# Positive and negative impact of technology and information revolution on compiling the dictionary

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**Abstract.** This study shows the positive and negative impacts of technology and new advances on the field of lexicography and dictionary making. The study makes an analytical comparison between three types of the dictionaries: printed, electronic and online. The researchers interviews some different users asking them about advantages and disadvantages of these dictionaries. This study confirms that the process of dictionary compiling is affected by the innovations and modern technology positively and negatively .Also, it finds that each one of the three types dictionaries has its own merits and demerits. The research recommends to benefit from the computer and internet revolution positively to improve our dictionaries. It concludes that the ideal dictionary is the one which meets the user's needs and requirements. The study ascertains that the dictionary remains an indispensible tool for any user.

Key words: technology revolution, printed dictionary, electronic dictionary, online dictionary, lexicography, dictionary-compiling.

#### 1 INTRODUCTION

Dictionary is one of the most essential learning tools for different users. Matej Lukáč (2001) confirmed that the dictionary is a necessary tool for English learner adding that the teacher has to help his\her students to choose the right dictionary to achieve their goals. He asserted that the best dictionary is not the one which provides the user with the word and its translation but it is the one which provides the user with other functions like collocations, idioms, examples, affixations, and others. Also, Sarah (2009) indicated that the dictionary is very important investment for the learner in general. In addition, Olimat (2010)pointed out that the dictionary is an important tool for any learner because it provides the user whether translator, learner or teacher with a lot of requirements such as definition, pronunciation, etymology ...etc.

Dictionaries are not only a wordlist with adjunct text but also they are collection of interrelated text supporting us as a function (Nielsen 2008). He demonstrated that the dictionary users' choice depends on nature of the needs, the ease and convenience. Moreover, Dion Nkomo (2008) has seen the dictionary as a container of knowledge and measure of correctness.. The researcher thinks that the best dictionary is the one that gives answers to the learner's questions. Different users need different types of dictionaries: monolingual, bilingual and multilingual. On the other hand, there are general dictionaries and specialized ones that focus on specific fields like law, physics, chemistry and others. Also there are different types which are electronic and online dictionaries as opposite to the paper printed ones. The dictionary remains indispensible tool for the user. It is a way of intercultural communication.

Lexicography is the process of compiling, writing and editing dictionaries. Williams (2009) thinks that lexicography is a linguistic discipline which consists of two related perspectives: practical lexicography which is the art and craft of compiling, writing and editing dictionaries. The other perspective is the theoretical lexicography which is the analysis and description of linguistic connections within the language lexicon. The researcher believes that lexicographer is the linguist who concerns about the word formation, meanings, structuring, usage, and derivation. Landau (1989) lists five phases for compiling the dictionary: planning, writing, publishing, revising, and abridging.

Boon Moh (2010) said that the technology is changing rapidly so that the trend to use the electronic and online dictionaries appeared as opposite to the printed ones. He added that using the electronic and online dictionaries has different advantages and disadvantages. Krubu and Osawaru (2011) pointed out the everyday technological advances affect the educational process and dictionary-using in the university libraries. Olimat (2010) and Boon Moh(2010) confirmed that electronic dictionary has become popular in the different institutions .Also, both of them ascertained that advances in technology and information system have helped this type of dictionary become more easily available and gain wide recognition and interests for the learners. Dirksen (2004) added that these advances and developments in technology made electronic dictionary with unlimited size and scope. Kirchner (2009) believed that the electronic information and technology have made sharp at speed changes in the field of lexicography and dictionary -making. He considered that computer technology is an environment for the dictionary making and use. The researcher conducts the study aiming to show the positive and negative impacts of the technology advances on compiling the dictionary. This study makes a comparison between the paper printed dictionary as opposite to the electronic and online ones showing their advantages and disadvantages.

# 1.1 Purpose of the study:

This research aims to show the positive influences of the technology and information revolution in the last decades on compiling the dictionary as well as to indicate to the negative effects of the developmental technology on industry of the dictionary. This study attempts to contrast between three main types of the dictionaries: paper, electronic and online. One of the main goals is to promote advantages of information revolution in field of lexicography and dictionary-making. The research also tries to highlight or reveal the negative points -to avoid them- that affect process of the dictionary-making which are appeared as a result of improving the technology and new inventions as a continuous stages in the last few years.

# 1.2 Question of the study:

Particularly, this study aims to answer the following questions:

- 1- what are the positive impacts of technology on compiling the dictionary?
- 2- what are the negative impacts of technology on compiling the dictionary?
- 3- what are advantages of the printed, electronic and online dictionaries?
- 4- what are disadvantages of the printed, electronic and online dictionaries?
- 5- which is the best dictionary (printed, electronic, online)?

