



The impact of artificial intelligence (AI) on the exploitation and commercial use of personal images and Vietnamese legal regulations

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Abstract

In the context of the 4.0 revolution, artificial intelligence (AI) is becoming increasingly popular and widely applied in daily life, production, and business activities. The development of AI creates expanded opportunities, challenges, and preliminary formulas for the entire society. AI has excellent potential in pollution control and environmental protection. However, the application of AI also negatively impacts the environment when it is not strictly controlled. This article focuses on clarifying the impacts of AI on the exploitation and commercial use of personal images and emphasizes the necessity of legal regulation as an effective tool to control the negative effects of AI on such activities in Vietnam today.

Keywords: Artificial Intelligence, personal images, impact, human rights, legal regulations

Introduction

Artificial Intelligence (AI) is a foundational technological field of the Fourth Industrial Revolution, playing a crucial role in driving breakthroughs in production capacity, enhancing national competitiveness, and promoting sustainable economic growth^[1]. In this context, the demand for the exploitation and commercial use of personal images is rapidly increasing, serving purposes such as advertising, marketing, and brand development across digital platforms. AI has a profound impact on these activities, supporting the realistic creation and editing of images, as well as data analysis to optimize campaigns. However, it also presents significant challenges to the protection of privacy and the prevention of personal image misuse.

The application of AI must therefore be accompanied by clear and robust legal regulations to safeguard individual rights. Detailed and specific legal provisions are essential not only to protect the lawful rights and interests of the parties involved but also to raise public awareness regarding the responsible and lawful exploitation and commercial use of personal images.

The impact of AI on the exploitation and commercial use of personal images

AI is having a profound impact on the exploitation and commercial use of personal images globally, offering both benefits and challenges. AI enables individuals and businesses to create personalized images, reduce costs, and enhance flexibility, but it also raises serious issues, particularly in relation to privacy violations. In the context of rapid technological advancement, AI is recognized as a core driver of the scientific and technological revolution, especially within the e-commerce sector.

According to Vietnam's Ministry of Science and Technology (mst.gov.vn), AI has dramatically transformed retail, marketing, and e-commerce by predicting user needs and behaviors, thereby enhancing personalized experiences^[2]. Through facial recognition, online behavior analysis, and image data processing, platforms such as Shopee, Lazada, and Tiki in Vietnam utilize AI algorithms to recommend products tailored to individual preferences. This not only improves the shopping experience but also increases conversion rates and customer loyalty.

The Ministry of Industry and Trade of Vietnam (moit.gov.vn) also highlights that AI is reshaping advertising and marketing strategies in e-commerce by analyzing user data^[3]. The use of personal images, with user consent, enables businesses to create authentic and engaging marketing content. For instance, customer images in reviews or social media campaigns foster trust, particularly given Vietnamese consumers' strong preference for authenticity.

Moreover, AI's ability to automatically generate personalized advertising content - such as videos or images - helps businesses save costs while maintaining high efficiency. E-commerce, identified as a leading sector of Vietnam's digital economy, has experienced the fastest growth rate in Southeast Asia during 2022 and 2023, according to the Ministry of Industry and Trade. The integration of personal images into new business models, such as livestream sales and influencer marketing, significantly contributes to this growth.

Individuals can leverage their personal images to become influencers (KOLs) promoting products and earning commissions, thus creating new income opportunities. This not only benefits individuals economically but also supports the expansion of e-commerce platforms and the digital advertising market. AI's role in the use of personal images also empowers micro, small, and medium enterprises (MSMEs) to enhance their competitiveness by enabling low-cost advertising and product development strategies.

Additionally, AI-assisted personal image authentication technologies, such as facial recognition, help address long-standing issues in consumer rights protection by verifying the identity of sellers or livestream hosts, thereby enhancing transparency and building consumer trust in commercial activities. While the use of personal images for commercial purposes in Vietnam, when conducted in compliance with legal regulations and with user consent, generates numerous benefits - from personalized customer experiences and more effective marketing strategies to the promotion of the digital economy and protection of consumer rights - it also raises serious concerns.

The lack of strict controls has created opportunities for criminal exploitation of AI technologies, particularly

deepfake technologies, for fraudulent purposes. Criminals use deepfakes to impersonate government officials or relatives of victims in fake video calls^[4], soliciting personal information or instructing victims to perform specific actions for video capture. These videos are later used to open bank accounts or e-wallets under the victim's identity for fraudulent activities. Victims suffer not only financial loss but also identity theft, causing severe harm to their reputation and finances. Such misuse erodes public trust in e-commerce platforms and social networks.

