufiqurrochman & Shirotol Mustaqim, 2023). Therefore, it is not an exaggeration to state that digital dictionaries have become one of the main pillars in Arabic language learning in this modern era.

Several preliminary studies regarding digital dictionaries have been carried out by researchers, The study on the use of digital dictionary showed that students cannot use dictionaries properly, so that the favorite digital dictionary used by students is Google Translate. (Arifin & Mulyani, 2021). This proves that the level of student translation is

classified as very low. In addition, Agussalim also previously stated that the design of two digital Arabic Linguistic dictionary applications; based on Windows and Android, carried out in five stages: installation of supporting dictionaries, data input, dictionary creation, internal testing, and dictionary revision. The test results of this digital dictionary application are 80% showing good results (Agussalim, 2019). Furthermore, research by Azmi states that with increasingly sophisticated technological developments, Arabic dictionaries have become the main reference for Arabic studies students which are updated quickly according to current developments. The data obtained was analyzed using descriptive techniques, with the result that digital Arabic dictionaries are more effective than printed Arabic dictionaries and have an important role in the digital Arabic language learning process (Azmi et al., 2018).

In this research, the writer tries to reveal the sources of the formation of modern Arabic and the role of digital dictionaries in interpreting the new terms of modern Arabic in the era of society 5.0. Because learning a foreign language without using a dictionary as a reference will be a problem for society, so they have to take advantage of technological developments in one way by using a digital dictionary. In the era of society 5.0, where technology and artificial intelligence increasingly integrate daily life, digital dictionaries are becoming one of the main tools in facilitating cross-cultural learning and communication. With its ability to provide instant and accurate information, digital dictionaries help speed up the learning process of modern Arabic and allow users to stay connected with developments in the language. As a result, digital dictionaries are not only a tool, but also an integral part of the process of learning and communicating in modern Arabic in the era of society 5.0.

Method

This research is descriptive research using the library method. According to Sugiyono, descriptive method is a method used to describe or analyze research results but not to draw broader conclusions (Sugiyono, 2018). The library method is defined as a method of collecting data by observing written results related to the problem or research object under study. Library technique is library research by reading, studying and recording various literature or reading material based on topics, then filtering and pouring it into a theoretical framework (Satori & Komariah, 2009). Data collection technique in this study used documentation techniques. Documentation technique is a way carried out by searching for data in the form of notes, transcripts, books, newspapers, magazines, inscriptions, minutes, research results, and so on (Moleong, 2018). In the meaning of that

the documentation technique is the collection of data contained in documents or existing archive, Data taken from a from the application Arabic Translator and Al Ma'any, and the official dictionary of Al-Mnawwir, Mahmud Yusuf Dictionary, in the form of the book includes definitions of words, phrases, sentences, and examples of use in a particular context. It also includes explanations or interpretations related to new terms in modern Arabic encountered in the era of Society 5.0 from the digital dictionary. The collected data was then analyzed using the method Milles and Huberman's descriptive model (2014) is carried out through three stages, namely reduction data is done to determine data that is relevant to research. Then presentation of data in the form of short narrative descriptions. Furthermore, conclusions are drawn by describing the findings related to the role of the digital dictionary in interpreting the new term modern Arabic in the era of society 5.0.

Result and Discussion

The development of science and technology (information technology) is synonymous with the development of language. When new theories and discoveries emerge (the field of science and technology) new terms appear in the language which are then followed by other languages. These terms can be created or obtained independently of a foreign language, planned or not. All natural languages have the ability to evolve in all directions and adapt to communication needs. It turns out that natural language can find ways to form words and phrases (Sakri, 1993). As new theories and discoveries are revealed in science and technology, new terms often appear in the language, reflecting the advancement and complexity of the newly discovered concepts (Hudaa & Bahtiar, 2020). For example, with the advent of internet technology, terms such as "website", "browser", "search engine", and so on have become an important part of everyday language. Over time, these terms were adopted by other language communities, inspiring an ever-expanding vocabulary of words and phrases.

