Journal of Information Systems Engineering and Management
2024, 9(4s)
e-ISSN: 2468-4376
https://www.jisem-journal.com/

Research Article

A Study on Generative AI in the China Media Setting Contemplated with the Nation's Economic Modernisation

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ARTICLE INFO

Received: 10 Aug 2024

Revised: 22 Sep 2024

Accepted: 15 Oct 2024

ABSTRACT

This research looks at the potential effects of generative artificial intelligence AI on the country's media landscape. Given their pervasiveness, it aims to reveal how AI-powered technologies in media content creation, distribution, and personalisation contribute to the overall process of national progress. Using well-designed questionnaires, the study quantitatively collects data from media professionals, techies, and communication scholars in large cities throughout China. Using statistical tools such as structural equation modelling and regression analysis, one investigated the interplay between the rate of modernisation, the effects of national development, and AI-driven media innovation. Media indices of generative AI demonstrate a clear positive correlation with the effect of modernism and national development programs. As China strives to digitally change its communication infrastructure and increase its cultural influence, technological prowess, and media production, generative AI is playing an increasingly crucial role. This study shows that AI in media may lead to more dynamic stories, practical audience participation, and worldwide outreach, all thanks to modernist techniques. There is no part of this that does not contribute to the advancement of national development goals. The results provide policymakers, media outlets, and AI developers with valuable information for formulating strategies to integrate AI with sustainable development objectives. Via an experimental interaction between generative AI and national development perceived via a modernist lens, this study provides a framework for future research on new media technologies and national change. The discussion of the societal potential presented by AI may now begin.

Keywords: Generative AI, China, media transformation, modernisation, national development, technology and society.

1. INTRODUCTION

On a global scale, generative AI has revolutionised the production, distribution, and reception of media. This technological advancement is in line with China's rapid shift towards a creative, knowledge-based economy. Generative AI technologies are changing the way people in China perceive news as they slowly but surely make their way into the country's media landscape. Video and image generators, massive language models, and autonomous news systems are all examples of the kinds of technologies that fall under this category. These innovations reflect societal shifts associated with modernism, such as the need to reskill employees, increase digital infrastructure, and raise levels of media literacy; they also constitute a technological revolution. Using AI in media, China has the potential to increase its global influence, strengthen its internal narratives, and project soft power. A sense of cultural and technical independence is important to this style of leadership (Wong & Looi, 2024). Few studies have examined the impact of AI on national development, especially modernism, despite widespread belief that technology would enhance the media. To help close that knowledge gap, this research looks at how generative AI contributes to China's economic development via the perspective of modernism, an approach that controls the social effects of technology. This article uses quantitative research methods to seek out the perspectives and experiences of media professionals and technology stakeholders in order to investigate the connection between national development and AI-driven media innovation. This further muddies the waters of how generative AI is changing communication pathways and impacting China's hopes for progress and modernity. In light of contemporary China, this essay (Xie et al., 2024) offers a substantial and relevant analysis of the relationship between technological innovation and modernisation initiatives supported by the Chinese government.

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2. BACKGROUND OF THE STUDY

AI (AI) has emerged as a cornerstone of innovation in several fields in today's modern, technologically advanced society. Generative AI is one of the subfields of AI that can generate media such as writing, pictures, music, and videos on its own, much like a human artist. A few examples of how this technology has altered the fields of communication and media include the proliferation of AI-powered editing tools, the development of automated journalism, and the emergence of virtual influencers. As a result of government initiatives aimed at promoting the technology's application across many sectors, China has ranked first in digital development and has actively embraced generative AI (Marcellino et al., 2023).

A hybrid strategy that mixes user-generated and AI-generated content has drastically changed China's media environment, moving away from conventional state-led propaganda. Chinese tech giants Baidu, Tencent, and Alibaba are working on state-of-the-art generative AI models. The results of this include new technology, more efficient media, and varied content. Collectively, these shifts are dictated by China's modernisation goal, which prioritises economic transformation, technical sovereignty, social justice, and digital governance (Li et al., 2023) among other things.