Fraudsters frequently impersonate large corporations, using fake personal images or logos to create websites, advertisements, or social media posts, thereby deceiving consumers and damaging the reputation of legitimate businesses, ultimately hindering the growth of e-commerce.

Another serious issue is the use of AI technologies to manipulate sensitive images or videos for blackmail. Criminals often target high-profile individuals, such as government officials or business executives, creating fabricated sensitive content to extort money^[5]. These acts result in financial loss, reputational damage, and public fear. Privacy violations are also alarming, as many photo-editing or deepfake applications collect personal data such as images, locations, and timestamps without sufficient consent, exposing users to risks of data abuse or unauthorized sales to third parties.

Vietnam's current legal framework for personal data and privacy protection remains inadequate, leaving individuals vulnerable to unauthorized exploitation of their images.

Furthermore, improper use of personal images for commercial purposes poses threats to social security and organizational reputation. Fraudsters impersonating law enforcement agencies - such as the police or procuracy - have been reported in Vietnam, using deepfakes to manipulate victims, causing widespread anxiety and undermining public trust in state institutions. Businesses targeted by impersonation suffer reputational damage and must invest significant resources to address the fallout, disrupting legitimate commercial activities.

Positive Impacts: AI is reshaping how businesses exploit personal images, transforming them into powerful commercial tools with outstanding efficiency. Advanced technologies such as DALL-E, Midjourney, and Stable Diffusion have opened new possibilities for producing high-quality images without costly and time-consuming traditional photo shoots, especially in industries like fashion, advertising, and media^[6].

For example, virtual models used for fashion displays allow small brands in developing countries to compete with significantly lower investment costs. AI also expands creative possibilities by enabling deep personalization of content through the analysis of image data and user behavior.

Instead of mass communication, businesses can now design advertising messages tailored to individual consumers, thereby optimizing the customer experience and directly boosting conversion rates. A notable example is the "Malaria No More" campaign, where David Beckham's image was utilized by AI to deliver messages in nine different languages, demonstrating AI's positive application while raising legal questions about personal identity control^[7].

Moreover, AI assists in automatic editing and optimization of images, from adjusting lighting to altering backgrounds,

saving time and resources while ensuring high-quality advertising content. Recent developments have demonstrated AI's enormous potential to generate new, commercially viable content by scraping images and human language data from the internet^[8]. In addition, AI plays an essential role in business process optimization, integrating personalized image-based chatbots and real-time content adjustments, contributing to sustainable long-term value creation and enhancing business adaptability in a rapidly changing market environment.

These technological advancements enable businesses to compete more effectively, promote sustainability, and meet new consumer demands emphasizing transparency, social responsibility, and respect for personal rights. Global practices show that properly harnessed AI image exploitation can balance economic benefits with the protection of individual rights, ethical technology use, and societal trust.

Major corporations are pioneering internal control processes, establishing clear data consent protocols, and disclosing AI usage in their commercial operations.

Negative Impacts: Shocking statistics reveal that 98% of deepfake videos online are non-consensual pornographic content, with an increase of 550% from 2019 to 2023, reaching 95,000 videos - highlighting the large-scale misuse of this technology^[6]. Such abuses gravely harm reputations and severely violate human rights, as seen in the unauthorized use of Scarlett Johansson's image and voice by AI, sparking intense debate over the control of personal identity^[7]. AI's misuse threatens not only privacy but also individual dignity and reputation.

Furthermore, AI-based commercial exploitation of personal images has revealed numerous regulatory shortcomings, with the legal framework struggling to keep pace with technological advances. The Getty Images lawsuit against Stability AI exemplifies this issue, with Stability AI accused of copyright infringement involving millions of images and facing damages claims of up to USD 1.8 trillion. Similarly, artists have sued Midjourney and DeviantArt for creative style infringement, posing complex challenges for intellectual property rights in the AI era^[8]. Although there have been individual successes in image rights lawsuits - such as Taylor Swift suing an AI company for unauthorized use of her image in AI-generated video ads - effective future legal solutions remain undeveloped^[10]. The unchecked commercial exploitation of personal images by AI risks severe financial losses, brand reputation damage, and public relations crises. Without proper regulation, AI could become a double-edged sword, threatening the sustainable development of individuals and businesses alike.

