



RESEARCH ARTICLE

Section: *Culture, Media & Film***Dimensions of interactivity in Iraqi newspaper websites**Neeran Waleed Jabar¹  & Husni Refat Husni Alashaab²¹Department of Media, College of Arts, Mustansiriyah University²Department of Journalism, College of Media, Al-Iraqia University*Correspondence: neeran.waleed@uomustansiriyah.edu.iq**ABSTRACT**

Interactivity is one of the most important aspects of digital media, it plays significant roles in the communication process, allowing the user to engage directly with the communicator and the news they publish, or with other users who share their interests and preferences. Interactivity with its tools has become a subject of interest to understand its dimensions, levels, types, and characteristics, in addition to its flaws or weaknesses in media and journalism, in order to diagnose and address them. Therefore, this research aims to identify the dimensions of interactivity in a sample of Iraqi newspaper websites, which are (ALMADA), (AZZAMAN), (ALSABAH ALJADED), and (ALMUSTAKBAL ALIRAQI), using a scale that includes a number of indicators. The research is descriptive; the researchers followed the survey methodology to achieve the objectives. The researchers reached a set of results and conclusions, the most prominent of which is the clear weakness in the dimensions of interactivity within the Iraqi newspaper websites, as many indicators were neglected, and no attention was given to the dimension of user response, which is an important dimension that cannot be dispensed with in the communication process.

KEYWORDS: communication, digital media, interactivity, Iraq, Iraqi newspapers, journalism, news websites

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1. Introduction

Communication, in its simplest definition, is the process of transmitting information, data, ideas, opinions, and feelings between a sender and a receiver using a specific medium, resulting in a reaction, it represents the degree of interaction between the two parties in communication, which we refer to as interactivity. This concept has attracted the attention of researchers since the beginning of evaluating the communication process and measuring its effects. This interest has increased with the spread of the internet and the emergence of digital newspapers, news websites, and social media networks, this has, in turn, changed the prevailing concept of interactivity, making the recipient a participant in the communication process, receiving the message in real-time and responding or interacting with it in less than a second.

The success of digital media has begun to be linked to the dimensions of interactivity, its levels, and the tools that allow users to navigate and browse within websites, as well as to comment, chat, and communicate directly with others or with journalists. Therefore, these media have started to focus on the design of their websites and the services they offer, which are fundamentally based on interactivity.

Interactivity is defined as the expression exhibited by the recipient of the message after receiving it, this expression is related to the message and reaches the sender through the same medium that conveyed the message, in other words, it is the ability of the communication medium to transmit the recipient's responses back to the sender (Rafaeli, 1988, pp. 110-111), and it refers to the degree to which the message receiver controls the communication process and exchanges roles with the sender (Downes & Mcmillan, 2000, pp. 172-173), and it can be classified into three categories related to the type of information that is sent and received in the communication process, which are (Pagani, 2003, p. 103):

- 1) Interaction between the user and the information: This is a specific and limited interaction, restricted to the recipient's choice of information – for example – the time of access and the way to handle it, such as reading or watching it.
- 2) Interactivity between the user and the communication medium: This is an exploratory interactivity characterized by more advanced forms of interaction, it provides users with a wider range of active options, including access to tools that enable them to engage with the medium.
- 3) Interaction between one user and another: It refers to the flows of information that enable direct communication between one user and another or among a group of users, reaching a high level of interaction that resembles direct communication regardless of the type of medium used.

Interactivity can be considered as the extent to which the recipient can modify the form or content of the communication message in real time. This concept is based on technical foundations, with its dimensions represented by the speed at which the recipient's response is transmitted to the sender through the communication medium, and the range that indicates the number of choices available to the recipient at any point during the communication process, in addition to the organizational capability of the medium, and the recipient's ability to control the communication process and the connection between interactivity and communicative existence (Steuer, 1992, pp. 76-88), it can be said that interactivity is a degree to which communication technology contributes to creating a communicative environment that allows for equal participation of the elements of the communication process, approaching the completion of communication in real-time, and contributing to the exchange of communicative messages (Kiouisis, 2002, p. 372).

Allowing the recipient to interact, change, and express their ideas, opinions, and suggestions, or to present a set of options that suit them, is something that increases the chances of success in the communication process and achieving its functions, regardless of its type, whether it is informational, educational, cultural, or for entertainment and leisure purposes (Alashaab, 2022, p. 5615).

