

Cognitive Adaptation for Book Editors in the Era of Generative Artificial Intelligence

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Abstract. This paper explores how book publishers are professionally adapting in light of smart publishing. The findings show that, in using generative AI, publishers are mostly adapting three aspects of their professional environment: their roles, career planning, and career prospects. Since AI technologies are developing exceptionally fast, publishers need to handle this tool strategically to ensure positive and productive evolution. Improvement of editorial products continuously and rebuilding editorial skills is part of that process. In organizational terms, publishing houses should get all their employees together and tap into the resources coming from other companies within the industry to help publishers improve their skill set. In this way, publishing work will regain some value and facilitate publishers' transition into the AI era.

Keywords: Generative Artificial Intelligence, Book Editor, Professional Cognition, Intelligent Publishing

1. Introduction

In particular, digital intelligence technologies, especially those based on AI, already permeate every step in the modern publishing process. The integration of this kind of technology has unconsciously made book publishers anxious about their professional identity. The overall rise in the application of AI within publishing and production processes has had the consequence of forcing publishers to rethink their tasks in a world of variation. Confronted by the intelligent publishing trend, publishers must rethink their career goals, their planning, and future direction to ensure their professional skills and personal qualities meet the requirements of the intelligent era. All this will contribute to their being better equipped to deal with the professional challenges occasioned by technological evolution.

2. How book editors can adapt their role in the age of intelligent development

The development of generative AI is changing the way we produce knowledge, thereby entailing great uncertainty among book publishers. When considering this fact, a question might arise: Will some professions become redundant, replaced by AI? Collaboration between humans and machines is not only redefining the publishing industry but also pressing a new mold on the work of book publishers. The latter are evolving from simple text processing to value creation in the digital

ecosystem. Such evolution will be associated with a growing professional diversity and a gradually changing professional identity, with publishers becoming indispensable in evaluation and decision-making tasks within a smart publishing environment. They are increasingly taking on the responsibility of quality assurance, efficiency monitoring and innovative evaluation. In turn, this establishes an intelligent system to help maintain the high standards of the publishing industry in the world of human-AI collaboration.

2.1. AI-driven book management

With the integration of intelligent technology into the production process and editing workflow, AI-assisted books have gradually become a unique and rapidly developing field in the publishing market. This technology integration has greatly improved production capacity and efficiency, and also completely changed the traditional labor-intensive and experience-dependent book production mode. Therefore, the publishing market has become more complex and changeable. In this reshaped ecosystem, the role of book publishers has gone beyond traditional administrative tasks and now covers many aspects such as decision-making and risk management. In the context of intelligent publishing, publishers must actively respond to market fluctuations, show greater initiative in topic selection and planning, deepen their understanding of AI technology, and identify new trends in the field of publishing. In addition, they must coordinate human-AI collaboration, adjust production plans, and optimize publishing project strategies. Thanks to these extended functions, publishers are increasingly playing the role of project managers in a human-AI collaborative production environment.

On the one hand, book editors are gradually becoming project managers. They evaluate various needs and strategically deploy intelligent tools. In the intelligent publishing environment, the role of editors is evolving. They should not only have project management functions, but also participate in creative decision-making. By using AI assistance systems, they break down traditional editing and proofreading tasks into easy-to-manage stages, assign responsibilities according to the advantages of machines, improve the efficiency of multi-threaded workflows, achieve parallel processing, and ultimately improve the productivity of individuals and teams. In the dynamic world of human-AI collaboration, editors are at the forefront of innovation, using generative AI technology to provide highly personalized and accurate services to the majority of users. This exciting development perfectly demonstrates the great potential of combining human intelligence with excellent machine intelligence. Editors continue to improve the integration of AI and optimize the collaboration mode by breaking down the publishing process into parallelizable components. This evolution is most evident in the complementary cooperation between editing and AI in core stages such as topic selection planning and quality assurance. The way book editors work has changed dramatically. They are now working with computers and others to create wonderful books together. The division of labor brought by generative AI has really changed the rules of the game. It enables editors to focus on their own strengths, make up for their shortcomings, and establish the most suitable process for their work. This is a great progress in the era of intelligent publishing, and it will also enable editors to perform their duties as book product managers in an unprecedented way.

