

# DEVELOPING THE SCIENTIFIC MAGAZINE IN THE PERIOD OF THE FOURTH INDUSTRIAL REVOLUTION

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*Characteristics of the industrial revolution 4.0 is the wide application of high-tech achievements, especially information technology, digitalization, artificial intelligence, network connections for management to create sudden changes in socio-economic development of many countries. Therefore, to reach the high-tech time, many magazines in Vietnam have changed dramatically, striving to reach the international scientific journal system of ISI, Scopus. The publication of international standard scientific journal will meet the demand of publishing research results of local scientists, on the other hand contribute to strengthening exchange, cooperation, international integration in science and technology.*

**Keywords:** Theoretical issues; Magazine concept; Publication; Press publication; Magazine characteristics; Magazine nature; Industrial Revolution 4.0; High technology.

## I. Some common theoretical issues about Magazine

Ho Chi Minh President always advised journalists, publishers to regularly cultivate revolutionary morality, cultivating ideology, studying politics in order to firmly grasp the policy undertakings of the Party and the State, going deep into practice, going deep into the labor mass, must always improve the culture level, forging profession, sharpening their pen in the “main serving, except evil” career. The task of journalists, publisher is important and glorious. To accomplish this task, they must try to study politics, raising the ideology, standing on the stance of the proletariat; to raise the culture level, to deepen their professionalism.

The Party sets out guidelines, strategies for the development of the press and publishing; leadership through ideological activity; leadership through Party organizations in the press, publishing. The Party leads the State agencies to build the legal system on the press, publishing through the cadre work of press and publishing;... The Party directly leads the agencies of press, publishing, training, fostering, managing and arranging cadres, journalists and editors into agencies of and publishing; the Party leads by exemplary activities of cadres, agencies and by checking and correcting deviations in the press and publishing activities.

The magazine is a written newspaper, to be the theoretical, academic and scientific agency of a certain organization or union mainly to deepen the research, guidance and exchange of scientific work

on a field belong to the scope of their respective branches and localities. The magazine’s release period is usually longer than the periodic release of the newspaper. The timely and urgently of theoretical information is not as demanding as the current news. The exact requirements for a magazine article are also different from the exact requirements of a newspaper article, or broadcasting on radio, on television that requires objectivity, honesty and accuracy.

### 1. Magazine

#### 1.1. Concept

Journal is one of the important publications in the publishing system in our country. At present, there are many different ways to understand the magazine, however through research, collection, we summarize some basic concepts as follows:

According to the definition of a magazine in the magazine publication (Vietnamese translation, Department of Publications - Institute of Journalism and Propaganda, 2010), UNESCO has summarized: “All publications have the same title, published periodically or non-periodically, at least one more period per year, each period with an ordinal number and specifying a date is called a magazine”.

Vietnam Encyclopedia Dictionary, the Social Sciences Publishing House, 2005, Volume 4: “Magazine is the type of periodical newspaper publication, with weekly, semi-monthly, one-month, one-quarter terms, half a year... Magazines differ from daily newspapers. About content,

the magazine often contains general or topical information on the current news situation, issues in the fields of natural sciences or society are of interest to many people. In form, magazines are packed in different sizes, the size is usually smaller than the daily newspaper, with cover”.

Starting from the above concepts and based on the practical situation in our country, we can generalize as follows: Magazine is a type of editable, periodic, stable, continuously published publication that is not limited to time, is bound in volume, distributing widely in society.

## 1.2. Characteristics

### 1.2.1. Journalistic qualities of the magazine

Newspapers have the basic function of gathering, processing and transmitting information on all aspects of economic, cultural and social life ... in order to meet the requirements of information and receiving information from the reader public. Both magazines and newspapers have their own governing Agency, which are organized and managed activities which they are classified into a number of public categories, periodically issued, a certain number of readers and a certain number of publications. Especially, newspapers and magazines are allowed to be republished and repaired. However, there are differences between magazines and newspapers as follows:

Magazine is a written newspaper, is a theoretical, academic and scientific agency of a certain organization or organization mainly to deepen the research, guidance and exchange of scientific expertise in a certain field within the scope of their respective branches and localities. The magazine's release period is usually longer than the periodic release of the magazine. The magazine's release period is usually longer than the periodic release of the newspaper. The timely and urgently of theoretical information is not as demanding as the current news. The exact requirements for a magazine article are different from the exact requirements of a newspaper article, or broadcasting on radio, on television that requires objectivity, honesty and accuracy.