This phenomenon confirms that natural language has an extraordinary ability to adapt to changes and communication needs. These languages are not only able to accommodate new concepts, but can also create new words or change the meaning of existing words to meet new needs. This shows the flexibility and dynamics of natural language, which continues to change with social, cultural and technological changes (Cai et al., 2023). As a result, the development of science and technology is intrinsically linked to the development of language, creating a network of mutual support between these two fields in enriching human expression and the advancement of knowledge. Through the close connection between language, science and technology, humans can continue to develop

their thinking and knowledge, and expand the boundaries of possibility in discovery and innovation. This emphasizes the importance of recognizing the role of language in driving holistic human progress.

Arabic is currently limited to terms found in religious books, but is starting to play a role in technology. Practitioners, opening the door, especially for those who work in the world of language, to take their place as a language that expresses modern thoughts (Murtosiah, 2020). Arabic picks up ideas and concepts from other languages which incidentally are more advanced in terms of science and technology. These ideas and concepts were then standardized by Arab academics and put into Arabic. The process of translating into Arabic and constructing a new Arabic vocabulary is known as the creation of new morphemes (Alshdaifat, 2021). The creation of these new morphemes reflects the Arabic language's response to advances in science and technology, as well as an attempt to convey these complex concepts into its own language. As a result, the Arabic language has experienced significant development and enrichment, with the emergence of new technical terms reflecting advances in various fields, from information technology to medical science (Keshav et al., 2022).

There are several ways to form a new vocabulary consisting of two basics. First, the words that are formed from the source language itself. Second, words collected from other language sources (Haq, 2022). In today's modern world, dictionaries can be found not only in print, but also in the form of Android applications or digital dictionaries. Including easy-to-use Arabic Indonesian dictionaries such as the Arabic Translator, Al Ma'any, Mutarjim, Mu'jam, Mu'jam Al Basith. Almost all people, especially students, have Android mobile phones, and students can use it as a dictionary in active learning (Ariati, 2021).

Because of this, various Arabic agencies must carry out changes to the original meaning which form new terms based on *isytiqaq*, carry out the meaning of terms, filter and create new vocabulary and follow various Arabic language rules, then discussion of *ta'rib* is mostly carried out by adapting the new vocabulary of modern Arabic to the era society 5.0.

Sources of Formation of Modern Arabic

The growth & development of a language may be separated based on the association between the language itself and other global languages. all languages that are still alive today certainly experience changes that may rarely be seen by the users of the language itself in a short time, but in a relatively long period of time, these changes will be clearly visible (Suroiyah & Zakiyah, 2021). Developments in communication technology,

such as the internet and social media, also have a major impact on language development. Social media, for example, creates platforms where new ideas, vocabulary, and language styles can quickly spread among large communities (Abdulsalam et al., 2023).

Modern Arabic is divided into three types, namely Arabicization, derivation and abbreviation. Besides that, there are also combinations of words, either ordinary combinations or hybrid combinations (Hilal, 2019). Through these processes, modern Arabic continues to develop and adapt to today's communication needs, but still maintains the roots and richness of its linguistic traditions. The modern vocabulary in the era of society 5.0 which is the focus of researchers is the vocabulary that arises as a result of technological developments, especially in the field of information technology. The sources for the formation of Modern Arabic are as follows:

1. Arabization.

Arabization is the absorption of foreign language vocabulary into Arabic. An example of the result of Arabization is a computer sentence in Arabic *كمبيوتر, تكنولوجيا* technology. The Arabization process is divided into two, namely through transliteration and through transcription (Khalid, 2018). The process of transliteration and transcription in Arabization shows the flexibility of the Arabic language in accommodating a variety of new sounds and concepts, creating a dynamic and evolving linguistic environment (El Kbaich, 2023). Therefore, Arabization is not just a process of absorbing foreign words, but also a manifestation of the vitality and adaptability of the Arabic language as a relevant and powerful communication tool in an ever-changing global context.

a. Transliteration

The first form of Arabization is transliteration

Bank bank بنك

Kabel Cable كبل

The data above proves that the absorption of a foreign language (English) does not all go the same way. *بنك* directly imitates the source language as it is. The letter b is transliterated to become the letter ب and the letter a is transliterated to become vowel fathah, the letter n is transliterated to become the letter ن and the letter k is transliterated to be the letter ك. This kind of Arabization is known as transliteration. Namely the change of letters from the Latin script to the Arabic script without any reduction in the actual word sound pronunciation (Wargadinata & Fitriani, 2008),

while the absorption of كبل data has been adapted to Arabic pronunciation and spelling, the letter c in the word cable is adjusted to the pronunciation of the letter ك because Arabic does not have the letter c. Therefore Cable/كبل data does not include transliteration but transcription.