In Vietnam, AI is becoming a significant driver of the digital economy and e-commerce, particularly through personalized shopping experiences, advertising, and MSME support. When used lawfully and with user consent, personal image exploitation has improved marketing effectiveness, boosted consumer trust, and created new income opportunities. However, Vietnam faces challenges similar to global trends, including deepfake-driven scams, extortion, privacy violations, and erosion of trust in digital platforms. Unlike some developed countries that have established relatively complete legal systems for personal data rights and AI use, Vietnam's regulatory framework remains in progress and urgently needs updates to keep pace with technological developments.

In summary, the exploitation of personal images through AI presents a clear duality: on one side, it drives creativity, economic growth, and user experience enhancement; on the other, it risks severe infringements on personal rights and legal exposure. Maximizing AI's commercial benefits while minimizing negative impacts requires a coordinated effort involving progressive legal frameworks, strong technological ethics, and heightened awareness among individuals, businesses, and society at large. AI is playing an increasingly critical role in the exploitation and commercial use of personal images, offering immense opportunities while simultaneously posing significant challenges.

The need to regulate AI's participation in the exploitation and commercial use of personal images through legal frameworks in Vietnam

At present, Vietnam does not yet possess a specific, coherent, and transparent legal system regulating the use of AI in the exploitation of personal images for commercial purposes. As a result, violations are handled sporadically, enforcement lacks deterrent effect, and serious legal gaps persist. This situation not only complicates the protection of individual image rights but also increases the risk of AI misuse, negatively impacting public trust in technological advancement. In contrast, various jurisdictions worldwide have begun developing specific legal regulations concerning AI. Comparing Vietnam's regulatory environment with international standards and the legislation of developed countries is therefore essential for gaining deeper insights into how legal frameworks can govern AI's involvement in the commercial use of personal images. Instruments such as the European Union's Artificial Intelligence Act (EU AI Act), the General Data Protection Regulation (GDPR, 2018), and national laws in countries like Japan and China have already established important standards, particularly concerning the protection of personal image rights amidst the commercialization of AI technologies.

The European Union (EU) is a global leader in setting rigorous legal standards for the use of personal images in AI. The EU AI Act and the GDPR (2018) together create a comprehensive framework that prioritizes privacy and ethics in the exploitation and commercial use of personal images.

According to the authors, these regulations are not merely legislative instruments but declarations on how technology should serve humanity. The EU AI Act categorizes AI applications involving personal images - such as deepfakes and personalized advertising - as high-risk, requiring companies to obtain explicit consent and disclose how data is used (Article 50, EU AI Act) ^[11]. It also prohibits AI systems from collecting facial images from the internet or CCTV footage to create facial recognition databases without consent, deeming such practices "unacceptable risk" activities (Article 5, EU AI Act) ^[11]. Simultaneously, the GDPR reinforces these protections by defining images as personal data (Article 4(1), GDPR) ^[12], imposing strict data security obligations, and granting individuals the right to withdraw consent or request the erasure of their data. Specifically, Article 17 of the GDPR (Right to be Forgotten) mandates the prompt deletion of personal images upon request ^[12]. Thus, in cases where personal images are exploited or misused for commercial purposes without consent, individuals have the unequivocal right to demand immediate removal, ensuring robust protection of their interests.

In China, the Personal Information Protection Law (PIPL, 2021) and the Deepfake Regulations (2023) reflect a tightly controlled regulatory approach, consistent with the country's political and cultural context. The PIPL mandates explicit consent for the use or exploitation of personal images (Article 29, PIPL) ^[13] and requires companies to localize data storage and disclose their algorithms (Article 40, PIPL) ^[13].

In contrast, Japan has adopted a more cautious approach through the Act on the Protection of Personal Information (APPI). The APPI applies to all business operators (individuals and organizations) engaged in processing personal information, distinguishing between "personal information" and "personal data" (personal information forming part of a personal information database under APPI definitions). The obligations of business operators vary depending on whether they collect, use, or provide personal information or personal data ^[14]. Japan, while reinforcing its privacy legislation, still lacks specific legal provisions addressing deepfakes or AI-driven advertising, unlike the EU and China.

In Vietnam, current regulations are primarily contained in the Cybersecurity Law, the Civil Code, and the Intellectual Property Law. However, these regulations remain general and lack detailed technical standards to ensure transparency, mandate explicit consent, or establish rapid deletion mechanisms for data breaches involving AI applications.