The magazine is mainly information, scientific theory, specialized professional guidance (for example: Communist Review, Party Building Review, Chemical Magazine, Industrial Magazine, etc.).

On the information task, the magazine task is mainly propaganda. Disseminating information to the problem, analyzing and synthesizing, giving the relationship of the problem with the purpose to give opinions to a number of people for awareness and discussion together with focusing on solving the problem with reality well.

In the magazine model, the magazine model of compact magazines (except for large magazines,

periodicals, and a lot of pages, often concentrated in magazines that specialize in social issues as sports, sex, fashion). There are magazines published every month for a period, and the whole magazine only needs one room (including editor-in-chief, editors, technicians).

On service objects, subjects are concentrated in specialized fields, especially magazines in the field of science and technology.

About the reflecting contents, it is necessary to thoroughly study the current status, causes and propose measures to remove or disseminate scientifically-oriented experiences and specialized science.

About content organization, content plan according to the issues of reality that the public is interested, having the task of information, orientation, giving appropriate solutions. Content is usually structured in the following format: Theoretical issues, specialized scientific work; Popular knowledge of science; Scientific news information... The use of limited genres is often used primarily for genres such as commentary, essays or scientific news, article genres or scientific investigations.

About the creative press staff, mainly to be collaborators, they are the scientists, Professional understanding of specialized issues, experience exchange, popular knowledge. Editors are professional editors about profession.

About publication time, the magazine's periodical release is longer than the newspaper. The most frequently published magazines are usually 15 days a month. Often magazines are published monthly. There are also some individual magazines, published every two months or several quarters.

About the released scope, the released scope is limited, especially in specialized magazines. Except for magazines on social issues, which are likely to be widely distributed domestically and internationally, these numbers are very few.

As with newspapers, based on the characteristics reflecting information of magazines, the magazines can be classified into the following two major categories: “*Magazine of Speech and Professional Magazines*”.

The scope of research in the magazine of information is usually political, cultural, social issues... The audience of this magazine includes the majority of the population. The major professional magazines focus on scientific reasoning in the scope of professional activities and specialized fields. Consequently, the subjects of this category are mainly people which work in the field.

However, the audience of the magazines compared to the newspaper is often limited, meaning that readers of the magazine is not as popular as

readers of the newspaper. In addition, readers of magazines, especially professional magazines, to require a certain understanding of the profession. So readers read the information and participate in exchanging, discussing, learning experience on the issues related to the occupation of their interest.

The difficulty of magazines is that in addition to ensuring compelling and attracting readers, it is more important to identify the audience for the magazine that includes readers: to be researchers or managerial cadre, or local cadre. In fact, there are many types of magazines that only serve primarily for the type of readers that are researchers with certain scientific qualifications. However, there is also a kind of magazine that caters to readers as well as researchers, managerial cadre, and practitioners in that field.

The attractiveness and persuasiveness of the magazine is reflected not only in its content, but also in the content of information that meet the information needs of each type of reader or not? And so, the content of the magazine is also very diverse and there are many different categories, not just a few categories in a magazine, but sometimes up to dozens of categories, or more. Although more or less in different types of magazines, reflective content of the magazine often expressed under three main topics: the general issues of theory, profession, science; Information Science; Activity news.

Meanwhile, theoretical, professional, scientific issues often account for a large proportion of the articles content in the magazine. With that content, articles of magazine genres must be able to demonstrate the nature of research and find out the laws of advocacy that can be found in the areas of professional disciplines. Here, the propaganda function on revolutionary theories, professional theory, science and technology will bring readers new knowledge with many specific ideas, easy access to reality, contact, applying in specific conditions of themselves, their units.

In addition to the function of propaganda and education, (in the broader and deeper meaning of the word), the magazine also provides information to readers in the shortest possible way: that is knowledge of politics, knowledge of economics, knowledge and management, knowledge of science and technology,... In the function of propaganda and education, the magazine must contribute to explaining or criticizing the situation and phenomena of research and at the same time referring to the treatment of the situation and phenomena according to separate research methods. For that reason, the magazine's distinctive feature is the function of *"theoretical information and scientific research"* who evaluate the results of scientific research applied in practice.