b. Transcription

Defined as copying text by changing the spelling into another spelling to indicate the phoneme of the language concerned (Fa'iq, 2011). Pronunciation adjustments that occur can be shown through the following data:

Table 1. Transcription

English	Arabic	Indonesia
Mouse	الماوس	Mouse
Web	ويب	Web
Robot	روبوت	Robot
Virus	فيروس	Virus
Windows	ويندوز	Windows
Cache	كاش	Cache

2. Derivation or *Isytiqaaq*

Every word in Arabic is usually formed from a root and a pattern. The second way is coinage of modern Arabic vocabulary according to information technology

a. Root word

Based on its roots, Modern Arabic vocabulary can be broken down as follows:

- 1) The root consists of two letters, أخ which is a brother, in the language of technology is defined as sibling (Ibrahim, 2022).
- 2) The root word consisting of three letters , شبكة network of words , ش ب ك and ة is a derivative affix. (Malik, 2009).
- 3) The root word consisting of four letters , جدولة tabulasai (Niswah, 2018).
- 4) The root word consisting of five letters , the data is برنامج (Djuaeni, 2022).

b. Pattern derivation

- 1) Derivation originating from wazan فعل for example, أمر which is instruction, and wazan فِعْل , namely حفظ which means save.
- 2) Derived from wazan فاعل, namely ذاكره which means memory.

- 3) The derivation that comes from wazan تفاعل namely تبادل means interchange.
- 4) The derivation that comes from wazan استفعال namely استقرار which means stability.
- 5) For example from the wazan مفعّل which shows the meaning of the perpetrator for example in modern Arabic مبرمج namely programmer (Niswah, 2018).

3. Preference between arabization and derivation

Some of the vocabularies produced through several arabization processes have equivalents to the vocabularies produced through the derivation process. For example, the word ماوس maws which is equivalent to the word فأرة fa'rah, both mean 'mouse', which is a tool that functions to move the cursor and its shape is similar to that of a mouse.

Modern linguists prefer to use isytiqaq rather than ta'rib. Although they also do not reject Arabization absolutely (Bakalla, 1990). Versteegh also gives an example of the word كمبيوتر which is gradually being replaced by the word حاسوب because of the desire of Arab linguists to maintain the purity of language (Versteegh, 1997). The preferences of these linguists are not the same as the preferences of the language user community and are even inversely proportional. They prefer Arabicization rather than derivation as the Indonesian language users are more familiar with the word mouse than mouse. The reason is simple, because the majority of information technology devices still use English in their use.

4. Merging or نحت is the process by which two or more words are made into a single unit (Bakalla, 1990). For example in modern Arabic vocabulary ب.ص stands for صندوق البريد postbox which is the equivalent of the foreign language P.O. box
5. Pluralization

The plural or plural form in Arabic is divided into three. First Regular Masculine Plural (Jama' Muzakkaris Salim), Regular Feminine Plural (Jama' Muannatsis Salim) Third Irregular Plural (Jama' taksir) (Fa'iq, 2011). For example :

Table 2. Pluralization

English	Arabic	Indonesia
Viruses	فيروسات	Virus – Virus
Network	شيكات	Jaringan Jaringan
Computer	حاسبات	Komputer Komputer
Code	نصوص	Kode

6. Combined words

Table 3. Combined words

English	Arabic	Indonesia
Online	على الخط	Online
Kata Sandi	كلمة السر	Password
Mailing List	القائمة البريد	Mailing List
Sign-In	تسجيل الدخول	Masuk
Backspace	حركة خلفية	Menghapus
RAM (Random Acces Memory)	ذاكرة التوصل العشوائي	Memori Akses

7. Hybrid

The combination of words to be discussed is a combination of source words from Arabic (derivatives originating from foreign languages (Arabization), this combination of words is known as hybrida (Kridalaksana, 1996). Hybrid data in Arabic vocabulary according to technology is as follows:

Table 4. Hybrid

Inggris	Arab	Indonesia
Web Page	صفحة الويب	Halaman web
Information Technology	تكنولوجيا المعلومات	Teknologi Informasi
Programs without viruses	برنامج الحماية من الفيروسات	Program anti virus
Web log	موقع على شبكة الإنترنت	Web-log

In addition to some of the things above, semantics also has an important role in the formation of new vocabulary in modern Arabic. There are several ways that semantics plays a role in creating new Arabic vocabulary.

