

Ngày nhận bài: 14/08/2024 | Ngày phản biện: 28/08/2024 | Ngày xuất bản: 20/10/2024

Tác giả: Huy Phuong HA (Academy of Journalism and Communication)

The historical timeline of the industrial revolution classification shows that the Industrial Revolution 1.0 harnessed water and steam power to mechanize production; Revolution 2.0 used electricity to mass produce goods, and Revolution 3.0 created electronic devices and information technology to automate production.(1) The Industrial Revolution 4.0 is based on using digital and smart technology to optimize production. All of these revolutions are the testament to human mind's ability to create civilized values of the world.

According to the World Economic Forum,(2) in 2018 about 90% of the world's population would have free, unlimited data usage. It also pointed out that in the near future robots may replace human beings in performing complex tasks. Subcutaneous microchips connecting divergent information systems will make health monitoring very convenient.

1. An overview of journalism and media in the era of Industrial Revolution 4.0

In the field of journalism and media, communication appears as a means of communicating, connecting, and interacting socially.(3) Thanks to communication, mankind's inventions are preserved, disseminated and become eternally applied values in social life. Communication has by its fundamental nature been constantly changing the world. The achievements of the four revolutions are familiar to mankind and applied in all fields, thanks to their ability to connect via press and communication.

Technology is an important foundation for the development of the new media society. Today traditional press and other media products are becoming obsolete. In their place there are smart newsrooms and media agencies, who are capable of integrating systems and producing media products using digitized data and artificial intelligence.

It is very likely that human journalists will soon be replaced by 'robot journalists.' The turnaround time of producing journalistic works will be shortened. The stages of data collection and information processing will be programmed, processed automatically and intelligently by 'robot journalists.' According to author Nam Duong, "In the world, robot reporters are implemented by many media corporations and press agencies in countries such as the United States, Japan, and China using artificial intelligence systems. The Associated Press (AP) in the U.S. was the first news agency in the world to use such a system."

Although born after the publishing industry, the press has quickly dominated and is the primary form of mass media used in handling and transmitting current, up-to-date, and objective information. However, in the era of Revolution 4.0, press agencies have been forced to find new ways to survive. The question remains, "in what direction?" Author Dang Thi Thu Huong has said, "The future of print journalism may not and should not be based solely on the public's nostalgia for the smell of ink. Is content the key or is it the connection speed? The heyday of print journalism is over. The printing press will have to change in order to be able to withstand the Industrial Revolution 4.0."(4).

Today's radio and television stations have shifted to digital technology considering it an inevitable move. Out of this move, internet and social networks developed. Radio stations have promoted the advantages of online broadcasting with products such as on-demand, podcast, and live-stream which combine to create a 'radio without antenna' to meet the audience's demand which is to listen to whatever they like at a time of their convenience, with the option to see the broadcast. Radio stations have created applications or 'apps' on smartphones where all it takes is a 'click' to listen to

a broadcast. Limitations of geography, time, culture, and language have vanished.(5) Currently, the world has about 3.88 billion internet users and more than 1.9 billion websites. With about 48.26% of the world's population having internet access, 138 billion emails are sent daily. There are approximately 3.8 billion views per day on YouTube; 2.2 billion people visit Facebook daily, while 3.5 billion people search using Google. Parallel to this an incalculable amount of information is created every day.(6) Recently the term 'Big Data' has gained attraction on academic forums related to the 4.0 era of communication. The essence of big data boils down to "the activity of collecting, analyzing, and monitoring data, while searching, sharing, storing, and transmitting it, using tools to query and visualize it with a modicum of privacy."(7) Big data brings many benefits to all areas of life, including journalism and communication.

Press and media agencies can gather and analyze information to create products of both material and cultural value. Project KHCN-TB. 14X/1318, conducted at Vietnam National University, Hanoi has launched the '5Vs' model. '5Vs' represents the important characteristics of big data: information capacity (Volume); variety of data (Variety); processing speed (Velocity); data accuracy (Veracity); and the value of data (Value).(8) The Industrial Revolution 4.0 has brought great achievements and new opportunities as well as challenges. Data, modern communication tools, and media creativity are no longer confined to content production or geographical location and a limited time frame. This poses a great problem that needs to be solved by the current leadership for overseeing communication management activities.

2. Some proposals and recommendations to ensure effective leadership and management of the press and media

The Industrial Revolution 4.0 is a result of mankind's creative activities. They have been and will continue to be a part of all areas of social life. Like many other industries, the press and media industry are ready to receive and apply the positive values of this revolution.