This leads us to agree with the previous definitions that addressed the concept of interactivity. We see it as the recipient's reaction to the content of the communication message, and its degree varies depending on this content and its impact on the recipient's personality, thoughts, beliefs, and principles that they adhere to. In other words, interactivity provides the recipient with the opportunity to be a participant and an influencer in the communication process, regardless of the type of communication medium through which the message is

conveyed.

Based on the above, interactivity takes on a set of dimensions, which can be highlighted as follows (Heeter, 1989, pp. 221-224):

- 1) Complexity of choice available: It refers to providing multiple options and offering more than one alternative for the user (the recipient) to access information. This dimension includes the choice of language within the website, the availability of a search engine, and the presence of multimedia elements, news, reports, and articles on the page.
- 2) Facilitation of interpersonal communication: The presence of a communication tool that enables users to interact with each other and with the content and those responsible for communication on the website, including the availability of chat rooms, discussion groups, and the email messaging feature.
- 3) Effort users must exert: It refers to the effort exerted by the user in obtaining the information they want from the website, and includes the number of clicks required to access the news.
- 4) Monitoring information use: Measuring the number of users, readers and viewers who follow what is published in digital media, such as websites and newspapers, and measuring their levels of interaction with information and news.
- 5) Responsiveness to the user: Responding to user commands and answering their questions and inquiries. This dimension includes help messages, instructions, and error messages.
- 6) Ease of adding information: The ease of adding information through the available tools on websites allows the user to be a writer and editor, expressing their opinions, hobbies, and interests. This can be measured by checking for the presence of features such as inserting comments, adding blog posts, and participating in polls.

2. Literature Review

The researchers were keen to access studies that discussed the concept of interactivity and analyzed its dimensions and levels, which will be reviewed as follows:

(Heeter, 1989) looked at interactivity as one of the functional characteristics of media, as the researcher identified a set of dimensions, and gave each dimension a value ranging between (0) and (3) as a scale or indicator of its presence or absence, in other words, the higher the value of the scale, the higher the level of interactivity, but many changes soon occurred to this scale due to the developments in websites and their distinction from other media surveyed (180) websites belonging to television channels, with the aim of identifying the interactive elements in the news articles published in their page's regression analysis. The study reached a set of results, the most important of which is that websites that contain video links, e-mail, and multiple pages are more interactive than websites that do not have these elements; by monitoring the number of users who are exposed to the content published.

A study by (Mcmillan, 2000) monitored interactivity from a functional and cognitive point of view, and the researcher compared interactivity and users' attitude towards websites, according to their demographic characteristics, and the content published, the results showed that there were no statistically significant differences, which made this study subject to criticism, as some saw interactivity as a functional characteristic of the medium, and others emphasized that interactivity is related to the perceptions of the participants in the communication process.

(Chan-Olmsted & Park, 2000) analyzed the content published in a sample of news websites in order to identify the extent to which the news published on the homepage are consistent with the news published in the subpages of the websites and their relationship with interactivity. The results of the study showed that the websites do not provide their users with interactive customization, and follow the pattern of regrouping and suggesting the featured news again to the readers.

The study of (Mohassab, 2008) belongs to quantitative descriptive research and aimed to measure the interactivity of (AL JAZEERA) and (CNN) websites. The researcher relied mainly on the survey method to identify the elements of interactivity. The researcher followed the steps of the comparative method to monitor the similarities and differences on the websites. The results of the study showed the superiority of (CNN) over (AL JAZEERA) in terms of interactive services; the researcher believes that the reason for this is the huge financial

budget of (CNN) and its association with (Time Warner), as well as the focus of the site's communicators on attracting the largest number of users by providing news in different ways and languages that mimic the desires, interests, and cultures of different people aimed to find out the availability of interactivity in Algerian newspaper websites and the most prominent interactive tools in them, the researcher followed the procedures of the descriptive survey method, and used the analysis and observation tool to achieve the objectives, the study reached a set of results, the most important of which is that newspaper websites provide users with many interactive options in varying proportions, with a weakness in the possibility of communicating with editors and journalists, except for one website, (AL SHOROUK), which depends on the method of submitting a request to communicate with editors and journalists.