On the other hand, book publishers using intelligent technology are expected to pay more attention to value creation throughout the life cycle of publishing products from production to consumption. They must prioritize creativity and value creation throughout the book production process, and give publications cultural and emotional resonance, so as to attract readers in a meaningful way. Unlike the linear distribution model of traditional publishing, publishers in the intelligent era must adopt an audience-centered perspective, respond to market demand, and

formulate comprehensive publishing strategies and services from an overall perspective. By dynamically adjusting the production process according to market fluctuations, publishers can scientifically reduce supply pressure and inventory risk. This method not only reflects the improvement of operational efficiency brought about by AI technology, but also reflects the attitude of publishers to actively respond to business challenges. Compared with rigid expert roles, publishing professionals with different skills and abilities can better resist the career changes brought about by intelligent machines. By actively participating in content creation and quality control, publishers increasingly play the role of publication managers and control the creative and operational levels of the publishing process.

In the era of intelligent publishing, the role of book publishers as managers of publishing products is increasingly diversified and extensive. By taking advantage of human-AI collaboration, publishers show greater adaptability and flexibility in optimizing workflow and project management. The improvement of this ability enables them to go beyond individual production steps and gain a more comprehensive perspective, thus promoting the high-quality development of the publishing process.

2.2. AI--driven content decision-making

The book publishing industry is an important part of the creative economy. Its long-term growth and sustainable development depend entirely on the value of content creativity. On the other hand, generative AI has shown great potential in content generation and can help editors complete most of the creative work, thus providing them with unparalleled technical support. However, it is still constrained by factors such as energy consumption, algorithm restrictions and the limited number of documents available in the database. Therefore, AI alone cannot achieve a truly independent level of innovation in publishing art or content realization. For this reason, book editors need to cooperate with machines to create content, which in turn can stimulate the inspiration of topic selection, enhance the ability to respond to market demand, and ultimately significantly improve the efficiency of content production [1]. Editors have the option of applying their ingenious critical judgment on the top of the machine ideas. Editors of books in the intelligent publishing context should take the utmost advantage of technological assistance not only for the quality to be improved but also for the quantity of creative productivity to be gained. They are thus involved in the adoption of technology as innovators, playing the dual parts of gatekeepers and policymakers in the creative output of generative AI artists.

To start with, the interactivity and user-friendliness of generative AI technologies allow book editors to do a lot more creative work, making it easier to hold practical thought experiments. Working continuously with AI systems, editors get the imagination to come up with new topics, market pattern and their own creative process plus front-loading and frolicking in content creativity. To put it into practice, the editing process of these AIs has been deeply integrated into its suitable workflows comprising topic planning, content creation, and marketing promotion. Thanks to AI, text generation, logical structuring, and semantic matching, creative outputs like book titles, blurbs, and marketing copy can be created in no time at all. During the process, editors employ their professional knowledge and taste to decide which of the AI-generated outputs are to be; that is, who gets the textual solutions that best balance market viability with cultural dispersion effectiveness from a broad range of options. Secondly, through persistent human-machine creative collaboration, book editors are able to open up to the future, sharpen their imaginations and find promising areas for innovation by the use of generative AI tools. Moreover, editors, depending on their background knowledge and sense of beauty, will be able to assess the concepts generated by AI critically and to

select those which have originality, market potential, and virality. The ideas that are chosen will then be developed and integrated into publishing and marketing strategies that are in line with the practical operational requirements of the company. Even though AI-generated blurbs and promotional copy very often lack expressiveness, show little flexibility and exhibit semantic impoverishment, they still can be of great help.

Generally speaking, generative AI technologies are not able to replace human value assessments or directional supervision. Editorial personnel still constitute the major source of creative output and serve as the gatekeepers who through their selection, evaluation, and shaping activities determine the path along which the content development will progress. Within the framework of human-machine co-creation of content, the figure of the editor must assert himself/herself as the lead and supervisor in all the aspects of the process. He/she will be the one to navigate the AI systems through the creative routes, to judge the worth and usefulness of the machine's ideas, and to examine very carefully the possible copyright issues that may arise from the AI-generated content. In the past, editors were always seen as the intellectual monopolists of the publishing industry—the great minds who could not be replaced in book production. Even though very advanced AI tools can do certain creative and operational tasks for the editors, the latter's role in the creative process cannot be completely taken away. Editors, thus, are the necessary complement to AI and can continue to do so by virtue of their professional insight and judgment in the tuning, i.e., the elaboration and integration of the machine's output; thus, the machine will not be the only one having the creativity as an attribute, it will instead be the machine plus the human who has the attribute of demonstrating it in an objectively recognized way since the result produced will be a combination of both qualities, i.e., machine-assisted creativity that retains the substantive intellectual and cultural value. Therefore, they effectively mediate the process of creativity that is guided by data and that is sensitive to human feelings through the application of depth, emotion, and vitality to book production..