Due to the nature of the magazine is both

theoretical and fighting in scientific research in many different fields, so the presentation form of the magazine only often has many attractive categories, conditionally printing beautifully and do not limit the length of the article. Thus, the contents reflect the information in the magazine to be also diverse and rich, consistent with the space and time of magazine publication. Therefore, the promptness and urgency of theoretical information is not as demanding as current news. However, the timeliness of the theoretical information for magazine demands to respond quickly to the problems that life poses that readers are interested in.

Magazine is research-based, professional, exchanged and professional, therefore, articles published in magazines are not necessarily fictitious, or scientifically affirmed, but may have written articles with the target just to "raise the issue" or scholarly exchange, referring to different perspectives. On that basis, readers can exploit, or evaluate according to their own views on the phenomena of their interest. Therefore, the exact requirements for a magazine article are different from the exact requirements of a newspaper article, or broadcasting on the radio to ensure objectively, honestly.

Likewise, the full requirement for magazine information is different from the newspaper's ability to exclude elements that constitute the whole research, but also it addresses a critical issue in the whole research to introduce to readers.

Magazine as well as newspaper serve the political task of a certain state, but by the function and objective of its service, the magazine must also be based on the requirements serving the political task of the organizations, unions, or branches in each period of socio-economic development so that determining the topic of each issue of the magazine will be published and distributed in the year.

The number of specialized magazines revolves around the magazine's categories, to aim at providing readers with an insight into a topic that life is setting in and is related to their own activity.

For each magazine is a reader objective. Therefore, the articles must meet the requirements of readers. The content of the article must be practical, scientific, persuasive. Otherwise, the magazine is merely a form of newsletters, rather than a magazine with its own meaning and name as the theoretical agency, research, exchange and professional guidance.

The magazine is a form of basic publication, appearing after books, daily newspapers, almost as a kind of mediation between books and daily newspapers.

The magazine provides in-depth information in the field of specializations, according to scientific

issues. Large amount of intellectual information, high cumulative value. The magazine is bound, with a certain thickness, bundled.

Magazine is publications that is extended continuously, monthly, quarterly and yearly; with a name, there is no limitation to the time of publication.

The magazine has features as following:

*Firstly*, about information: the content of knowledge information transmitted in the magazine is not much. The content of information in magazine issues does not overlap.

Each period of the magazine usually contains information content about a topic. However, besides the theme, there are many other added contents aiming to brighten, deeper and broader for themes.

Each number usually has many categories. Each category often goes into one aspect, the theme of life, reflecting, addressing different topics. Thus, the cumulative value of a magazine is often diversified in a field.

The information in the magazine is highly current. Magazine must always be based on the real life of society, reflecting the current aggregate information, the new achievements of science closely related to the contemporary context. The magazine has time to follow, analyze more depth so the news information is often deep and powerful.

The capacity of a relatively large article, many articles are the research results, review and evaluation of practical activities should often bring great news, especially when researching a scientific problem or investigation, reflect a specific social phenomenon. Magazine articles are long, organized into a series to publish serial numbers, or exploiting various aspects of the phenomenon that are posted on a single period to increase the syndicated effect of the magazine.

Thus, in terms of the whole, the magazine has the function of perceiving, accumulating deeply and continuously the culture of the development process, about the history of the development of phenomena, thoughts, a specific science.

Magazine is a one-time publication. Magazine is not reproduced, each number is a only single publication.

*Secondly*, the magazine is a regular publication, with regular weekly, half-month, one-month, one-quarter, one-year cycle. Organizing editorial work to publish magazine requiring a very strict time progress.

*Thirdly*, the object orientation. The magazine has a well-defined reader right before the first issue. Object orientation is one of the basic requirements when defining the purpose and purpose of a magazine. Therefore, the magazine can use the

booking methods to orient the release, forming a stable readers. Because the magazine has a clear orientation on the object, is released continuously and there is a relatively stable release, so it can become effective advertising media, always adherent advertisers.