While the study of (Messamah & Haddadi, 2020) revealed the interactive dimensions available in the pages of Algerian private satellite channels on (FACEBOOK), the study belongs to descriptive and analytical studies, and the researchers followed the steps of the descriptive survey method. The data was collected through the content analysis tool, and the researchers applied the analysis form to a purposive sample of private satellite pages, the study reached results, including that the analyzed pages utilized interactivity in different dimensions, with a variation in their use by the audience.

The reviewed studies represent an important addition to the foreign and Arab scientific heritage, and their review helped in crystallizing the current research problem accurately and methodologically, choosing the scientific method, designing the data collection tool, and accessing a list of important sources and references that enriched the theoretical aspects of this research, and avoided the researchers from repeating what has been studied, so the difference between this research and the previous studies can be identified in the following points:

- 1) This research sheds light on the websites of Iraqi newspapers.
- 2) The current research developed a new scale adapted to the nature of local Iraqi websites that researchers can use for new studies that explore news websites, for example, or any other media platform or medium, in order to study and identify their interactive dimensions.
- 3) The results of this research come at a time when the media landscape is witnessing clear developments in content delivery and news publishing, which makes it important for Iraqi media to upgrade their levels of interactivity to meet the needs of users.

3. Research Methodology

3.1. Research Problem

A problem in scientific research is a case, idea, or issue that requires study and investigation in an organized scientific manner to understand its premises and build relationships between its elements or variables (Hussein, 2006, p. 69), or it may be a lack of information or experience, an unmet need, or a question that piques the researcher's curiosity, prompting them to seek an answer to reach the truth (Abd Al-Hamid, 2015, p. 110). The researchers formulated their research problem in a main question: (What are the dimensions of interactivity in Iraqi newspaper websites?), and a group of questions emerged from it:

- 1) What interactive tools are available on the websites of the Iraqi newspapers?
- 2) Is the way to access news on newspaper websites easy and diverse?
- 3) What options do Iraqi newspapers provide for communication between the editor and the user?

3.2. Importance of the Research

The importance of this research stems from its results, which define the dimensions and levels of interactivity in Iraqi online newspapers. It can serve as a starting point for research and studies that highlight interactivity in Iraqi digital media and its ability to fulfill communicative functions for users. The importance of research also evident for journalists and media professionals working in online newspapers to identify the strengths and weaknesses of the websites and to work on developing their infrastructure in a way that provides a unique, error-free user experience for users in obtaining information and staying updated on news and current events.

3.3. Research Objectives

The research seeks to achieve several objectives:

- 1) Identify the dimensions of interactivity in Iraqi newspaper websites.
- 2) Identify and classify the interactive tools available on newspaper websites.
- 3) Testing the accessibility of news content published on newspaper websites.
- 4) Identify the options provided by newspapers for communication between editors and users.

3.4. Research Sample

The researchers conducted a preliminary exploratory study to identify the characteristics of the research community. The results showed that there are (14) Iraqi newspapers that have websites on the web. The researchers randomly selected (4) newspapers from the community as a representative sample, which are: (ALMADA), (AZZAMAN), (ALSABAH ALJADED), and (ALMUSTAKBAL ALIRAQI).

3.5. Research Limits and Fields

- 1) Time Field: Extends from October 1 to December 31, 2024. The researchers chose this period to obtain an appropriate amount of data that helps achieve the research objectives.
- 2) Place Field: The web, websites, Iraqi newspaper websites, represented by (ALMADA), (AZZAMAN), (ALSABAH ALJADED), and (ALMUSTAKBAL ALIRAQI).

3.6. Research Method

This research is classified as descriptive research, which relies on studying phenomena that exist in reality and focuses on accurately describing them. Descriptive research involves research procedures that integrate to explain the phenomenon or subject under investigation, based on the collection of facts, information and data, classifying them, and then processing and analyzing them accurately to extract their significance and reach scientific conclusions (Al-Mashhadani, 2019, pp. 125-126) and the researchers followed the steps of the survey methodology to achieve the research objectives, which is a method that focuses on studying phenomena and the surrounding conditions to collect facts about them and derive necessary conclusions to address a specific problem (Badr, 1975, p. 279), and also aims to describe and explain the reasons for the occurrence of phenomena and their current conditions by studying the relationship between two or more variables (Zaghib, 2009, p. 109).