2.3. A pioneer in AI-driven production technologies

Looking back on the trajectory of publishing, each wave of technological innovation has profoundly influenced the industry's development. In the face of generative media technologies, humanity is neither the sole architect nor a passive beneficiary. Through reciprocal interaction and deep co-construction with generative media, humans and machines together shape evolving ecosystems of information, knowledge, and digital culture [2]. In this process, there is a dynamic interaction between the autonomy of media technology and the dynamism of human beings, and finally a creative balance is achieved. Generative AI has unlimited potential in the publishing industry. Although the technology currently applied is general-purpose, there is still an opportunity to explore a special framework for the needs of specific industries. In this exciting field, book editors are at the forefront. They skillfully combine the capabilities of humans and machines to unlock higher levels of technical adaptability and innovation. They are pioneers, leading the development of generative AI applications and redefining the boundaries of possibilities. Judging from its inherent production logic, book editors realize that a generative AI system will definitely become a new standard because a large amount of training and large-scale data input will establish a stable and reliable content generation model.

The domestication of generative AI by book editing is an exciting process, which requires mastering specific skills and practical experience. With their own professional experience and work habits, editors can give editing thinking to machines through continuous interaction. The improvement of generative AI is exciting. It still needs to be customized, which is good, because editors can constantly improve the output results by adding qualifying modifiers, clarifying text

requirements and establishing operating specifications. What's more, the editor's modification methods are diverse, which largely reflects their understanding of the sentence expression. The structure of Chinese sentences is very interesting. It depends on the context and is constrained by language conventions, such as standardized word order and grammatical functions. This makes Chinese sentences more difficult to modify at will than English, which is an fascinating difference. In the actual editing work of dynamic, editors will adopt a modular processing strategy when responding to the modifications generated by AI. This exciting process involves breaking down tasks into the most basic components, ensuring that they fit perfectly with the editorial vision, and defining the specific steps required to achieve all of this. The exciting, ongoing evolution of AI operations is allowing editors to master interactive methods for effectively using generative AI. Their practice is guided by the principle of aligning machine outputs with editorial standards while preserving creative integrity. In this exciting process, book editors have brilliantly distilled personalised experiential techniques and adaptive training protocols through continuous experimentation and reflection.

It's so exciting to see book editors evolving from passive users into active co-creators of technology through the cyclical mechanisms of technological adaptation. They enthusiastically invest their time and effort in engaging with machines, participating in the logic of algorithmic optimisation by continually refining AI's professional applicability in topic planning and content generation – emerging as non-technical "technology tamers" in the process. They're a world away from the old-fashioned, isolated editorial practices of traditional print publishing. The new technologies and training are so inspiring and motivating, and they require editors to constantly update and expand their knowledge structures. The great thing about using generative AI technologies to perform professional tasks is that editors no longer just passively receive technological configurations. Instead, they become active participants in constructing usage paradigms. In doing so, they design intelligent editorial workflows that are perfectly tailored to their professional demands and creative objectives.

3. Under the background of intelligent efficiency improvement, the career planning adjustment of book editors

Within the context of intelligent publishing, the career development trajectories of book editors are undergoing a gradual yet profound transformation. From an industrial perspective, generative AI has reconfigured the operational toolkit of editors, reshaping their workflows and professional routines. Through repetitive and cyclical practices of technological symbiosis, editors must continuously explore the operational principles of generative AI and proactively align themselves with emerging technological applications. At the same time, they are compelled to reconstruct their professional value and identity within a publishing environment reshaped by generative AI—seeking to preserve professional dignity while cultivating a sustainable space for long-term development.

3.1. From ambiguity to clarity: expectations for AI usage

Under the background of intelligent publishing, the career trajectory of book editors is undergoing a gradual and profound change. From an industry perspective, generative AI has reshaped the operating tools of editors and changed their workflows and career habits. Through the repetitive cycle practice of technology symbiosis, editors must constantly explore the operating principle of generative AI and actively adapt to emerging technology applications. At the same time, they are also forced to reconstruct their professional values and identities in the publishing environment

reshaped by generative AI, seeking to create a sustainable space for long-term development while maintaining professional dignity.