The Party and the State of Vietnam are very interested in this revolution. The Resolution of the 5th Plenum of the Party Central Committee (12th tenure) also raised this issue. State President Tran Dai Quang pointed out the characteristics, opportunities, and challenges of the Industrial Revolution 4.0 for Vietnam, and presented initial plans to move forward.⁽⁹⁾ During the conference “High-level Policy on Human Resource Development in the Digital Era,” held on May 15, 2018 in Hanoi, Deputy Prime Minister Vu Duc Dam said, “The fourth industrial revolution and the digital era not only increases productivity and economic growth, but also opens up a horizon of human-to-human connection. It is important to seize opportunities, not only new professions, but also a new method of supplying and organizing labor.”

Industries and sectors in Vietnam in general, and the journalism-media industry in particular, have lagged behind during previous industrial revolutions and from this experience Vietnam has learned a valuable lesson to stay abreast of the changing technologies.

The lead and manage the activities of the press and media, five urgent requirements are set out today: proper assessment of the impact of the 4.0 Revolution on the field of journalism and communication, solutions for traditional press and media types that are in danger of being eliminated due to competition and the information explosion, and especially the emergence of new media; the evolving structure of the press agency, media establishment, and media personnel in the context of media convergence, and integration and the current ‘robot journalist’ movement; and information security issues.

1) It is necessary to properly assess the impact of the 4.0 Revolution on the field of journalism and communication in order to propose appropriate leadership and management methods. As mentioned above, the nature and benefits of the 4.0 Revolution are clear. Recognizing the value of this revolution and thoroughly applying the progressive achievements in journalism and communication activities will help leaders and managers as well as professionals create valuable journalist and communication products.

2) It is necessary to have the right, appropriate, and effective leadership and management solutions for traditional media in the context of the media explosion, competitive trends, and marketization of the press today. In fact, warnings about the risk of competition and exclusion for traditional newspapers has been ongoing for more than 10 years, especially with the development of generation 2.0 of the web as well as the concurrent explosion of new media and social networks. The risks of receiving information solely through social media by the public is increasing, pushing traditional journalistic methods to the brink of extinction. Determining the direction for all types of media to coexist and develop with inherent value is causing headaches for leaders and managers of press and the media in both the world and in Vietnam.

3) In order to ensure a national press and media development strategy in the new period, especially adapting to the Industrial Revolution 4.0, the Ministry of Information and Communication of Vietnam has built the Master Plan for Press Development to 2025 and submitted it to the Government for approval. This project addresses solutions for State management to restructure the national press and media system to ensure progressive development. However, until now, implementing this content faces many difficulties and obstacles. The most obvious problem is to clarify the characteristics, properties, strengths, and limitations of each type of media channel and to create smooth management. It is also necessary to clarify the functions and tasks of the evolving press agency to avoid overlapping, imbalanced, and wasteful investment, and to clarify a management mechanism of central and local press agencies at macro and micro levels to increase efficiency and management responsibility and unite to build a model of organization and operational agencies and establishments to ensure compatibility with the demands of the Industrial Revolution 4.0.

Several ministries and localities have also experimented with building press and media planning projects for those under their management. However, the projects and ideas have not yet received official approval, due to limitations of time and the lack of careful

preparation. Ideas and projects proposed lack theoretical and practical basis which should be summarized and evaluated from typical and effective operational models found throughout the world and elsewhere in Vietnam.

By surveying the issue of planning for press and media development at the central and local levels such as Hanoi, Ho Chi Minh City, Quang Ninh, and Ha Nam, it has been found that there is lack of unity in most of these ideas. The biggest problem is to clarify the management model, whether to merge or separate, or to build an operational concept and especially prepare a team to meet new requirements and tasks in the context of the new structure of the press agency and media base directed toward the goal of convergence, integration, and digital communication.

4) Human resources need to meet press and communication activities in the context of the Industrial Revolution 4.0. This problem remains unsolved in many press and media agencies. One current hypothesis is that in the future, the production resources of journalism and media products will all be made by 'robot journalists.' Where will human journalists go? Will artificial intelligence replace human intelligence?

These questions arise not only with press and media agencies but also with journalism and media training institutions which will provide the human resources for the media. If the training institution does not transform and innovate its programs, training content and methods, and teaching and learning methods, it will not be possible for professional journalists to produce good journalism and communication products and adapt to the 4.0 era.

5) In the era of high technology, there is an urgent need to ensure communication security and information safety. Non-traditional security issues are now of greatest concern in every country, sectors and fields. High-tech crime is increasing day by day and causing great damage to society.