Vietnam's legal system currently reveals clear deficiencies in controlling AI's participation in the exploitation and commercial use of personal images. There is no distinct and comprehensive legal framework to manage the risks arising from AI technologies, particularly in sensitive areas such as personalized advertising, deepfakes, and facial recognition.

Drawing lessons from global practices, it is evident that regulating AI's participation in the exploitation and commercial use of personal images is an urgent necessity. The rapid development of AI has amplified risks concerning privacy violations, information manipulation, and serious infringements on individuals' personal rights. The EU, China, and Japan have acknowledged these challenges and have progressively built tighter legal frameworks to govern AI based on the fundamental principle of human rights protection. For Vietnam, this need is even more pressing amidst the Fourth Industrial Revolution and its deep international integration. The early establishment of a specialized legal system ensuring individuals' control over their own images in the context of AI technologies would not only protect personal rights but also promote the ethical and sustainable development of Vietnam's technological and commercial sectors.

Vietnamese legal orientations for regulating the impact of AI on the exploitation and commercial use of personal images

The rapid development of AI, with applications such as facial recognition, automated image generation, and deepfake technologies, while offering numerous benefits, also raises significant legal, ethical, and privacy challenges. In Vietnam, as well as in other countries worldwide, the establishment of a legal framework to regulate the impact of AI on the exploitation and commercial use of personal images is an urgent necessity.

Firstly, a critical orientation is the need to expand the legal scope of protection for personal images. Legal regulation

should not be limited to images directly captured, but should also encompass images generated, edited, or synthesized by AI technologies. In practice, products such as deepfakes, digital avatars, and reconstructed images based on biometric or behavioral data may possess identifiable characteristics of an individual even without their direct participation. When such AI-generated images are used for commercial purposes, they can significantly affect an individual's reputation, commercial value, and control over personal information. Therefore, legislation must clearly stipulate that AI-generated images, if based on personal data or capable of identifying specific individuals, must be protected on par with real images, thereby safeguarding the legitimate rights and interests of those individuals.

Secondly, legal regulations should establish the principle of transparency in the exploitation and use of personal images through AI. Enterprises and organizations that collect or use personal images - whether real or AI-generated - must be required to provide clear notifications to individuals regarding the intended purposes, the technologies applied, the potential modifications, and any associated risks. Consent for the use of personal images must be based on fully informed, voluntary agreement, thus preventing manipulation or misinformation. This principle is particularly critical in an environment where AI-generated images can be virtually indistinguishable from real ones, leading to risks of deception or misattribution of inappropriate content. Transparency and fully informed, voluntary consent must become the foundation of all activities involving the exploitation and use of personal images in the digital environment.

Thirdly, clear limitations must be established concerning the exploitation and use of personal images by AI for commercial purposes. Legal provisions should delineate clear boundaries between legitimate uses and abuses of personal images. For instance, the use of personal images - whether edited by AI or not - to promote sensitive, inappropriate, or damaging products, or in a manner that harms an individual's honor or dignity, should be strictly prohibited or subject to stringent regulation. Similarly, the use of AI to create false images that imply a person's participation or endorsement of a product or brand without their consent should be legally defined as a violation. Establishing such boundaries ensures that AI serves legitimate interests without undermining social ethics or human rights.

Fourthly, the legal framework should enhance mechanisms for the swift and effective protection of individuals whose images are exploited or misused. Existing mechanisms remain inadequate for addressing violations in the fast-moving online environment. Thus, the law should provide for simple, flexible, and efficient procedures for filing complaints and requesting the removal of infringing images, along with clear obligations for coordination among stakeholders such as social media platforms, data-exploiting enterprises, and state authorities. Particularly, specific timeframes must be imposed for processing removal requests to avoid prolonged exposure that could cause severe harm to affected individuals.

Fifthly, legal regulations must clearly define the legal responsibilities of various stakeholders involved in the exploitation and use of personal images by AI. In today's complex technological landscape, not only the entity directly using the image but also technology developers, AI training data providers, and content-hosting platforms could

be implicated in rights violations. The law must specify the responsibilities of each party: who bears primary responsibility, who is obligated to oversee compliance, and who is liable for damages. Such clarification would enhance the effectiveness of personal rights protection while promoting transparency and fairness in legal enforcement.