The researchers applied content analysis method to achieve the research objectives. The analysis form included indicators derived from the theoretical model of (Carrie Heeter's scale). Additionally, it based on the results obtained from the exploratory study conducted by the researchers on the research community from September 1 to September 30, 2024, to identify Iraqi newspaper websites. The researchers precisely identified the indicators (main and sub-indicators) and assigned a score of (1) for the presence of each indicator in Iraqi newspaper websites, and a score of (0) in case of its absence. The total number of indicators included in the form was (29), distributed as (5) main indicators and (24) sub-indicators.

To verify the validity of the research tool, the researchers presented the analysis form to a group of experienced and specialized arbitrators. After making the necessary adjustments, the researchers calculated the validity ratio by extracting the percentage of agreement among the arbitrators for each indicator and then finding the overall percentage of their agreement on all indicators. The agreement percentage on the validity reached (87.31%). The researchers calculated the reliability using (Holsti's Method Formula), and the reliability ratio was (95.42%).

4. Findings and Discussion

Table (1) below shows the results related to the (Complexity and multiplicity of choices) dimension in the websites of the Iraqi newspapers, and the results were as follows:

- 1) (Multiple languages): The Iraqi newspaper websites presented their news, reports and everything published on their pages in one language, Arabic, and the feature of changing the language or translation did not appear in any of the websites, which is a negative indicator that reduces the level of interactivity

in the websites and shows its limited spread within certain geographical borders.

- 2) (Search engine availability): The results showed the availability of the search engine in (3) websites: (ALMADA), (AZZAMAN), and (ALSABAH ALJADED). The researchers tested their efficiency by entering keywords about the most prominent current events and issues within the specified period of the research, and the results appeared well without errors, while the researchers observed the absence of a search engine on the website of (ALMUSTAKBAL ALIRAQI) newspaper.
- 3) (Breaking news appearance): Breaking and important news appeared on the four newspaper websites in the research sample, on their main front pages in the form of a news bar as well as side posts distinct from the rest of the news, which is a positive indicator that increases the level of interactivity.
- 4) (Utilizing multimedia elements): The Iraqi newspapers' websites used multimedia elements well to attract users, as the researchers observed the use of images in all the news published on the four websites, as well as the publication of visual reports and short video clips. However, the researchers observed poor quality images and videos posted on the four websites.
- 5) (Change the layout of the website): The results showed that the four newspaper websites in the research sample do not provide options to change the layout of the presentation or the content published, and their interfaces are characterized by rigidity, and their designs are old and not updated with dynamic and interactive designs, which is a negative indicator.
- 6) (Change the text size): The results showed that (ALMADA) newspaper allows its users to change the text size of the news published on its pages, while the rest of the newspapers neglected this feature, and it is a negative indicator.
- 7) (Availability of sharing and saving tools): The researchers found the availability of sharing, saving and printing tools for the published content on the four newspaper websites, which is a positive indicator.
- 8) (Providing supportive media services): (3) websites provided supportive media services, such as market prices, stocks, and weather, while (ALMUSTAKBAL ALIRAQI) newspaper did not.
- 9) (The use of interactive words and links): This indicator was ignored by the four newspapers, and the news, reports, and articles appeared as a static text that did not refer the user to any related details or information to the topic or the story.

Table (1): Results of (Complexity and multiplicity of choices) dimension in Iraqi newspaper websites

Indicators	Websites of Iraqi newspapers				Total	%
	ALMADA	AZZAMAN	ALSABAH ALJADED	ALMUSTAKBAL ALIRAQI		
Multiple languages	0	0	0	0	0	0
Search engine availability	1	1	1	0	3	15.79
Breaking news appearance	1	1	1	1	4	21.05
Utilizing multimedia elements	1	1	1	1	4	21.05
Change the layout of the website	0	0	0	0	0	0
Change the text size	1	0	0	0	1	5.27
Availability of sharing and saving tools	1	1	1	1	4	21.05

Providing supportive media services	1	1	1	0	3	15.79
The use of interactive words and links	0	0	0	0	0	0
Total	6	5	5	3	19	100

From the data in Table (2) related to (Ease of interpersonal communication) dimension, we can see that the test indicators appeared in the research websites as follows:

- 1) (Likes and reactions): (ALMUSTAKBAL ALIRAQI) newspaper allows its users to rate the published news by giving a number of stars ranging from (1) to (10) that show how satisfied the users are with what is published, while the rest of the newspaper websites did not show any indicators of liking or rating.
- 2) (Comments): (ALMADA) and (ALSABAH ALJADED) users can write comments and personal opinions and add them to the published news and topics, which is a positive indicator of a high level of interactivity and confirms their superiority over (AZZAMAN) and (ALMUSTAKBAL ALIRAQI).
- 3) (Live chat): The researchers did not observe the presence of this feature on the websites during the research period.
- 4) (E-mail:) Available on all four newspapers, the user can correspond with the communicators through it, realizing communication functions that may be informational, commercial or personal.
- 5) (Phone number): Available in (ALMADA) and (ALMUSTAKBAL ALIRAQI) websites, where the communicator provided local phone numbers to communicate directly with the websites' management or advertising departments, and the communicator in (AZZAMAN) newspaper website provided an international phone number, (UK), while the communicator in (ALSABAH ALJADED) website did not provide any phone number or customer service.
- 6) (Linking to social media websites): It means linking the user to the social pages of the newspaper in social media, and the results showed that it is possible in (ALMADA) and (ALSABAH ALJADED) websites only.

Table (2): Results of (Ease of interpersonal communication) dimension in Iraqi newspaper websites

Indicators	Websites of Iraqi newspapers				Total	%
	ALMADA	AZZAMAN	ALSABAH ALJADED	ALMUSTAKBAL ALIRAQI		
Likes and reactions	0	0	0	1	1	8.33
Comments	1	0	1	0	2	16.67
Live chat	0	0	0	0	0	0
E-mail	1	1	1	1	4	33.33
Phone number	1	1	0	1	3	25
Linking to social media websites	1	0	1	0	2	16.67
Total	4	2	3	3	12	100

The data in Table (3) below shows the interactivity indicators for (Effort exerted by the users) dimension in the four Iraqi newspaper websites:

- 1) (Updates): The researchers observed that the websites were keen to update their content daily and provide the users with the latest local, Arab, and international news, within the specified period of the research.
- 2) (News classification): Content on websites is classified and organized based on subject matter (political, economic, sports, etc.), geographical scope (local, regional, international), or type (news, reports, articles, investigations).
- 3) (Efficiency of access to information): The users can access the information and news with a single click without going to external pages, subpages, or side topics.

Table (3): Results of (Effort exerted by the users) dimension in Iraqi newspaper websites

Indicators	Websites of Iraqi newspapers				Total	%
	ALMADA	AZZAMAN	ALSABAH ALJADED	ALMUSTAKBAL ALIRAQI		
Updates	1	1	1	1	4	33.33
News classification	1	1	1	1	4	33.33
Efficiency of access to information	1	1	1	1	4	33.33
Total	3	3	3	3	12	100

The results in Table (4) below show that the indicators related to (Responsiveness to the user) dimension were clearly weak in all of the research newspaper websites, as they neglected to provide a navigation map and a page to answer frequently asked questions, and did not have any guidelines, instructions, or privacy policy pages regarding the use of the newspaper websites.

Table (4): Results of (Responsiveness to the user) dimension in Iraqi newspaper websites

Indicators	Websites of Iraqi newspapers				Total	%
	ALMADA	AZZAMAN	ALSABAH ALJADED	ALMUSTAKBAL ALIRAQI		
Website navigation map	0	0	0	0	0	0
Answers to frequently asked questions	0	0	0	0	0	0
Instructions and error messages	0	0	0	0	0	0
Total	0	0	0	0	0	0

Table (5) below shows the indicators of (Ease of adding information by the users) dimension in the newspaper websites, and its results were as follows:

- 1) (Participation in opinion polls): (ALMADA) and (ALMUSTAKBAL ALIRAQI) newspapers allow users to participate in polls published on their websites. These polls are simple, consisting of one or several questions with specific options, covering topics, current events, and various issues.
- 2) (Editing comments and reactions): appeared only on (ALSABAH ALJADED) newspaper website, where

users can edit their published comments by linking their accounts to (FACEBOOK). Otherwise, users cannot make any edits, a feature that was overlooked by the other Iraqi newspaper websites.

- 3) (Adding/submitting articles and blog posts): This indicator refers to the user's ability to submit articles and blog posts for publication on the newspaper's website. Despite the importance of this indicator on newspapers website, the sample websites neglected it and did not provide any option for online submission, requiring articles to be submitted directly at the newspaper's headquarters instead.