3.1.1. Accuracy and intelligence, efficiency and safety: the expected role of generative AI in book editing

Unlike the positioning of technical professionals, book editors have a more pragmatic attitude towards the use of generative AI. They believe that technology should mainly serve their professional goals and achieve accurate, intelligent, efficient and safe results. In the face of the expanding publishing supply chain and rapidly changing market trends, the daily responsibilities of book editors have increased significantly. Their workload and work difficulty have increased significantly, which aggravates their professional pressure [3]. At the same time, as the book market continues to develop in the direction of specialization and high-end, editors must constantly expand their horizons to improve the content competitiveness and market attractiveness of publications. Therefore, improving the efficiency of repetitive work, enhancing the output capacity of complex positions, and reducing work pressure have become an urgent need for the editorial community. This covers the optimization needs of generative AI in three key areas: book editing and proofreading, topic selection planning, and book marketing.

Book editors are extremely excited about the future of generative AI. They expect this technology to reduce the burden of repetitive work in the editing and proofreading process by assigning workloads to multiple rounds of proofreading. Once fully trained for accurate content, the AI system can identify and correct factual errors, knowledge gaps and other key defects in the content of the manuscript. At the same time, they can also enhance the coherence of context by correcting the shortcomings of grammar and style, clarifying the author's ideas, and improving logical fluency. What's more exciting is that AI can also help customize content for different audiences. By rewriting paragraphs, it can significantly improve the readability and understandability of the manuscript. In terms of topic selection and planning, editors and planners will make full use of the analysis and induction capabilities of generative AI to access and integrate top industry databases. By building a broad, true and credible source of information, AI helps to overcome the limitations of subjective empirical thinking. This is so exciting because it helps to make more accurate and reliable topic selection suggestions. This is no longer just about editing and planning responsibilities, but a new world full of opportunities. The rise of social media platforms such as WeChat official account, Weibo, TikTok and Rednotes has opened up a new world for editors. They can now use the power of generative AI to create truly fascinating text elements, including book titles, selling points and promotional copy. This exciting development has given rise to a new marketing concept and innovative marketing strategy. More importantly, it gives AI vitality, making it a partner for readers to interact and interact with readers in real time. Its interactive function and instant feedback enhance readers' participation, thus improving readers' affinity and sympathy for book brands and publishers, which is conducive to the long-term development of the brand.

Based on the existing book production process, the generative AI technology used for book editing can enhance the whole production process efficiently, safely and accurately, and promote seamless collaboration in all aspects of the publishing chain. Editors are passionate about generative AI. It is not only a tool to improve efficiency, but also a real innovator of human-AI collaboration in the complex publishing process. The technical requirements put forward by the editorial community are very pragmatic and close to practical application, reflecting their keen assessment and rational consideration of AI application scenarios. This attitude of "toolistic acceptance" shows the proactive adaptability of professionals in the face of technological change, which is deeply inspiring. It also

reveals the exciting challenges and development vision faced by publishing practitioners in the process of digital transformation. With the increasing application of generative AI technology in publishing practice, they will become the key catalysts to transform the book editing industry, simplify the workflow, and raise the quality of publishing to a new height. In this exciting new technology pattern, the role of human-AI collaboration and book editors will definitely undergo remarkable changes. We can foresee that the editorial function and capacity structure will change, thus pushing the entire publishing ecosystem towards higher intelligence and higher quality standards.

3.1.2. Originating from books, but beyond books: the evolution of published products in the era of generative AI

In the evolution of the publishing industry, each technological iteration has brought about changes in the way knowledge is stored and presented. From primitive social knots and inscriptions on turtle shells and animal skeletons, to paper and ink in the printing era, to mobile media such as smartphones and computers in the information age, the transformation of knowledge storage forms is constantly reshaping the production and consumption path of publishing products. Entering the era of generative AI, the presentation of knowledge in published products is gradually shifting from manual printing to diversified and intelligent integrated output created through human-AI collaboration. This change foreshadows a profound change in the production logic and consumption mode of publishing products. Integrating generative AI into publishing and production can automatically meet the needs of personalized, multi-scenario and immediate knowledge consumption, thus promoting the innovation of knowledge products and knowledge service forms [4].