Sixthly, in order to balance the protection of human rights with the promotion of technological innovation, legal frameworks must be designed to be flexible and adaptive. The use of AI in the exploitation and commercial use of personal images holds significant potential for advancing business efficiency, artistic creativity, and marketing services. Therefore, legislation should avoid imposing excessive barriers that hinder technological innovation. Instead, it should be based on a risk-governance principle, focusing regulatory efforts on harmful behaviors that genuinely threaten individuals' rights and interests. Additionally, Vietnam should strengthen international cooperation to build common standards for AI ethics, data protection, and personal image rights, thereby safeguarding the interests of Vietnamese citizens amid deepening globalization.

In summary, the impact of AI on the exploitation and commercial use of personal images poses major challenges to the legal system. To respond effectively, legal frameworks must adopt comprehensive orientations, including: expanding the scope of protection for personal images; requiring transparency and fully informed consent for AI applications; establishing reasonable limits on commercial uses; strengthening rapid and effective mechanisms for personal rights protection; clearly defining stakeholder responsibilities; and ensuring a balance between human rights protection and technological innovation. Only through such a comprehensive, flexible, and progressive approach can the law effectively regulate the increasingly complex impacts of artificial intelligence in this domain.

Conclusion

Artificial intelligence offers tremendous opportunities for the exploitation and commercial use of personal images. When applied appropriately, AI can optimize advertising activities, support brand development, and promote the growth of the digital economy.

However, this advancement also poses significant challenges to individual rights, necessitating the establishment of appropriate legal boundaries. Achieving this requires the collective efforts of legislators, technology companies, AI developers, and individuals themselves in building a safe, transparent, and human rights-respecting digital environment.

In particular, Vietnam must urgently develop a specific and coherent legal framework to regulate AI's participation in the exploitation and use of personal images for commercial purposes, ensuring that technological progress is aligned with the protection of human dignity, privacy, and ethical standards.

References

1. Government of Vietnam. Decision No. 127/QĐ-TTg on the approval of the National Strategy for Research, Development, and Application of Artificial Intelligence until 2030, 2021.
2. Ha Thanh (translating LeewayHertz). The emergence of AI in economic sectors. Ministry of Science and Technology of Vietnam, 2020. <https://mst.gov.vn/ai->

- xuat-hien-ra-sao-trong-cac-linh-vuc-kinh-te-197143154.htm
3. Department of E-commerce and Digital Economy. The impact of artificial intelligence on e-commerce. Ministry of Industry and Trade of Vietnam, 2024. <https://moit.gov.vn/tin-tuc/chuyen-doi-so/tac-dong-cua-tri-tue-nhan-tao-den-thuong-mai-dien-tu.html>
 4. Nhu Nguyet. Beware of AI-based image and video manipulation scams targeting officials and entrepreneurs. VnEconomy Magazine, 2025. <https://vneconomy.vn/canh-giac-thu-doan-dung-ai-cat-ghep-hinh-anh-video-lua-dao-cong-chuc-doanh-nhan.htm>
 5. Quang Minh. Artificial intelligence poses numerous risks and threats to society. Nhân Dân Newspaper, 2023. <https://nhandan.vn/mat-trai-cua-tri-tue-nhan-tao-post788699.html>
 6. Aesthetics of Photography. Facts and stats on AI photography: How AI is reshaping visual creation, 2024. <https://aestheticsofphotography.com/facts-and-stats-on-ai-photography-how-ai-is-reshaping-visual-creation/>
 7. Le Grelle E. AI-generated content and personality rights: The importance of consent and clear contractual stipulations. CMS Law-Now, 2024. <https://cms-lawnow.com/en/ealerts/2024/09/ai-generated-content-and-personality-rights-the-importance-of-consent-and-clear-contractual-stipulations>
 8. Ross C. Who really owns AI art? What businesses need to know about generative AI and intellectual ownership. Forbes, 2024. <https://www.forbes.com/councils/forbesbusinesscouncil/2024/04/16/who-really-owns-ai-art-what-businesses-need-to-know-about-generative-ai-and-intellectual-ownership/>
 9. Amazon Web Services. What is a chatbot, n.d. <https://aws.amazon.com/vi/what-is/chatbot/>
 10. Silicon Review. Legal victory reshapes AI's use of celebrity likenesses, 2025. <https://thesiliconreview.com/2025/03/ai-celebrity-rights-lawsuit>
 11. European Union. EU Artificial Intelligence Act, 2024.
 12. European Union. General Data Protection Regulation (GDPR), 2018.
 13. National People's Congress of China. Personal Information Protection Law of China, 2021.
 14. Amazon Web Services. Data privacy in Japan, 2025 n.d. <https://aws.amazon.com/vi/compliance/japan-data-privacy/>