- a) Reusing old or obsolete Arabic words to express modern concepts, such as the words *جوهر* and *عرض* which have a substance meaning, besides that there is the form *سيارة* which used to mean camel caravan and now means car (Alolaywi, 2022).
- b) Majaz or metaphor
This concerns the use of majaz in translating foreign vocabulary into Arabic, such as the word telephone, namely *هاتف*, which used to be defined as the voice of inspiration, and the word *برق* which today is defined as telegraph and in the past had the meaning of lightning, and so on (Mohammed & Dhayif, 2022).
- c) Translation of foreign word patterns

For example, the term United Nations or called the UN, namely منظمات الأمم المتحدة, OPEC countries دول الأوبك, football كرة القدم (Albantani et al., 2020).

The Role of the Digital Dictionary on the Meaning of Modern Arabic Terms

A digital dictionary is an application that produces a variety of information that can be used to help translate words or phrases efficiently and effectively. One of the dictionaries needed at this time is the Indonesian-Arabic dictionary. The choice of Indonesian Arabic is because the majority of Indonesia's population adheres to Islam. With such a large number of Muslims in Indonesia, many people want to learn Arabic. We can buy printed Indonesian-Arabic dictionaries, but this method still has many problems because we have to look up words one by one in the dictionary, even though the number of words in the dictionary reaches thousands of words and it will take a very long time to find the word to translate. One of the modern tools that can help translate Indonesian-Arabic is to use a digital application. The application will automatically translate the words entered by the user.

Digital Arabic dictionaries consist of two types, offline digital dictionaries such as Al Maany Dictionary and online dictionaries (requires internet connection) such as Transaltor AR-ID. The types of offline/online digital dictionaries are not limited to one type of dictionary and this differentiates them from printed (traditional) dictionaries. The nizam word tagging system and the emergence of a digital dictionary are more flexible. The number of digital dictionaries is much larger and contains millions of word entries. Digital dictionaries are easier to update and change whenever needed. Each digital dictionary has a personal appearance and form, but users/translators are equipped with manuals and are more familiar to those who understand basic computer functions (Hayani, 2019). The existence of a dictionary itself cannot be separated from an educational process, especially in learning a foreign language. In its history, the existence of Arabic dictionaries has undergone various forms of change. Both in terms of the physical or systematic preparation of the dictionary. The tendency of students towards Arabic dictionaries is to emphasize practicality and convenience because they use the latest information technology sophistication (Sadat, 2020). In addition, the low ability of Arabic grammar is one of the most important factors that students do not use the maximum of the dictionary.

The advantage of a digital dictionary is that it has more vocabulary, can be developed with an attractive design and is easy to use, portable, multilingual, interactive, collaborative, and relatively inexpensive. This statement was also made by Yamin with a statement digital dictionaries offer a variety of displays and structured word entry formats. With millions of entries, digital dictionaries provide extensive material. Their advantage lies in their ability

to be easily updated and modified (Yamin et al., 2022). This is also strengthened by Rizqia's statement Despite differing in design, their usage is facilitated by accompanying software. Digital dictionaries offer more vocabulary entries and can evolve and be revised easily. They have attractive, user-friendly designs and are available on various platforms.(Rizqia et al., 2022). Their multilingual capability, interactive learning, and collaborative features make them more cost-effective compared to traditional printed dictionaries. The weaknesses of digital dictionaries are sentences or language texts that are not translated with the correct translation results because grammatical errors are often found, users and translators need knowledge of handling hardware systems and internet connections, and the price of devices or internet access options is expensive, and difficult to reach.