Under the background of the increasing maturity of knowledge encapsulation, publishing products are increasingly breaking through the boundaries of traditional media, giving rise to a cross-media, cross-platform and multi-format publishing ecosystem. Through the application of generative AI in the production process, these products are evolving from an isolated single print form to a digital publishing output ecosystem that integrates interaction, communication and co-creation. Under this trend, the traditional skills of book editing are also being adjusted. The core ability that was once limited to book production including text sensitivity and political insight has now become a necessary skill to create diversified digital cultural products. Under the paradigm of media empowerment cognition, individuals realize the revelation of cognition and the transformation of subjectivity through interaction with generative AI. They have jumped from passive content consumers to the core node in the collaborative production-consumption network and become meta-actors in the content creation and communication ecosystem of the publishing industry [5]. From this perspective, the labor environment and production factors of the book editing industry are undergoing significant changes. Editing work is no longer limited to basic tasks such as reviewing and proofreading texts or proposing creative ideas, but covers corpus annotation and cleaning, database management and operation and maintenance, algorithm optimization, and integrated management of content resources. With the application of generative AI technology and the increasing popularity of digital publishing products, the planning and operation focus of book editing has also expanded from paper books to multi-format integrated product suites. In an increasingly digital publishing environment, editors must take cross-media integration and data literacy as part of their career development. They must also consider the differences between different formats and keep their work consistent with the media consumption patterns of contemporary users.

In a word, the integration of generative AI technology will not only change the workflow and responsibilities of book editors, but more importantly, it will fundamentally change the existing publishing model. Therefore, it will reshape the professional ability, role and organizational structure of the book editing industry, thus promoting the transformation and restructuring of the professional system of the publishing industry.

3.2. From the edge to the mainstream: introduction to artificial intelligence application

According to the Generative AI Application Development Report (2024) released by the China Internet Network Information Center (CNNIC), by June 2024, the user group of China's generative AI products will reach 230 million [6]. As an emerging technology that empowers content production, generative AI is moving from experimental applications to industrial applications, being used more and more widely in publishing scenarios, and constantly expanding its application field. In the face of the wave of generative AI, the autonomy and innovative ability of book editors are becoming key factors in adapting to the intelligent publishing environment [7]. From text assistance to core publishing processes such as theme planning and marketing promotion, the use of AI by book editors has developed from edge observation to in-depth integration, breaking through application barriers.

In the early days of the publishing industry, the application of generative AI technology attracted the attention of book editors. They quickly engaged in it and began to try to use these new tools. At first, they started with some less important tasks to familiarize themselves with their operation and improve their personal efficiency. For example, editors try to use AI-generated content in their daily work, such as drafting official letters or sorting out materials, and then optimize the output results according to their own professional knowledge. This powerful auxiliary application has greatly improved work efficiency and marked a major breakthrough in the application of AI technology in the publishing industry. As the editors' understanding of AI continues to deepen, their attitude has also changed from cautious observation to active participation, gradually integrating generative AI into the workflow, making it a collaborative assistant. It is gratifying that once they understand the functions of AI, more and more editors begin to use these tools in project planning and marketing copywriting. This has given rise to a new model of human-AI collaboration. How AI can seamlessly integrate into the publishing workflow and become a disruptive tool for professionals is really exciting.

The publishing industry is at the forefront of the new era, and many leading enterprises have begun to systematically apply AI. They cooperate with professional institutions to guide employees to seamlessly integrate generative AI applications into their career development. Phoenix Publishing Media Group has been at the forefront of this exciting development, actively recruiting engineers with professional backgrounds in science and engineering. They have also established cooperative relations with a leading domestic open access technology company focusing on large-scale language models, and developed an integrated generative AI platform called "Phoenix AI Spirit" for internal employees. The company has been committed to putting this concept into practice. They carried out a series of wonderful training and practical courses to help editors master the application of AI in the publishing process, including content planning and marketing. This exciting initiative integrates the development and application of AI into the company's long-term strategic planning. In short, these developments show that the publishing industry is shifting from small-scale experiments of individual editors to large-scale organizational-level AI technology applications.

The publishing industry is experiencing a fascinating change. The joint efforts of book editors and the innovative measures of publishing enterprises are paving the way for a new era of AI

application. This process fully demonstrates the innovative ability and adaptability of publishing professionals. It also highlights the need for individuals and organizations to work together to promote technological innovation under the background of the transformation of intelligent publishing. It is gratifying that the publishing industry is ready for success, whether at the personal level or at the industry level. Through the wide application of AI tools, they will achieve comprehensive intelligent integration and structural innovation in the operation mode.