The journalism and communication fields are directly associated with new and modern techniques which boil down to one word – technology. This will always be accompanied by a need for security of production, storage, as well as information protection and value. Traditional methods of organizing, managing, and ensuring information security have become inadequate and are forced to change and adapt. The result is to apply technology to ensure communication security.

On June 12, 2018, at the 5th session of the 14th National Assembly, nearly 90% of the delegates voted for the Law on Cybersecurity. This guarantees Vietnam's preparation for Industrial Revolution 4.0, in which ensuring information security and safety is a top priority.

3. Some recommendations

In order to ensure quality and efficiency for leadership and management of the press and media in the context of the 4.0 Revolution, the following steps are recommended.

1) Leaders, managers, and staff who create journalistic and media products need to be completely and correctly aware of the nature of the 4.0 Revolution and the ability to apply its innovations to their sector or field. Adequate perception, attitude, and behavior of leaders, managers, and professional activities will change and act with the right purpose.

In the reality of journalism and communication activities in Vietnam today, not all leaders, managers, and professionals are fully aware of the meaning, value, and importance of the Industrial Revolution 4.0. Therefore, the cognitive iceberg needs to be crushed to change attitudes and behaviors, because if we fail to perceive and act, we will be left behind and become weak in the future.

2) It is necessary to have appropriate mechanisms and policies to promote the structure of the national press and media system, with early publication of a policy on

decentralizing press agencies and media establishments while perfecting, approving, and officially promoting the National Press and Communication Planning Project.

For State news agencies and media establishments, it is necessary to have appropriate financial investment and organizational policies, focusing on their peculiar features during leadership and management. A mechanism is needed to encourage financial autonomy in journalism and communication activities. For private media establishments, it is necessary to promote an open legal system, encourage media production and business, contribute to economic development of the industry, and effectively contribute to the State budget.

3) On the issue of training human resources to meet the requirements in the context of the Industrial Revolution 4.0, it is necessary to encourage training institutions to innovate curricula, with updated content, teaching and learning methods. The result is expected to meet standards in human resource training to serve the reality of contemporary journalism and communication activities in the context of the new era.

The prestigious Academy of Journalism and Communication is one of the leading media training institutes in Vietnam. With 56 years of growth and development, this organization has trained tens of thousands of officials, reporters, newspaper and book editors, as well as those who work in the fields of public relations, advertising, and external information. The Academy has continuously innovated training programs, presentation of content, as well as teaching and learning methods in journalism and communication. Over the years the school has invested nearly 100 billion VND to develop its practical training system of journalism and communication. It has created facilities in which classrooms are equipped with modern equipment, meeting the demand for practical creating of journalist and media products using digitalization, big data, and systematic administration. The Academy's lecturers are regularly sent to training courses to study, receive new perspective on knowledge and skills in modern journalism and communication to convey to students of the Academy. The Academy

has also focused on training a team of leaders and managers of the press and media for the country. There have been five Master-level courses of Science in Journalism and Communication Management while dozens of short-term refresher courses on this topic have been initiated. This has also contributed to increasing awareness of the role of leadership and media management in the context of the Industrial Revolution 4.0.

Conclusion

The Industrial Revolution 4.0 is an outgrowth of the digital technology platform and integrates new smart technologies to optimize the news production process and to discover new methods associated with breakthrough technologies.

The achievements of the 4.0 Revolution will be further energized in the near future as countries around the world prepare for this change. Vietnam is ready to seize the opportunity and apply the values from the 4.0 Revolution to all industries and fields, including journalism and media industry. However, the 4.0 Revolution has posed problems that needs to be solved with strong leadership and media management.

Tài liệu tham khảo

- (1), (6), (8) Bui Chi Trung, New opportunities for journalism in the Big Data era
- (2) Nguyen Van Dung (2011), Modern journalism - media (from academic to daily perspective), Vietnam National University Ha Noi Press
- (3) Nam Duong, Artificial Intelligence and the "origin" of journalism
- (4) Dang Thi Thu Huong, The challenge of printing press in the context of industrial revolution 4.0
- (5) Dong Manh Hung, Broadcasting in the 4.0 media environment, Nguoi lam bao Magazine, No. 411, May 2018.
- (7) Viktor Mayer - SchOmberger & Kenneth Cukier (2017), Big Data, Tre Publishing House, Ho Chi Minh City
- (9) Ho Chi Minh National Academy of Politics (2017), The fourth industrial revolution - opportunities and challenges for Vietnam, Political Theory Publishing House, Ha Noi