Apart from these advantages and disadvantages, digital dictionaries have an important role in translating new modern Arabic terms and vocabulary. This was also said by Hafidz et al "Digital Arabic dictionaries have an important role for students of Arabic studies in the 4.0 era. This shows their doubts whether digital dictionaries have an important role or not for Arabic Studies students in the 4.0 era as many as 84% of respondents stated that dictionaries have an important role in translating, especially in translating modern Arabic vocabulary (Zahrah et al., 2021).

Society 5.0 is a new order of modern society by using and utilizing technology in various aspects of life. Such as internet on things, artificial intelligence, big data, and robots to improve the quality of human life. That way to live in the era of society 5.0, namely mastering foreign language skills, both English and Arabic or other languages. For a programmer in the era of society 5.0, it will always make it more upgradable, as well as students, especially Arabic language education studies, who are required to know modern Arabic (Azizah, 2022), because without language one cannot live in any era.

The modern mufradat/vocabulary in the scope of information technology which has new terms are as follows:

1. Modern Arabic Vocabulary/Terms according to the dictionary version of the Arabic translator (Klays-Development)

Table 5. Modern Arabic Vocabulary of the Arabic translator (Klays-Development)

English	Arabic	Indonesia
File	ملف	Berkas
Icon	أيقونة	Ikon/gambar
Windows	نظام التشغيل وسندوز	Sistem operasi windows
Ebook	كتاب إلكتروني	Buku elektronik
Algorithm	خوارزمية	Algoritme

2. Vocabulary of Modern Arabic terms dictionary version of the Indonesian Arabic Translator

Table 6. Modern Arabic Vocabulary of the Indonesian Arabic Translator

English	Arabic	Indonesia
Browser	متصفحات	Penelusuran/penjelajah
Cache	ذاكرة المؤقتة	Memori singgahan
Aplplication	طلب	Aplikasi
Earphone	سماعة	Pengeras suara
Computer Analysts	تحليل الحسوب	Analisis Komputer

3. Vocabulary of Modern Arabic Terms Offline Arabic dictionary version

Table 7. Modern Arabic Terms Offline Arabic dictionary version

English	Arabic	Indonesia
GSM	نظام الاتصالات المتنقلة العالمي	Sistem Komunikasi Seluler Global
Hard disk Drive	محركات الأقراص الصلبة	Cakram Keras
CPU (Central procesing unit)	وحدة معالجة مركزية	Unit pemroses sentral
Folder	المجلدات	Penyimpanan Berkas
Hardware	المعدات	Perangkat keras

4. Vocabulary of modern Arabic terms, the complete version of the Indonesian Arabic digital dictionary application

Table 8. Vocabulary of Modern Arabic Terms dictionary version of Arabic digital dictionary

English	Arabic	Indonesia
Keyboard	لوحات المفاتيح	Papan tombol
Laptop	أجهزة الكمبيوتر المحمولة	Komputer jinjing
Network	شبكة الاتصال	Jaringan
PC Card	بطاقة الكمبيوتر	Kartu Memori PC
Password	كلمة السر	Kata sandi

5. Vocabulary of Modern Arabic Terms dictionary version of Indonesian Arabic Translator (Vaniinfo Solution) Education

Table 9. of Modern Arabic Terms dictionary version of Indonesian Arabic Translator (Vaniinfo Solution)

English	Arabic	Indonesia
System Programming	برمجة النظام	Program Sistem
Web Design	تصميم المواقع	Perancangan Web
Web Developers	مطور ويب	Pengembangan Web
Website	موقع الكتروني	Situs Web
Wifi	شبكة لاسلكية للمنطقة	Jaringan area nirkabel