Generative AI, according to this study's thesis, is more than just a technological achievement; it's a tool for social and political change that has the potential to shape public opinion, bring attention to cultural narratives, and rethink the role of citizens in a rapidly evolving society. Data privacy, fraud, and ideological dominance are major worries with generative AI, despite its many advantages including more automation, simpler access, and better user participation. Using an analysis of four primary components, this study investigates how generative AI has affected China's media environment and its attempts at modernisation. To better grasp the relationship between these factors and their impact on national development goals, a quantitative approach can be useful.

3. PURPOSE OF THE RESEARCH

This study investigates how modernism influences a nation's growth with an eye on the ways in which it promotes social, economic, and technological innovation. The issue this article aims to investigate is how modernization through digital transformation, creative policy innovation, institutional change, and infrastructural development contributes to national prosperity, international competitiveness, and social welfare. This article will evaluate quantitative factors like government efficiency, technological integration, economic development, and educational standards to give objective statistics on the degree modernist promotes. Emphasising important elements either supporting or hindering this communication may help legislators, teachers, and everyone else engaged in national development goals to be directed. Given the dynamic character of modern society, the study tries to underline how modernism may be a driver of fair and sustainable development.

4. LITERATURE REVIEW

Experts are quite curious in generative AI's impact on China's media ecology, particularly in view of the country's modernisation and growth initiatives. Generative AI technologies, such as AI-generated content and large-scale language models, are impacting the production, dissemination, and consumption of media in China (Li et al., 2023).

It is startling to see how little AIR&D is respected by China's legislative constraints. Examines the cultural politics of AI in China, taking into account the ways in which cultural narratives and government policies influence the spread of AI. The research stresses the need to integrate AI with national goals and objectives if civilisation is to advance (Cai, 2025).

Another area where AI output might have an impact is on public opinion and the perspective of news sources. Bringing attention to the importance of educational events in fostering critical thinking on AI and the difficulties it poses to the media-related ecosystem. Dong and Chun stress the importance of promoting AI literacy in 2024 to counteract false information and guarantee the ethical usage of AI-generated content. This will aid in the prevention of the dissemination of false information (Dong & Yong, 2024). The Chinese economy is being bolstered by the widespread use of generative AI in media, which increases productivity and encourages creative thinking. Research into generative AI challenges accepted thinking, accelerates dialogue in the business and financial sectors, and

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disrupts long-standing industries. Incorporating AI might boost output and competitiveness in many sectors, as shown in their studies (Chen et al., 2023).

Considering everything, generative AI is a game-changer for China's modernisation efforts. It affects the country's long-term plans for financial and technological growth as well as its present channels of communication.

5. RESEARCH QUESTIONS

5.1 How does modernisation influence the advancement of a country?

6. RESEARCH METHODOLOGY

a. Research Design

Quantitative data analysis was carried out by the researchers using SPSS version 25. Researcher used the odds ratio and the 95% confidence interval to find out which way the statistical link was going and how strong it was. To be considered statistically significant, a p-value has to be less than 0.05. The data's key characteristics were retrieved by descriptive analysis. Data converted by statistical analysis software or data gathered from polls, questionnaires, or surveys is a frequent source for quantitative approaches.

b. Sampling

A total of 473 surveys have been suggested for the study using the Rao-soft algorithm. From a total of 550 that were sent, 537 were subsequently deleted because researchers were missing certain pieces of information. Over 500 Chinese volunteers were contacted and interviewed to construct the study's results.

c. Data and Measurement

The research mainly relied on a questionnaire survey to gather data. The second part of the survey asked respondents to rate several aspects of the online and offline channels on a 5-point Likert scale after they provided some basic demographic information. Many other places, most notably online databases, contributed to the secondary data set.