3.3. From fluctuation to reshaping: responding to the value return of AI

For a long time, the professional value of book editors has been limited by the limitations of the daily work environment, which has reduced them to the role behind the scenes, which is in stark contrast to the authors in the spotlight. With the iterative progress of publishing technology, the publishing industry has undergone systematic changes, including business digitalization, intelligent printing, intensive management and precise communication. These developments have pushed the publishing industry from manual labor to digital production, and promoted the adjustment and transformation of the traditional editing work mode. With the evolution of the publishing environment, the scope of editorial responsibilities continues to expand, and the scope of content is wider than ever before. However, the core process framework of book editing is still structurally consistent, and key stages such as project planning, content acquisition and editing, and editing are still the cornerstones of the publishing process. In the era of intelligent publishing, these stages are being reintegrated into the broader publishing ecosystem through intelligent technology, which brings unprecedented turbulence and uncertainty to the professional value and role boundaries of book editors.

On the one hand, publishing products developed by generative AI technology have developed rapidly and penetrated into all aspects of the publishing process. AI shows strong learning ability and self-renewal potential, which exposes the long-term text sensitivity and professional knowledge of book editors at risk of being outdated, triggering a profound professional identity crisis, forcing the publishing industry to re-evaluate the value and positioning of editors in the process of product transformation. Editors must now reshape their irreplaceable functions in the publishing process. With the integration of generative AI, the core value and audience positioning of book products are changing, and the content form and consumption mode are also changing. As the planners and producers of these products, the traditional core competencies of editors, such as editing skills and subject expertise, are facing challenges and weakening, which makes the intrinsic value of editing work increasingly blurred and increases people's uncertainty about their own professional identity and value.

The exciting news is that in this era full of uncertainty, editors are by no means passive. In fact, they are becoming more and more proactive, especially in the field of intelligent publishing. They are committed to enriching and expanding their professional identity and mission. The good news is that although generative AI platforms and software are increasingly assisting editors, editors still have a broad career space. Book editing is an industry full of personal and career growth opportunities. Practitioners constantly expand their knowledge system and ideological horizons. Book editors are not just piecework workers who mechanically perform editing tasks; their work is about the pure pleasure of reading, so that readers' rational and spiritual dedication can be integrated with the text and produce other creative resonances. The advantage of AI is that it can only replace mechanically replicable operations. This means that it cannot weaken the humanistic value and unique professional significance of the profession of book editing.

At the same time, in the face of the deep integration of AI technology, publishing enterprises are actively exploring strategies to break through the value limitations of the industry. In order to conform to the booming trend of intelligent operation, the publishing house has always adhered to the principle of content first. They break through the shackles of traditional paper media and transform high-quality content into fascinating new forms, such as radio dramas, e-books, short videos, podcasts and interactive publications. This provides an excellent way to expand and diversify content distribution channels. By adhering to the commitment to high-quality content, the publishing house has cultivated the common goal of industry development and professional standards in book editing. This is undoubtedly encouraging news for editors and helps them regain their confidence in their careers. This also highlights the importance of paying attention to the quality of publication, not just the speed of content production. Book editors do not resist the generative technology of AI, but actively adapt to technological development and redefine their professional roles. Their transformation from behind-the-scenes contributors to core participants is encouraging because they have achieved the revival of professional value through human-AI collaboration.

4. Adjustment of the career prospects of book editors in the era of intelligent trends

With the progress of generative AI technology, the career trajectory of book editors is increasingly consistent with the technological development. This trend not only threatens the traditional role of editors and employment opportunities, but also provides a long-term prospect for creative career development. In the face of the emerging intelligent publishing pattern, under the impact of technological change, book editors are not only confused and worried about their future career development, but also cautiously optimistic about the improvement of career development and working environment.

4.1. Technology replaces risk: the bleak career prospects of the industry bring uncertainty

From a technical point of view, generative AI shows autonomous deep learning ability beyond human beings, unparalleled multitasking efficiency and stability, and work stability that is difficult for human beings to maintain in the long term. These characteristics bring unprecedented risk of technical unemployment to workers [8]. As a machine that simulates human cognitive ability, generative AI technology has raised deep concerns about employment security since its birth, especially among practitioners in the press and publishing industry. They are worried that writing robots may replace journalists and algorithm recommendation systems may replace editors [9]. The experience model of technological progress and practical application shows that a certain degree of technological unemployment is inevitable, and the career trajectory of publishing practitioners is likely to undergo a major change. Large-scale language models use massive data resources and strong learning ability to pose considerable career challenges for publishing experts engaged in text work. These AI-driven tools demonstrate excellent cross-content and data source aggregation capabilities, providing new retrieval and interactive services. Therefore, they pose a challenge to traditional publishing knowledge services and databases characterized by the integration and integration of publishing resources, and have a fundamental impact on book categories that are highly dependent on knowledge production and integration.