Conclusion

Arabic is currently limited to terms found in religious books, but is starting to play a role in technology to express modern thoughts. The sources for the formation of Modern Arabic are arabicization, derivation, arabization and derivation preferences, merger. To live in the era of society 5.0, namely mastering foreign language skills, both English and Arabic or other languages. For a programmer in the era of society 5.0, his eyes will always be upgraded, as well as students, especially Arabic education studies, who are required to know modern Arabic. One of the modern tools that can help translate Indonesian-Arabic is to use a digital application. The application will automatically translate the words entered by the user. Almost no one denies that digital dictionaries have an important role in translating new terms and vocabulary in modern Arabic. Because the digital dictionary always gets the latest updates regarding new words and meanings in every language, especially modern Arabic. Based on the findings of this research, the importance of developing and mastering Modern Arabic in the context of society 5.0 becomes increasingly clear. The implication of this is the need to focus on developing educational resources that support the learning of Modern Arabic, including the development of digital applications that can assist in translating and understanding new terms. The next recommendation is to focus on the development of educational resources, including digital applications for translating new terms. Further studies are needed to understand preferences for using Modern Arabic and to develop effective learning methods. This will enhance understanding and mastery of Modern Arabic among students and the general public.

References

- Abdullayeva, D. S. (2021) . The Importance Of Dictionary Instructions In Formulating Pragmatic And Language Competency Of Learners. *The American Journal of Social Science and Education Innovations*, 3(1), 268-274. DOI: <https://doi.org/10.37547/tajssei/>
- Abdulsalam, K. A., Adebisi, J., Emezirinwune, M., & Babatunde, O. (2023). An Overview and Multicriteria Analysis of Communication Technologies for Smart Grid Applications. *e-Prime - Advances in Electrical Engineering, Electronics and Energy*. 3(1), 100-121. DOI: <https://doi.org/10.1016/j.prime>.
- Agussalim, A. (2019). Perancangan Kamus Digital Linguistik-Arab Berbasis Windows dan Android. *Nady Al-Adab Department of West Asian Studies*, 16(2) 34–59.
- Albantani, A. M., Fauziah, A. U., & Sumiantia, I. (2020). Perkembangan Kosakata Bahasa Arab Melalui Isytiqāq. *ALSUNIYAT: Jurnal Penelitian Bahasa, Sastra, Dan Budaya Arab*. 3(2) 1-14. DOI: <https://doi.org/10.17509/alsuniyat.v3i2.26243>
- Aljasser, F., & Vitevitch, M. S. (2018). A Web-based Interface to Calculate Phonotactic

- Probability for Words and Nonwords in Modern Standard Arabic. *Behavior Research* 50(1), 313-322. DOI: <https://doi.org/10.3758/s13428-017-0872-z>
- Alolaywi, Y. (2022). Derivation between English and Arabic with Reference to Translation: A Contrastive Analysis Study. *Arab World English Journal For Translation and Literary Studies*, 6 (3), 128-141. DOI: <https://doi.org/10.24093/awejtls/vol6no3.9>
- Alshdaifat, A. (2021). The formation of verbs of emotion in Arabic. *Jordan Journal of Modern Languages and Literatures*, 13(1), 105-120. DOI: <https://doi.org/10.47012/JJMLL.13.1.7>
- Ariati, S. (2022). The Use of an Android-Based Arabic Dictionary in the Arabic-Indonesian Tarjamah Course at the University, *Industry and Higher Education*, 1(1) 70-85.
- Arifin, A., & Mulyani, S. (2021). Persepsi Mahasiswa Terhadap Penggunaan Kamus Digital Bahasa Arab Di Era Society 5.0. *An Nabighoh*. 23(2), 235-250. DOI: <https://doi.org/10.32332/an-nabighoh.v23i2.4478>
- Asmara, H. D. (2019). Arabisasi (Ta'rib) Istilah-istilah Ilmiah dalam Buku Pelajaran Biologi Kelas 3 SMA, *Alfaz (Arabic Literatures for Academic Zealots)*, 7(2) 1-12. DOI: <https://doi.org/10.32678 /alfaz.vol7.iss02.2290>
- Azmi, H., Maulidiyah, I. W., Miftah, D., & Sutisna, F. (2018). Peran Kamus Digital Arab Bagi Mahasiswa Studi Arab Di Era 4.0., *Multaqa Nasional Bahasa Arab*, 1(1), 12-21.
- Cai, J., Hadjinicolaou, A. E., Paulk, A. C., Williams, Z. M., & Cash, S. S. (2023). Natural Language Processing Models Reveal Neural Dynamics of Human Conversation. *BioRxiv*. DOI: [doi10.1101/2023.03.10.531095](https://doi.org/10.1101/2023.03.10.531095)
- Che Mat, A., Ramli, N. A., Nokman, A. Z., Musilehat, N. S. B., & Abu Bakar, A. F. Bin. (2023). The Importance Of Idiomatic Dictionary In Arabic Language Acquisition: Students' Perception. *Ijaz Arabi Journal of Arabic Learning*, 6(2). DOI: <https://doi.org/10.18860/ijazarabi.v6i2.20562>
- Djuaeni, N. (2022). Isytiqaq dalam Pandangan Linguis Klasik dan Modern. *JAEL : Journal of Arabic Education and Linguistic*, 2(1), 11-19. DOI: <https://doi.org/10.24252/jael.v2i1.31389>
- El Kbaich, A. T. (2023). Between Translation and Arabization: The Transmission of European Texts into Arabic during the Nahda. The case of al-Tahtāwī. *Quaderns*. 1(2) 92-106. DOI: <https://doi.org/10.5565/rev/quaderns.107>
- Evi Nurus Suroiyah, & Dewi Anisatuz Zakiyah. (2021). Perkembangan Bahasa Arab Di Indonesia. *Muhadasah: Jurnal Pendidikan Bahasa Arab*, 3(1), 60-69. DOI: <https://doi.org/10.51339/muhad.v3i1.302>
- Faidlatul Habibah, A., & Irwansyah, I. (2021). Era Masyarakat Informasi sebagai Dampak Media Baru. *Jurnal Teknologi Dan Sistem Informasi Bisnis*. 3(2) 350-363. DOI: <https://doi.org/10.47233/jteksis.v3i2.255>
- Hanif, A., Deswita, D., Budiarti, M., Herman, H., Mudinillah, A., & Putri, L. R. (2023). Development of a Digital Dictionary for Measuring Arabic Language Education Students Retention. *Migration Letters*. 20(5), 321-339. DOI: <https://doi.org/10.1080/15437597.2023.2244444>