#### 1.3 Significance of the study:

The study aims not only to help the translators, translation students and general learner, but also to help the lexicographers, publishers and compilers. It is also intended to enrich the translation, lexicography and linguistic fields with several important points. In addition, it provides the dictionary-makers, translators, terminologists and general users with some suggestions, criteria and recommendations to help them review, evaluate and make the ideal dictionary.

## 1.4 Research methodology

To achieve his goals, the researcher used two ways. firstly, he analyzed and reviewed some previous related studies and researches focusing in their content on the relationship between information revolution and printed, electronic and online dictionaries. This method was used to demonstrate to what is discussed about impact of modern technology revolution on the dictionary-making process in general. Secondly, the researcher interviewed some dictionary users asking them about advantages and disadvantages of printed, electronic and online dictionaries.

## 2 THE PREVIOUS RLATED STUDIES

A few studies have been conducted on the issues of the effect of the technology and information revolution on the process of compiling the dictionary.

#### 2.1 The printed, electronic and online dictionaries

The dictionary remains one of the most necessary aids for the learner. Olimat (2010) explained that dictionaries are store of lexicon which offer the requirements and needs of the learner such as meaning, examples and others. He stated that the current dictionaries have many shortcomings and pitfall that affect the learning process negatively. These drawbacks are related to the content and organization of dictionary.. The researcher contrasts between the three main forms: paper, electronic and online.

## 2.1.1Paper dictionary

Sarah (2009) demonstrated that printed dictionary is usually used more with the students who are interested with the first language adding that this form of the dictionaries has a lot of benefits: encouraging handwriting, having additional references like maps and common names of areas, can be existed in different educational institutions, and browsing which means that the user not only finds specific words but also notices the vocabulary along the way. Boon Moh (2010) emphasized that the learners are more familiar with the traditional way of using the dictionary in book form. Olimat (2009) concluded that the hard copy of dictionary are more accurate and provides the user with important knowledge such as collocations, idioms, exemplifications but on the other hand he indicated to some pitfalls and problems for this type.

## 2.1.2 Electronic dictionary

Olimat (2010) has seen that the technology entered the world of lexicography making the electronic dictionary more popular as a source of lexical knowledge. Midlane (2005) defines the electronic dictionary as a pocket-sized devices which can easily be carried by students for use in the classroom or for translation. He stated that most models can offer an audible pronunciation option allowing students to hear the word they look up. He added that many teachers don't prefer their students to use electronic dictionary in the classroom. Midlane questioned whether the regular use of electronic dictionary has beneficial effect in the acquisition of the foreign or second language than the paper-based dictionary. In addition, he argued that there is a gap in the teacher's acceptance of the portable electronic dictionary.

Boon Moh (2010) stated that the developed electronic dictionary is not merely a reference but also can be classified as a language learning tool. He added that it is not wise for the teacher to teach only by the paper dictionary. However, he suggested that the teacher should have a good idea about the lexicographical content of the electronic dictionary. Dirksen (2004), Morton (1978), Nielsen (2008) and Sarah (2009) asserted the electronic dictionary is much better than the printed one for many reasons: can be updated quickly, easy to use and portability. On the other hand, Boon Moh (2010) listed some disadvantages for this type. Firstly, some teacher are unfamiliar with their lexicographical content. Secondly, using the electronic requires some different skills. Thirdly, it is very expensive compared to the paper printed dictionary in addition to the need for batteries. However, he mentioned some positive points for this dictionary: having other options like calculator, clock, calendar, memory card and others, providing the user with correct pronunciation and availability in different styles and colours.

Olimat (2010) said that the students who use the electronic dictionary save more time and efforts. The electronic dictionary affects the teaching and learning process. Moreover, it is a fast effective tool which gradually replaced the bulky heavy paper dictionary as a result of rapid development of technology. i.e. it is so light. This dictionary improved our ability and made us have better, more efficient memorization. On the other hand, there are some demerits of electronic dictionary: not keeping us with rapid changes, listed a few usages, and hard to keep the new words in mind. Nielsen (2008) complained that most of the electronic dictionaries depend completely on the paper printed ones transferring their data. The researcher thinks that the e-dictionary eliminate printing, binding, storage and transportation. Hence, it plays an important role in our learning life.

## 2.1.3 Online dictionary

Kirchner(2009) ascertained that the online dictionary recently becomes one of the essential tools in the education process nowadays adding that the publishers are exploiting the technology potential for greater user involvement. Shiratuddin and others (2004) presented that the online dictionary has unlimited size and scope. Their research indicated that although the online dictionaries save time and efforts, are easy to use, give the correct pronunciation but they lack some examples and sentences about the word usage. Nielsen (2008) clarified that the internet dictionary allows the user to contact with the lexicographers demonstrating that most of the online dictionaries based on the printed one using their data. He argued that the online dictionary is not a source of wordlists but it has database in which the search is conducted electronically.