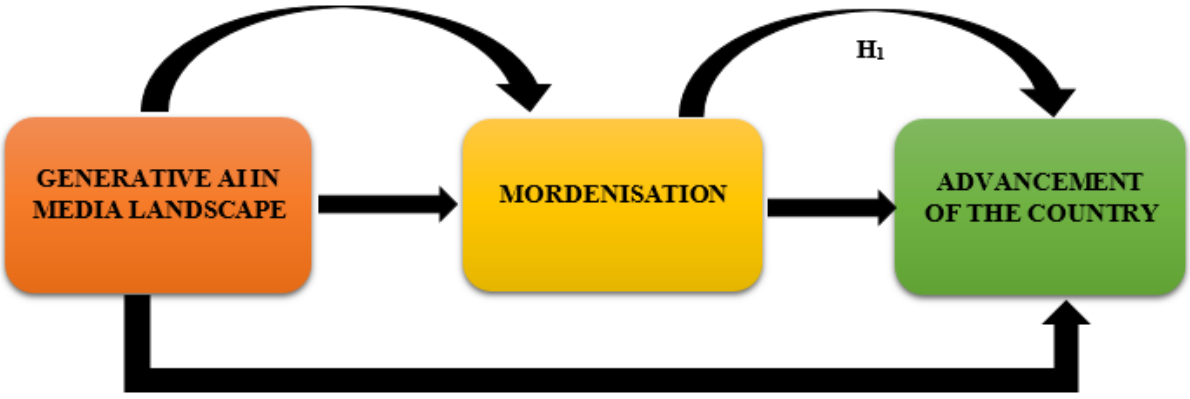
d. Statistical Software

The statistical analysis was conducted using SPSS 25 and MS-Excel.

e. Statistical Tools

The basic essence of the data was understood via descriptive analysis. The researcher has to look at the data using ANOVA.

7. CONCEPTUAL FRAMEWORK



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8. RESULT

Factor analysis

Checking for hidden components in visible data is a common use of Factor Analysis (FA). As a matter of course, when there are no obvious visual or diagnostic signs, ratings are generated using regression coefficients. In FA, models play an important role. Finding mistakes, intrusions, and apparent connections are the main aims of modelling. One method for assessing datasets produced by multiple regression analyses is the Kaiser-Meyer-Olkin (KMO) Test. It is their responsibility to ensure that the sample's variables and model accurately reflect the entire. According to the figures, there seems to be duplicate data. A reduction in the percentage makes the data easier to understand. The result of running KMO is an integer between zero and one. A KMO value between 0.8 and 1 is considered an appropriate sample size. Kaiser states that these are the permissible boundaries: Here are the entrance requirements set by Kaiser:

A pitiful 0.050 to 0.059, below average 0.60 to 0.69

Middle grades often fall within the range of 0.70-0.79.

With a quality point score ranging from 0.80 to 0.89.

They marvel at the range of 0.90 to 1.00.

Table1: KMO and Bartlett's Test

Testing for KMO and Bartlett's

Sampling Adequacy Measured by Kaiser-Meyer-Olkin .970

The results of Bartlett's test of sphericity are as follows: approx. chi-square

df=190

sig.=.000

Table 1: KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.970
Bartlett's Test of Sphericity	**Approx. Chi-Square**	3252.968
	df	190
	Sig.	.000

Claims based on the execution of a sample are therefore shown to be valid. In order to determine how significant the correlation matrices were, the researchers used Bartlett's Test of Sphericity. When the result is 0.970, the sample is considered good according to the Kaiser-Meyer-Olkin measure. The result of Bartlett's sphericity test is a p-value of

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0.00. According to Bartlett's sphericity test, the correlation matrix is not an identity matrix since the results are statistically significant.