<https://doi.org/10.59670/ml.v20i5.3547>

- Haq, M. Z. (2022). Problematika Penerjemahan Idiomatik Arab Ke Indonesia. *Muhibbul arabiyah: Jurnal Pendidikan Bahasa Arab*, 2(1), 15-30. DOI: <https://doi.org/10.35719/pba.v2i1.32>
- Hayani, F. (2019). Leksikografi Arab (Sebuah Kajian Linguistik Terapan). *Shaut Al Arabiyyah*. 7(1), 1-12. DOI: <https://doi.org/10.24252/saa.v1i1.7786>
- Hilal, I. (2019). Creation of French Neologism in the Modern Arabic-French General Bilingual Dictionary. *Lexikos*, 20(1). DOI: <https://doi.org/10.5788/29-1-1523>
- Hudaa, S., & Bahtiar, A. (2020). Variasi Bahasa Kaum Milenial: Bentuk Akronim dan Palindrom dalam Media Sosial. *ESTETIK: Jurnal Bahasa Indonesia*, 3(1), 42-52. DOI: <https://doi.org/10.29240/estetik.v3i1.1470>
- Ibrahim, M. (2022). Al-Ta'ribat Mufradat Modern pada Lingkup IT (Analisis Leksikografi). *Uktub: Journal of Arabic Studies*, 2(1), 23-38. DOI: <https://doi.org/10.32678/uktub.v2i1.6031>
- Keshav, M., Julien, L., & Miezal, J. (2022). The Role Of Technology In Era 5.0 In The Development Of Arabic Language In The World Of Education. *Journal International of Lingua and Technology*. 1(2), 79-98. DOI: <https://doi.org/10.55849/jiltech.v1i2.85>
- Khalid, M. R. (2018). Al-ta'rib fi Al-Lughah Al-Arabiyyah baina Al-Musyajji'in wa Al-Munkarin. *Diwan: Jurnal Bahasa Dan Sastra Arab*, 4(2), 98-113. DOI: <https://doi.org/10.24252/diwan.v4i2.6703>
- Malik, A. (2009). Arabisasi (Ta'rib) dalam Bahasa Arab (Tinjauan Deskriptif-Historis). *Adabiyat*, 8(2), 36. DOI: <https://doi.org/10.14421/ajbs.2009.08204>
- Mohammed, I. F., & Dhayif, Q. A. (2022). Derivation and its Effect on Meaning in English and Arabic: A Contrastive Study. *International Journal of Linguistics Studies*, 2(2), 176-184. DOI: <https://doi.org/10.32996/ijls.2022.2.2.20>
- Moleong, L. J. (2018). *Metodologi Penelitian Kualitatif*. PT Remaja Rosdakarya.
- Murtosiah, S. (2020). Urgensi Bahasa Arab di Era 4.0. In *Lughoti: Jurnal Pendidikan Bahasa Arab*, 2(2), 49-66. DOI: <https://doi.org/10.54396/saliha.v2i2.29>
- Niswah, I. (2018). Pola Derivasi Dalam Bahasa Arab. *Al Lahjah*, 2(2), 31-40.
- Nugraha, A., & Aminur Rahman, F. (2021). Android Application Development of Student Learning Skills in Era Society 5.0. *Journal of Physics: Conference Series*. 17(1). DOI: <https://doi.org/10.1088/1742-6596/1779/1/012014>
- Pansuri, H. (2018). Kamus Bahasa Arab: Cara Penggunaannya. *Al-Ihda': Jurnal Pendidikan Dan Pemikiran*, 11(1), 112-120. DOI: <https://doi.org/10.58645/alihda.v11i2>
- Rizqia, A. Q. S. Z., Maylana, A. N., & Luthfi, K. M. (2022). Arabic-Indonesian Dictionary: Comparison of Digital Dictionary and Printed Dictionary. *Al-Ma'Rifah*, 19(1), 41-52. DOI: <https://doi.org/10.21009/almakrifah.19.01.04>
- Satori, D., & Komariah, A. (2009). *Metodologi Penelitian Kualitatif*. Bandung: Alfabeta.