From other side, Sarah (2009) divided this type to three form: dictionary, glossaries and translators. He mentioned some merits of online dictionary: free to use, quickly to be updated , no space restriction and easy to include the latest new words. Boon Moh (2010) considered the online dictionary as a form of electronic one. He argued that the main difference between online and printed dictionaries is not their information content but also their retrieval system. His research pointed out that the increase of using internet dictionary resulted from the advances of technology and high-speed changes. He complained that some online dictionaries based on outdated paper dictionary.

# 3 DISCUSSION AND FINDINGS

The researcher interviewed some different users (university students, teachers, foreign learners and translators) asking them three questions. The first one is : what do you prefer: printed, electronic or online dictionary? The answers of the first question were approximate. Some of them preferred paper dictionary, others chose electronic, while a few selected the online dictionary.

The target sample listed their answers for the second question which is: what are advantages of the paper, electronic and online dictionaries? The students who preferred the paper dictionary mentioned these positive points: it provides the user with different needs and requirements such as spelling, definition, etymology, idioms, synonyms, collocation, affixation ...etc. Also, it can be used in the classrooms, examinations, assignment or any place where there is no computers or internet access. They pointed out this kind of dictionaries gives examples on how to use the polysemous and monysemous words in different contexts. Moreover, They presented that the paper dictionary is reasonably priced. The dictionary users discussed that this form is more accurate and precise than others because usually written by universities and educational or governmental institutions.

On the other hand, the users who chose the electronic dictionary as their favourite one stated that the portability and convenience are the most important benefits, i.e. it is so light adding that the electronic dictionary is easy to use and find the required information. They confirmed that the user can achieve his\her duty quickly saving a lot of time and efforts. Further, some of the target sample concluded that the electronic dictionaries support extra-functions like calculator games and help them pronounce the word correctly. They believed that the this type of dictionaries is a useful tool for the translator, language learner, students and travelers.

On the contrast, online dictionaries- according to the interviewee- are updated frequently an regularly, so there is no need to update their dictionaries. This means that there is no necessity to go to bookstore every year and buy a new dictionary. Also, they are free to charge and there are more options and functions for this type on the internet. They think that this dictionary is more convenient for the them since it helps them check grammar and spelling and gives them the correct pronunciation. They emphasized that this type provides them with different requirements and multifunction: synonyms, slang and translation. The online dictionary offers other benefits, for instance, games, crosswords puzzles ...etc.

The researcher asked his interviewees the third question which is: what are disadvantages of the printed, electronic and online dictionaries? The users listed the following points as negative points for the printed dictionary: limited words compared to electronic or online

versions, very bulky -heavy book, inconvenience for carrying cumbersome paper book, the need to use more than one dictionary for the specialized terms or texts, the necessity to be updated regularly. Some mentioned the following as demerits of electronic dictionaries: shortage of examples, can't be updated, their content based on the printed dictionary, they are fragile, more expensive compared to the printed dictionary, and they are reluctant to the thinking and memorization. From other side, others said that the online dictionaries have a few cons which are: can't be used in the classrooms or examination, the publishers of this dictionary are not professional nor accurate, some regional and cultural differences in the pronunciation, don't explain the differences between synonyms and similar meanings.

This study points out that the current dictionaries -which are used by different users whether they are students, teachers or translators- are affected negatively and positively by the technology and information revolution. This study concludes that a lot of different users begin to use the electronic and online dictionaries instead of paper ones. Moreover, it finds that the electronic and online dictionaries have a good number of portability...etc. On the other hand, it is clear that they have some disadvantages like: shortage of examples about sense and meaning of the word, collocation and idioms and losing the enjoyment of searching for the word and its meaning...etc. Because depending on the printed dictionary, the profit- making purpose of the new editions of the electronic and online dictionary is one of the most significant findings in this study.

# 4 CONCLUSION AND RECOMENDATIONS

To sum up, the dictionary is an essential tool for the learners in general. The traditional form of printed dictionary remains the most common in the users' hands. Nowadays, the electronic and online dictionaries become more and more popular in the learning process as a result of advances and development of technology. Generally speaking, they are supplement to printed dictionary not a replacement. The three types of dictionary- printed, electronic and onlinehave their own advantages and disadvantages. The user's choice of the dictionary is based on his\her needs and required information.

The research recommends that the scholars, learners and institutions have to benefit from the developments and new inventions of information technology and computer system to improve our dictionaries. It is necessary to work hard seriously to make up for deficiencies and misrepresentations whether in the printed, electronic and online dictionaries. Furthermore, the study suggests that the current dictionaries have to be updated positively through the correct utility of the modern technology to meet the user's needs and requirements.

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