Table (5): Results of (Ease of adding information by the users) dimension in Iraqi newspaper websites

Indicators	Websites of Iraqi newspapers				Total	%
	ALMADA	AZZAMAN	ALSABAH ALJADED	ALMUSTAKBAL ALIRAQI		
Participation in opinion polls	1	0	0	1	2	66.67
Editing comments and reactions	0	0	1	0	1	33.33
Adding/submitting articles and blog posts	0	0	0	0	0	0
Total	1	0	1	1	3	100

Based on the results presented, (Complexity and multiplicity of choices) dimension achieved (19) indicators distributed by (6) indicators in (ALMADA) newspaper website, (5) indicators in (AZZAMAN) and (ALSABAH ALJADED), and (3) indicators in (ALMUSTAKBAL ALIRAQI) website, achieving the highest percentage, (41.30%), followed by (Ease of interpersonal communication) and (Effort exerted by the users) with a total of (12) indicators and a percentage of (26.09%), while (Ease of adding information by the users) had (3) indicators and a percentage of (6.52%) while (Responsiveness to the user) dimension did not achieve any percentage, as shown in Table (6) below:

Table (6): Dimensions of interactivity in Iraqi newspaper websites in the research sample

Dimensions of interactivity	Websites of Iraqi newspapers				Total	%
	ALMADA	AZZAMAN	ALSABAH ALJADED	ALMUSTAKBAL ALIRAQI		
Complexity and multiplicity of choices	6	5	5	3	19	41.30
Ease of interpersonal communication	4	2	3	3	12	26.09
Effort exerted by the users	3	3	3	3	12	26.09
Ease of adding information by the users	1	0	1	1	3	6.52
Responsiveness to the user	0	0	0	0	0	0
Total	14	10	12	10	46	100

5. Conclusions

- 1) There is a clear weakness in the dimensions of interactivity within the websites of the Iraqi newspapers; they transmit a large amount of news and reports on a daily basis, without concern for interactivity between the content and the user, between the user and the communicator, and between the user and the communication medium, which requires a reconsideration of the function, role and position of these websites.
- 2) The newspaper websites neglected the dimension of responsiveness to the user, which is an important dimension in the communication process; the sample websites were a maze that did not contain a map, instructions or guidelines, and the pages and sections dedicated to these purposes did not work and suffered from many errors.
- 3) The websites of Iraqi newspapers looked outdated: the user interface, designs, interactive tools, colors, the quality of images and videos are old and do not correspond to current changes, which is an indication that the websites are not keeping up with modern technology developments in the field of interactive design.
- 4) A clear weakness in the dimension of adding information by users in Iraqi newspapers websites is a negative indicator, as the results showed that the user is unable to comment on the news, and if he adds a comment, he is unable to edit or delete it, in addition, the user is unable to add or submit articles and blog posts, which is a negative indicator of the weak potential of the websites and their unwillingness to attract a larger audience.
- 5) The Iraqi newspaper websites show no interest in expanding their reach globally, as they provide their content only in Arabic.
- 6) The researched websites succeeded in achieving the dimension of user effort, as the researchers observed that the news was constantly updated, categorized according to type and topics, as well as easy to read with one-click access.
- 7) The websites offer various communication channels with editors, such as email, phone calls, and messaging, enabling users to reach journalists for answers to their queries or questions.
- 8) The websites did not use keywords or links to direct users to more relevant and informative pages, which is a negative indicator for Iraqi newspapers, as news and reports have turned into blocks of text entirely devoid of interactive elements.

6. Recommendations

- 1) Conduct research to measure the dimensions, tools, and levels of interactivity in Iraqi news websites and compare them with newspaper websites to identify their strengths and weaknesses.
- 2) Conduct survey studies on a sample of journalists working for Iraqi websites to determine their awareness of the concept of interactivity and measure the extent of its use.
- 3) Redesign and restructure Iraqi newspaper websites using modern tools and software that prioritize interactivity.
- 4) Utilize artificial intelligence to enhance the interactive dimensions of Iraqi newspaper websites, transforming them into platforms that accurately reflect the true role of media and journalism in society.
- 5) Utilize multimedia elements to enhance interactivity within newspaper websites by developing innovative methods for presenting news.
- 6) Enable the user to participate in expressing opinions and commenting on the published news.
- 7) Iraqi newspaper websites should generally support publishing in different languages (e.g. English and Kurdish) to achieve greater reach inside and outside Iraq.

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