- Society 5.0: A People-centric Super-smart Society. (2020). In *Society 5.0: A People-centric Super-smart Society*, 10(1), 1-18. DOI: <https://doi.org/10.1007/978-981-15-2989-4>
- Sugiyono. (2018). *Metode Penelitian Kuantitatif, Kualitatif, Dan R&D*. Bandung: Alfabeta.
- Taufiqurrochman, R. (2020). Advantages And Disadvantages Of Arabic Dictionary Applying Morphological System For Learning Arabic In Indonesia. *LiNGUA: Jurnal Ilmu Bahasa Dan Sastra*, 14 (2). DOI: <https://doi.org/10.18860/ling.v14i2.8316>
- Taufiqurrochman, R., & Mustaqim, N. Y. S. (2023). Digital Indonesian Arabic Dictionary For Improving Mastery Of Arabic Vocabulary. *Ijaz Arabi Journal of Arabic Learning*. 6 (3), 669-681. DOI: <https://doi.org/10.18860/ijazarabi.v6i3.22906>
- Tavares, M. C., Azevedo, G., & Marques, R. P. (2022). The Challenges and Opportunities of Era 5.0 for a More Humanistic and Sustainable Society, A Literature Review. *Societies*, 12(6), 1-21. DOI: <https://doi.org/10.3390/soc12060149>
- Wargadinata, W., & Fitriani, L. (2008). *Sastra Arab dan Lintas Budaya*. Malang: UIN-Malang Press.
- Yamin, M., Islam, U., Sultan, N., Idris, A. M., Annisa, S., Putri, M., Rohimah, S., Muhammad, A., Samarinda, I., Chairunnisa, S., Muhammad, S., & Chaidar, R. (2022). Kamus Digital Sebagai Sarana Hifdzul Mufrodah di Kelas VII-1 Madrasah Tsanawiyah Negeri Samarinda. *Jurnal Tarbiyah & Ilmu Keguruan (JTIK) Borneo*, 3(3), 37-45. DOI: <https://doi.org/10.21093/sijope.v1i2.4917>.
- Zahrah, H., Wargadinata, W., & Barry, N. A. (2021). Analisis E-Dictionarry "Arab-Indonesia" yang Tersedia di Playstore dengan Pendekatan Leksikologi. *Shaut Al Arabiyyah*. 23(2), 235-250. DOI: <https://doi.org/10.24252/saa.v9i1.21494>