In recent years, the book publishing industry has faced a crisis. The revenue of many enterprises has declined, and the business sector has been constantly adjusted to balance income and expenditure. The position of book editor has fallen into a vicious circle of high-intensity work and

low return. Against this background, the introduction of generative AI technology has impacted market competition like a "catfish", exacerbating people's concerns about the career risks brought to book editors brought by technological progress. In order to reduce labor costs, publishing houses constantly adjust the staffing ratio of various links. In addition to AI-assisted book illustration drawing, they also hire low-cost external reviewers and proofreaders to cope with fluctuations in market revenue. In this cost-oriented and output-oriented publishing process, the deployment of mature generative AI technology is likely to lead to a large number of unemployment and lay off the positions of basic editors and producers. Although most editors who focus on planning and text retouching have not yet faced the unemployment crisis caused by AI, the growing ability of AI in image generation and graphic design has led to the risk of unemployment for some single-skilled art designers. For example, art editors and illustrators who are only responsible for line drafts or storyboard drawing often face unemployment due to their narrow scope of skills. Many experts in coloring, cartooning or illustration have been fired, and it is difficult to find suitable alternative jobs. In the face of these potential career crises, book editors are increasingly aware that only professionals with multi-skilled skills can be more than proficient in the uncertain professional environment brought about by technological progress. In the face of these potential threats, editors must constantly improve their professional ability. In order to overcome anxiety about career uncertainty and doubts about their own career value, they must choose a career path with greater development potential to reduce the confusion and helplessness in the face of intelligent work.

In the exciting era of generative AI, the career development of book editors is undergoing a dynamic change, and individuals interact with their career environment in a new and innovative way. Career factors, including the nature, content and specific responsibilities of the work, are constantly changing. In today's rapidly changing professional environment, book editors are constantly adjusting and developing to meet the changing needs of their roles. They are always looking for new ways to improve their skills and abilities, so as to become real drivers of change in this field. These pathways include re-evaluating and improving self-awareness, pursuing career development, and participating in creative work [10]. In the continuous challenges, some editors began to think about new growth and development opportunities. They are eager to explore new perspectives and constantly improve their professional skills.

4.2. Technology symbiosis opportunities: future career development vision

There is a fascinating tension between machine efficiency and personal creativity. On the other hand, in today's rapid development of automated publishing processes and algorithms, practitioners engaged in repetitive work or low skill thresholds have excellent opportunities to explore new fields and improve their skills according to technological progress. What's more exciting is that the wide application of AI has created a broader career development space for publishing professionals and given rise to a variety of hybrid roles. Building an intelligent digital publishing ecosystem requires knowledge-based workers with mixed skills, who must constantly balance the relationship between technological progress and career development needs [11].

The development of generative AI has finally begun to show tangible results in the publishing industry. It is encouraging that machines are increasingly replacing tedious and lack of creative work, thus improving efficiency and expanding the potential to improve the professional literacy and ability requirements of book editing. The editors were happy to learn that generative AI would raise their work efficiency to a new level, allowing them to get rid of monotonous tasks and focus on the creative aspects of their work. The future prospect of book content is bright, which is expected to significantly improve the quality and standards of our work. This not only opens up exciting career

development and pay opportunities for editors, but also injects new vitality into their professional dignity and identity. Nowadays, with the booming development of AI, the publishing industry is undergoing a change. The role of editors is changing, and they have the opportunity to reshape themselves. It is encouraging that editors can look forward to the future with confidence. By adapting and mastering new technologies, and reflecting and clarifying the relationship between editing and AI, they can give full play to their future career value [12]. However, the advantages brought by generative AI technology are indeed amazing. In the process of continuous learning and adaptation, book editors move forward cautiously and always maintain a cautious and optimistic attitude when responding to the changing needs in the field of intelligent publishing. Although existing studies show that concerns about the possible disruptive impact of generative AI may reduce career satisfaction for practitioners, most book editors are not short-sighted pessimists. On the contrary, they have a pragmatic and forward-looking attitude towards their career future, realizing that technology will not lead to the disappearance of jobs, but will replace those who are unable or unwilling to learn and apply generative AI technology.