*Fourthly*, on the outside, the magazine is often smaller than newspapers but larger than books. Normally, in Vietnam, the magazine size is usually 19 x 27cm, clamped or cased, in the heat seal (with crown), the magazine usually has a thickness of about 40-120 pages.

*Fifthly*, about the style of page layout, due to the size of the small printed page, the magazine's emphasis on openness, continuity before and after, change in consistency and simple page printing techniques. Due to information longer than the press, saving more durable information, so magazine should be chosen to print on good quality paper, thick, fine white, good quality ink and print.

*Sixthly*, in terms of functions, the magazine is primarily engaged in propaganda, so many things have to be said insight into the nature of things, phenomena and perhaps only some people can acquire.

*Seventhly*, organizational model, magazine is always associated with a mass, a scientific research agency, its functions and tasks attached to the management agency. The main object of the magazine is that all cadres and employees working in the relevant professional fields of the agency in charge.

The magazines have two divisions: the editorial department and the administrative department. Professional staff in the magazine are mainly editors, almost no full-time reporter, or if there are quite a few. Journalists in magazines are mainly editors. Their main responsibility is to organize the exploitation of manuscripts and editing manuscripts, to improve the quality of postings. However, when necessary, editors of the magazine can directly write news articles. As with book editors, collaborative work is also key in editorial activity of the magazine.

In addition to the editorial Board, many magazines also have editorial boards. This editorial board is often composed of highly reputable, highly respected leaders, experts, scientists and practitioners who advise the Editorial Board on the development of communication strategies, organizing posts and browse important articles of the magazine.

The magazine publishing unit must have a dedicated general editor in line with professional requirements and a limited number of editorial staff in charge of editorial work. In any case, the magazine must not arbitrarily transfer the editorial

rights, nor allow any unit or individual outside the publishing organization to engage in editorial activities of the magazine in any form.

### 1.2.2. The book nature of the magazine

The magazine is not just about journalism, but it has many similarities, especially the professional magazines. About languages, magazines and books all use compact, refined, scientific, and high-standard language. Chapters, items are relatively uniform and stable. The layout is scientific, easy to understand, easy to see, easy to look. Magazines and books are bound in books; the content is highly specialized and relatively picky readers.

Magazine and book remains the difference: Firstly, the content of magazine articles requires close social life. The magazine's update is average, poorer the newspaper, but more than books. Books have relatively stable characteristics, the timing of the weaker; updates can not be made by newspapers and magazines.

Periodicals, periodicals, half-month magazine, one-month magazine, two-month magazine, one-quarter magazine ... They have to rely on different time to publish periodically. Publishing time is not strict in normal cases. Books are not as periodical as magazines. A magazine with the same name is published continuously, periodically and books have no common name and to be regular, continuous.

On the form, the magazine is usually stable in size and page number due to periodical. Books do not have the stability of page size and page size because of inconsistencies and individual books.

The content of the articles in the magazine usually do not link the topic. The articles are arranged in categories and each article is a completely different topic, the books are often subject to interpretation, there is a close link, even with the year book. In addition, magazines are often not reprinted or reprinted but can be aggregated for publication as bindings and books can be reprinted several times.

The readers of the book and magazine are also different: The reader of the magazine is clearly defined, on a preset order to aggregate print and release, forming a stable readership. Books have their own reader objects but must have the confirmation process of the market.

The magazine has been continuously released and relatively stable, should be selected as the advertising media of many units, businesses and customers are more respectful. In contrast, books are not advertised, effective propaganda is not by the magazine.

Magazines are close to books in terms of content and the subject is mentioned, but unlike books, a booklet goes into more or less deep and comprehensive subjects. Therefore, many people view magazines as publications between books and

newspapers.

High interdisciplinary character, clearly defined.

In the field of magazine in the science field, this is quite clear. Interdisciplinarity is expressed in two ways: Using interdisciplinary approaches to address interdisciplinary content. The second aspect is to use the basic methods of the specialized field to study interdisciplinary contents.

About the periodicity of the magazine: The periodicity of the magazine is usually shorter and at a certain time, sometimes in hours (for printed newspaper), sometimes in seconds, minutes (for radio and television, electronic newspaper). Periodicity of a magazine is longer than a newspaper or magazine does not appear more than once a week, sometimes half a month, a month, even a quarter or six months.