Test for hypothesis

- ❖ **INDEPENDENT VARIABLE**
- **Generative AI in media landscape**

In popular culture, "generative AI" refers to computer systems that can create their own articles, films, music, photos, and social media posts, among other multimedia formats. Generative AI, in contrast to traditional AI, which relies on current techniques to process and analyse data, generates material that mirrors human creativity and expression via the use of deep learning models such as Generative Adversarial Networks (GANs) and Large Language Models (LLMs). The impact of generative AI on content production, distribution, and consumption patterns is reshaping China's media environment. Using this technology, media companies may automate labour-intensive activities, tailor user experiences, and simplify content delivery. In an effort to simplify reporting and boost audience engagement, Chinese platforms have begun to incorporate visual content, news presenters, and scripts created by AI. An improved digital communication environment is one of the many goals of generative AI, which also helps with real-time translation, customised content distribution, and accessibility support. There are ethical concerns about the reliability of news reporting and other information when generative AI is used in the media. Media generative AI is therefore a divisive issue among academics, legislators, and politicians, particularly in fast-developing countries like China. A respectable amount of inspiration is also provided by it (Zhang et al., 2023).

- ❖ **MEDIATING VARIABLE**
- **Modernisation**

Replacement of antiquated, underdeveloped systems with more advanced, modern ones is central to modernism's aims of industrialisation and technical advancement in the built environment. Societal shifts, technical advances, economic growth, and institutional reforms may all work together to make people's lives better, make governments more effective, and make countries more competitive on a global scale. Digital technology, new ways of sharing information, and public forums that welcome everybody, are easy to use, and encourage active involvement are the hallmarks of modernism in the realm of mass communication. The media would much appreciate it if cutting-edge technology like generative AI were to be used. These will help with high-quality development, digital transformation, social justice, cultural revitalisation, technological self-reliance, and extending communication infrastructure while also improving content quality and making sure that information is accessible in both rural and urban areas. In light of modernism's emphasis on pluralism in the media, public engagement, and transparent administration, it is imperative that national stability and information management be taken into account. The modernist agenda in China aims to build a society that is creative, globally connected, and modern; it goes beyond just developing the country (Li et al., 2023). This vision guides the strategic use of newly emerging technology like generative AI.

- ❖ **DEPENDENT VARIABLE**
- **Advancement of the country**

The worldwide competitiveness of a country, the stability of its economic growth, and the general population's living standards may all be enhanced by bolstering its political, social, technical, economic, and cultural institutions. National strengths may be improved by the implementation of inclusive social policies, the incorporation of contemporary technologies, the improvement of infrastructure, the expansion of educational possibilities, and the enhancement of governance. There is a strong correlation between China's riches and its strategic modernisation objectives, which aim to turn the nation into a technological powerhouse without compromising social stability or national pride. Part of this includes improving public services, being green, embracing digital governance, and AI. A nation's potential is directly proportional to its educational system, its ability to respond to changing global trends, and its resilience in the face of economic and geopolitical challenges. Generative AI makes sure that everyone can enjoy the material, makes communication more effective, and helps progress national objectives technologically. People can see the progress that technology has made in this area. The degree to which a government and inventors

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collaborate to build a contemporary, egalitarian society is more indicative of a nation's level of progress than its GDP alone (Shi & Sun 2024).

- **Relationship between Modernisation and Advancement of the country**

Modernism is the major driver of national development especially in quickly growing nations like China. This method turns out-of-date technological, social, and financial systems into contemporary ones more adaptable, innovative, and efficient. Among China's modernising projects are reforms of education, urbanisation, industrial innovation, and growth of its digital infrastructure. All taken collectively, these elements increase national competitiveness, innovation, and manufacturing—all of which support ongoing economic growth. One method China's continuous modernising is creating new creative possibilities in media, healthcare, and manufacturing among other sectors is via generative AI. Apart from their linked technical counterparts, these technical advances enhance sustainable governance, quality of life, and economic progress. Modernism also enables one to use world-class standards and methods, therefore improving the national profile overseas. Scholars see modernism as reforming institutions, reshaping cultures, and altering society as well as as adopting new technology (Cai, 2025). Strategically managed modernism provides the foundation for and drives long-term national development, therefore fostering resilience, innovation, and equitable growth in an increasingly integrated world.