In the face of generative AI, the editing industry has ushered in an excellent opportunity to show its value and importance. Adhering to humanistic values and adhering to the principle that technology should ultimately serve the welfare of the public, the editing industry can ensure future success. In the rapidly changing field of book production, the rapid development of generative artificial intelligence provides editors with an exciting opportunity to embrace technological innovation and adapt to its practical application. Book editors no longer passively wait or anxiously resist unpredictable technological changes, but increasingly integrate AI into the publishing workflow with an open and positive attitude. They embrace technological change, explore diversified career paths, and strive to fully realize and reaffirm their career values. This exciting change not only requires editors to make adjustments in terms of technical literacy and career planning, but also requires the organizational support of publishing enterprises to promote the career development of editors. Publishing houses should create an experimental culture that encourages innovation and provide a supportive and flexible environment for creative exploration and the application of generative AI technology. Leaders in particular have excellent opportunities to show empathy and foresight in supporting employees to participate in technological innovation. They can gain an in-depth understanding of the individual needs of employees during technical adaptation through understanding and care. This exciting method is expected to change the career trajectory and career expectations of editors in the emerging intelligent publishing model.

5. Conclusion

Under the background of the rapid development of digital technology, generative AI has become an important force to promote the structural transformation of China's publishing industry. This brings new challenges to the career development and role positioning of book editors. This article discusses the cognitive reshaping path of book editors in the digital intelligence industry, mainly focusing on three aspects: career roles, career planning and career prospects. On the one hand, the introduction of generative AI technology has changed the professional role of book editors in the traditional publishing industry, and has also brought uncertainty to career development and future prospects. On the other hand, intelligent technology continues to be applied to the industry, which also brings more possibilities and innovation space to individual practitioners and the overall organizational structure of the publishing industry. This provides publishing industry practitioners with technological opportunities and the cornerstone of change, helping them cope with market fluctuations and industry crises. Although generative AI technology will undoubtedly bring career

disruption and industry challenges, book editors should seize the development opportunities brought by this technology. They must create a career path characterized by human-AI collaboration and intelligent ethical applications. This means that they need to maintain their professional skills and control ability under the guidance of artificial intelligence, but also improve their technical literacy and adaptability. This method will help book editors reshape their professional values and functions in the evolving field of AI.

References

- [1] Wang, Y. J. (2023). Optimization of Book Selection Planning and Content Production from AI and Integrative Publishing. *Publishing Science*, 31(01), 44-49.
- [2] Wang, N., & He, J. (2024). From Generative AI to Generative Media: A Re-examination of the Connotation of "Generative" and the Media Environment. *Editorial Friend*, (11), 80-87.
- [3] Xing, Z. X., Zhao, Y. S., & Yang, Y. F. (2024). Sample report on the professional status survey of publishers (2022—2023). *Science-Technology & Publication*, (03), 96-109.
- [4] Yi, L. (2023). From Digital Publishing to Intelligent Publishing: The Evolution of Knowledge Packaging. *Publishing Science*, 31(01), 81-90.
- [5] Li, Y. H. (2020). Publishing Convergence: Product Form, Core Task and Technical Path. *Journal of Communication University of China (Natural Science Edition)*, 27(03), 60-63.
- [6] Xinhua News Agency. (2024, November 30). The number of users of generative artificial intelligence products in China reaches 230 million. Retrieved October 12, 2025, from https://www.gov.cn/yaowen/liebiao/202411/content_6990362.htm
- [7] Qin, Y. H., & Lu, Y. Y. (2024). *Intelligent era book publishing planning*. Beijing, China: Capital University of Economics and Business Press.
- [8] Tan, J., & Ouyang, B. (2024). Human-machine Job Competition: The Impact of Generative AI on Workers' Work and Its Way Out. *Academic Exchange*, (09), 157-170.
- [9] Chen, C. F., & Huo, J. (2018). People-oriented: The application of artificial intelligence technology in the field of journalism and communication. *Journalism & Writing*, (08), 54-59.
- [10] Sun, Y. P. (2021). *Occupational sociology*. Beijing, China: China Social Sciences Press.
- [11] Wang, Y. X., & Liu, D. H. (2023). Hybrid skills and human-machine collaboration: Forward-looking analysis of occupational risks in the AI society and the transformation of talent cultivation paths. *China Publishing Journal*, (20), 29-34.
- [12] Zhou, M. (2021). Inheritance and differentiation: The development path of editors in the era of artificial intelligence. *Publishing Research*, (01), 16-23.