The magazine limitation is defined in four aspects:

Firstly, is the periodicity of the report, commonly referred to as the periodicity for both licensed magazines. Periodically, there is no change, if there is any change, the agreeing and approval of the management agency.

Secondly, is the periodical of each category, or is called periodicity of the matter. This period is decided by the editorial office, can change if the problem, the category is no longer appropriate or attractive. The change in magazine entries was not so much because the research issues were relatively stable, with little change.

Thirdly, is the page number limitation: The number of pages per magazine specified in the license. The magazines are published within the limitations of which, if changed, the requirements of raising the paper must be approved by the governing agency and state management agency (Ministry of Information and Communications).

Fourthly, the magazine is relatively stable in the number of releases. This is due to the specialty of the high magazine. Therefore, the magazine agency decides on the number of prints on the basis of the magazine object group initially and the number of subscribers monthly.

### 1.2.3. Function of the magazine

Magazines often perform the role, function and task of the ministry; there are the functions of a specialized press agency assisting the management agency in carrying out the press, propaganda, research and disclosure of information in the specialized field assigned.

The magazine is usually a non-business unit, there is legal personal status, own seal, can be operated at the State Treasury, bank account in accordance with the law and current regulations and current regulations.

Most magazines are headquartered in Hanoi and

there are permanent correspondents in the Central and Southern regions.

#### 1.2.4. Magazine classification

The quality of the magazines are mainly based on the censorship process for posting and the citation index statistics of the articles published in the magazine through the impact index. Published scientific indicators are used by universities to assess the quantity and quality of scientific research and ranking universities in the world, as well as individual scientists, researchers.

ISSN (International Standard Serial Number) is an international standard serial number for magazines, internationally recognized for the title of publications all over the world. Once the ISSN is available, the magazine will be officially recognized internationally and presented on a global scale. This is the “identity card” to travel in the world information village. However, the ISSN of a magazine does not relate to the scientific quality of the articles posted therein.

The list of magazines with published codes (ISSN) covers and to be much broader than the ISI and Scopus lists. Currently, the ISI list includes about 10,000, Scopus includes over 30,000 magazines on Natural Sciences, Technology, Engineering, Medicine, Pharmacy and Social Sciences. Meanwhile, the magazine list has an ISSN index of about 1.3 million.

As with newspapers, based on the magazine’s reflective information characteristics, it is possible to classify magazines into two main categories as following: Magazine of Speech Information and professional magazine.

The scope of research of the magazine of Speech Information is usually political, cultural, social matters... The subject of this magazine cover a large number of population. The major professional magazine focus on scientific reasoning research in the scope of professional activities and specialized field function. Consequently, the subjects of this category are mainly those in the specialized field.

Magazine can be classified into specific categories according to different criteria, depending on the purpose of the work.

- *According to the publishing cycle*, the magazine is divided into: monthly magazines, quarterly magazines, annual magazines, one-month magazines (monthly magazines) and weekly magazines. This commonly used in publishing, libraries and archives,...

- *According to the publication content*, the magazine is divided into information fields, serving specific subjects such as: Sports Magazine, Football Magazine, Television Magazine, Journalists Newspaper,... In addition, a number of professional majors also have magazines catering to those who

work in that specialty and those who are concerned such as: Financial Magazine, Tax Magazine, Magazine of Automation, Magazine of Political Theory and Media, ...

- *According to nature, the content of information*, there are types: Magazine of Science, Magazine of Information, Magazine of Culture - Synthesis, Entertainment, Art Magazine,...

## 2. Characteristics of editing magazine

Editing magazine is the editing of publications, the nature of cultural selection, the selection of spiritual work to meet the requirement of propagating and receiving culture of society. Editors choose information, select topics, evaluate drafts must have specific skills: It mean they have to look insightful, accurate at a specific time, at the same time must have a long view in creating a healthy spiritual life for the society.