On the basis of the above discussion, the researcher formulated the following hypothesis, which was analyse the relationship between Modernisation and Advancement of the country.

"H_{01}: There is no significant relationship between Modernisation and Advancement of the country."

"H_1: There is a significant relationship between Modernisation and Advancement of the country."

Table 2: H_1 ANOVA Test

ANOVA					
Sum					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	39588.620	103	4209.211	1193.425	.000
Within Groups	492.770	396	3.527		
Total	40081.390	499			

The outcome of this research is noteworthy. With a p-value of.000 (less than the.05 alpha level), the value of F, which is 1193.425, approaches significance. Accordingly, researcher accept ***"H_1: There is a significant relationship between Modernisation and Advancement of the country."*** and reject the null hypothesis.

9. DISCUSSION

The study's findings show that modernism is an important middleman between national progress and the entrance of generative AI into the media environment; the relationship is large and statistically significant. By increasing the speed, accuracy, and personalisation of communication, generative AI is revolutionising quantitative data-dependent media processes in China. Automated news producers using deep learning models and visual material makers are examples of such technology. There is a close relationship between this technological revolution and other modernisation initiatives, such as the adaptation of the workforce, the reform of regulatory institutions, and the

development of digital infrastructure. The goals of national progress may be significantly advanced in a modernised society that is conducive to the integration of AI. Improving China's image in global media, encouraging technological advancement, and, by extension, cultural growth, are all part of these plans. The study also shows how media companies become more tech-savvy and adaptive as a result of modernisation, which increases the power of generative AI. First, media modernisation programs must be continuously funded if AI is to be used effectively. Second, with the support of aligned policies and societal acceptance, AI-driven media transformation may be a driving force behind national progress. These findings further demonstrate the critical need of aligning technological innovation with national development objectives. While the benefits are clear, the research does reveal some challenges. Some of these concerns include the need for laws to ensure the appropriate use of AI, risks associated with false information, and ethical considerations. In general, the results demonstrate that, with the help of continuous modernisation, the strategic integration of generative AI into media could significantly enhance China's socio-economic and technological development. This, in turn, could solidify China's position as a world leader in invention and media influence.

10. CONCLUSION

The study shows a substantial and statistically significant relationship between the entrance of generative AI into the media environment and the national advancement; modernism is a crucial intermediate. The use of generative AI is revolutionising media operations in China by making data-driven communication faster, more accurate, and more personalised. Automated news production systems and deep learning algorithms that generate visual assets are examples of such technology. There are a number of broader modernisation initiatives that are closely related to this technology revolution, such as the development of digital infrastructure, the reform of regulatory institutions, and the adaptation of workers. The goals of national development may be significantly expanded in a modern setting that is conducive to the integration of AI. Promoting cultural growth, increasing China's media profile, and encouraging digital innovation are all part of these plans. As a result of modernisation, media companies are more technologically proficient, adaptive, and flexible, which increases the impact of generative AI, according to the study. Constant investments in modernising projects are essential for successful use of AI in the media. AI-driven media transformation may be a driver for national growth if supported by aligned policies and public acceptance. These findings further demonstrate how important it is to align technological innovation with national development objectives. The benefits are clear, but there are some potential problems that have been brought to light by the study. Some of these concerns include the need for laws to ensure the appropriate use of AI, risks associated with false information, and ethical considerations. Generally backed by continuous modernity, the intentional incorporation of generative AI into media might greatly enhance China's socio-economic and technological growth. This, in turn, could solidify China's position as a world leader in innovation and media influence.

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e-ISSN: 2468-4376
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