Editing magazine is a outsourcer, not a creative activity. The editor manages the work of the author, making it more perfect and more beautiful. The editor is described as “the midwife” for the birth of the mental children of the author. Therefore, the editor needs to be highly skilled, because they are the ones who can make the work more complete, but they can also be the person who ruined the work. The editorial work is therefore mainly supplementary and creative work to improve the work already. So, editorial work is passive, there are not the role of the composed subject, but always depending on the author, respecting the author, protecting the copyright of the author.

Editing magazine is the nature of the intermediary activity, to be the “bridge” of the author’s mental activity with material production activity to create publications, to be the bridge between the author and the reader. The author’s creative work only goes through the process of choosing the editor’s editorial work to put into production creating articles to spread widely in the public.

Editing magazine is active and well-defined, as board of magazine editing is not the main force of writing, but they evaluate, outsource the manuscript, organize the magazine publication; each magazine is published permanently with a fixed name. Thus, overallly, the existence of a continuous magazine for a long time with its own identity, each magazine as a major work, to be a separate creative product, to be “children” of the magazine editing board.

Before publishing a magazine, the editing subject should clearly identify the magazine: clearly define the purpose and purpose of the magazine: What is the magazine for? How to do? Who is the target subject? to confirm locality of the magazine in society.

In the editorial process of each magazine issue, the editorial board must always ensure stability,

maintain the original purpose of the magazine and further enhance the identity of the magazine.

Editing magazine is different from editing book, magazines on a variety of topics and topics in each magazine issue. Each magazine issue has many articles, many topics of various authors, so the editing of the magazine must ensure the variety of its subject. Editorial work must know the ingenious coordination between the themes of the articles in a number of directions on a topic, a typical event in the period of magazine publication to create the whole effect.

Editorial work is markedly timed, because editors must arrange editorial work according to the magazine's publishing cycle, ensuring strict implementation of the publishing schedule.

Therefore, editors must complete all editing steps according to the magazine's pre-publication cycle, ensuring that all works must be completed within the specified time frame so that the magazine will be available on the scheduled date.

On the other hand, the content of the magazine must be up to date with the current socio-political situation, ensuring the current affairs, the editors can not leave the magazine out of date with information life.

Therefore, editing magazine must keep abreast of the current situation of life, to exercise judgment and high political sensitivity to ensure that the information in the magazine to be not old and out of date.

## II. Scientific Magazine during the Industrial Revolution 4.0

The fourth industrial revolution is a very new issue that is set for Vietnam today. This revolutionary feature is the widespread use of high-tech achievements, especially in information technology, digital, artificial intelligence, and networking to govern in order to make breakthrough changes in the socio-economic development of many countries. The development of this revolution is paving the way for both the opportunities and the challenges that require explicit identification, from which early development strategies are appropriate to successfully implement the way of the short development, ensuring rapid and sustainable development in Vietnam. As a result, the process of interaction is faster, more convenient and more accurate, optimizing the production process, reducing costs, increasing productivity, product quality, enhancing competitiveness in the context of full globalization.

Technological revolution 4.0 has brought humanity into the era of information society, social knowledge and social learning society. The influences of the 4.0 technology revolution on the Vietnamese press include: creating revolution and

diffusing technology in the media press, career change, especially in the field of information and communication, the transformation of flows in the "information society", making the emergence of different development trends in each area, country and locality.

With the rapid development of science and technology, especially in information technology and intelligent systems which take humanity to a new revolution, revolution of science and technology 4.0. The role of intelligent systems is an essential and important part. Revolution 4.0 is understood to be a great revolution in science and technology, where intelligent systems take the lead, which may include: information and communication technology (ICT), embedded systems, or automation systems, sensor networks, real-time systems, and 3-D or 4-D printing technologies,...which the center of this revolution is communication between smart platforms such as smart mobile systems, intelligent plant systems or intelligent building systems. In addition, linking, processing information through social networks or web platforms is becoming more and more important in the digital age. These platforms are built around network services, data and people. The features of the 4.0 revolution brought within it are in terms of knowledge technology and smart technology.

Therefore, the current publication of international standard scientific magazines in order to publish national, international, high-citation research is internationally recognized as one of the an important requirement in the process of development and international integration of the country's science and technology.

So far, many magazines in Vietnam have made significant changes, with their roadmap, the scientific magazine is striving to reach the international standard of Scopus, ISI. The necessity to publish scientific journals in accordance with international standards. In the process of scientific and technological development of countries, the publication of scientific magazines according to international standards is an important factor contributing to supporting and promoting the internal science and technology of each country, because the publication will meet the needs of publishing research results of local scientists, on the other hand, contributing to the enhancement of exchange, cooperation and international integration in science and technology.

Before the inevitable changes of the 4.0 technology press, the Industrial Revolution 4.0 strongly influenced all the basic elements of the national media, with three basic elements: production of media press, media press products - as a commodity, service and the profound transformation of public communication groups.

## References

- Hoang Anh (Editing Owner) – Pham Van Thau (2005), *Practice Vietnamese*, Publisher of political theory, Hanoi.
- Nguyen Trong Bau, *Editing Book Language and Press*, (Episode Two), People's Army Publishing House, 1995.
- Nguyen Van Dung (Editing Owner) – Do Thi Thu Hang (2006), *Communication - Theory and Basic Skills*, Political Theory Publishing House, Hanoi.
- Nguyen Van Dung, *The press and public opinion*; Labor Publishing House; H. 2011.
- Nguyen Van Dung, *Theoretical basis of the press*; Labor Publishing House; H. 2012.
- Tran Duy Doi, Minh Chuyen, Ho Phuong, Vu Sac (Selected): *Road to editing*, People's Army Publishing House, 2002.
- Ha Minh Duc (2000), *Theoretical basis of journalism, general characteristics and style*, National University Publishing House, Hanoi.
- Tran Van Hai (editing owner) 2012, *Master Curriculum in Publiction: Theory of Publication Speciality*.
- Tran Van Hai (editing owner) (2000), *Editing specialized books*, National Political Publishing House, Hanoi.
- Tran Van Hai (editing owner), *Theory of Publication Speciality*.
- Tran Van Hai (head of theme), *Editing the magazine* (internal circulation curriculum) 2014.
- Ngo Sy Lien (Editing owner) (1998), *Principles of book publishing editing activities*, Education Publishing House, Hanoi.
- Hoang Phe (Editing owner), *Vietnamese Dictionary*, Da Nang Publishing House, 2002.
- Ha Huy Phuong, *The trend of development of the press, publishing in the coming time* (Special subject to serve the editorial staff of the editorial staff, reporters in 2015 in Hanoi).
- Secretariat, Directive No. 63-CT/TW dated 25/7/1990 on strengthening the leadership of the Party for the press work, publishing.
- Secretariat, Directive No. 08-CT/TW dated 31/3/1992 on strengthening the leadership and management to improve the quality and effectiveness of press work and publishing.
- Secretariat, Directive No. 42-CT/TW dated 25/8/2004 on improving the comprehensive quality of publishing activity.
- Institute of Journalism and Propaganda (1993), *Editing language of book and press*, Social Science Publishing House, Hanoi.

## PHÁT TRIỂN TẠP CHÍ KHOA HỌC TRONG THỜI KỲ CÁCH MẠNG CÔNG NGHIỆP 4.0

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**Tóm tắt:** Đặc trưng của cuộc cách mạng công nghiệp 4.0 là ứng dụng rộng rãi những thành tựu công nghệ cao, đặc biệt là công nghệ thông tin, số hóa, trí tuệ nhân tạo, kết nối mạng để quản trị nhằm tạo ra những thay đổi đột phá trong phát triển kinh tế - xã hội của nhiều nước. Vì vậy, để tiếp cận với thời đại công nghệ cao, hiện nay nhiều Tạp chí ở Việt Nam đã có sự thay đổi đáng kể, phần đầu vươn tới hệ thống tạp chí khoa học quốc tế ISI, Scopus. Việc xuất bản tạp chí khoa học theo tiêu chuẩn quốc tế sẽ đáp ứng nhu cầu công bố các kết quả nghiên cứu của các nhà khoa học trong nước, mặt khác góp phần tăng cường trao đổi, hợp tác, hội nhập quốc tế về khoa học và công nghệ.

**Từ khóa:** Vấn đề lý luận; Khái niệm tạp chí; Xuất bản; Xuất bản báo chí; Đặc điểm tạp chí; Tính chất của tạp chí; Cách mạng công nghiệp 4.0.