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AI and Well-being among Danish Journalists

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Indhold

> **AI's impact on journalists' mental well-being depends on the degree of voluntariness, adequate training and support, clear ethical guidelines, and a balance between efficiency and quality.**

Summary

This report examines how generative artificial intelligence (AI) impacts the psychosocial work environment and the mental well-being of journalists in Danish media workplaces. The study is based on desk research, interviews with leaders and employees from eight media organisations, conversations with freelance journalists, and a survey among members of the Danish Union of Journalists.

Generative AI has become a widely used technology in the media industry in record time, with the potential to streamline workflows and improve the quality of journalistic work. Our study shows that the implementation of AI in 2024-2025 varies significantly across media organisations – from those that are far advanced with the systematic use of the technology to those still in an experimental phase.

Interviewed journalists primarily use AI to streamline routine tasks such as transcribing interviews, researching, generating headlines, proofreading, and subtitling. This is generally perceived positively, as it frees time for more creative and engaging tasks such as in-depth interviews, investigative journalism, and critical analysis. Many journalists find that AI can be an effective partner and collaborator, contributing to higher quality in their work.

At the same time, the study shows that implementing AI can create uncertainty and concern among journalists. This particularly includes fear of reduced job security if the technology eventually replaces certain journalistic functions. Other concerns include the risk of increased productivity pressure, where efficiency gains translate into demands for higher output, as well as worries about quality degradation and the spread of misinformation if AI-generated content is not quality-assured.

The management's approach to implementing AI significantly impacts journalists' experiences and well-being. Organisations with a clear strategy, where management involves employees in the implementation process and provides thorough training, typically encounter less resistance and uncertainty among employees. In contrast, a top-down implementation lacking adequate inclusion and training can result in frustration and concern.

For freelance journalists, AI offers greater flexibility as they can choose when and how to utilise the technology. However, they also face some uncertainty about the future, particularly if the demand for journalistic work decreases due to AI implementation.

The study suggests that AI's impact on journalists' mental well-being depends on various factors: the degree of voluntariness in its use, adequate training and support, clear ethical guidelines, and the balance between efficiency demands and quality focus. Responsible and inclusive implementation is crucial for AI to positively contribute to the work environment, ensuring that journalists' professional skills and judgment remain valued.

Introduction

Generative artificial intelligence (AI) has rapidly become a technology most people recognise and apply across various industries. With its potential to enhance efficiency and improve quality in diverse work contexts, it is not surprising that many workplaces have already adopted this technology and are exploring the numerous opportunities it presents.

When workflows change due to new technology, it impacts the people who must operate it. Numerous examples exist, and there is a growing awareness of how new technology influences the work environment and employees' well-being.

New technology places new demands on both managers and employees, and the new tools can thus shape the psychosocial work environment.

One area where generative AI holds significant potential is journalism. For journalists, generative AI can transcribe interviews, provide feedback on text and ideas, and draft articles. Both Danish and international media houses are already employing generative AI to varying degrees as a tool to support journalists' work.

However, when technological development occurs rapidly, it is crucial to consider how these changes affect those impacted by the technology. Currently, we know very little about how generative AI influences the psychosocial work environment among journalists.

This analysis is, therefore, an essential contribution to understanding how generative AI affects employees and how organisations and managers can appropriately introduce this technology.

Reading guide

In the following chapter of this report, we define key concepts for analysing the relationship between journalists' use of generative AI and the technology's impact on their mental well-being. Chapter 3 provides an overview of relevant international research on the topic. Chapter 4 presents the combined results from eight case studies focusing on generative AI and journalist well-being. Chapter 5 contains the results of a survey among journalists, while Chapter 6 focuses on freelancers' perspectives. Finally, Chapter 7 includes the report's conclusion and closing remarks.

> **Many workplaces have already adopted generative AI and are exploring the numerous opportunities it presents.**

Concepts and definitions

This chapter defines the key concepts of the analysis. First, we review the concept of generative AI as a subcategory of the overarching term "AI" and its application in the analysis. Subsequently, we present our definitions of mental well-being and the psychosocial work environment.

Technological framework for AI

AI is a broad term encompassing various technologies with the common ability to perform tasks initially requiring human intelligence. AI is not a recent innovation. For instance, playing chess against a computer has been possible since 1957. This type of AI relies on complex decision trees: If the player executes action X, the AI responds with action Y. This creates the illusion that the computer acts as a human opponent, although it merely follows predefined patterns of behaviour based on the player's input. In recent decades, there has been significant progress in AI technology. The breakthrough mainly lies in the development and proliferation of machine learning, deep learning, and generative AI. This progress is primarily attributed to the vast amounts of data available today. Figure 1 illustrates a categorisation of AI concepts, where general AI serves as the umbrella term while machine learning and generative AI present specific subfields.

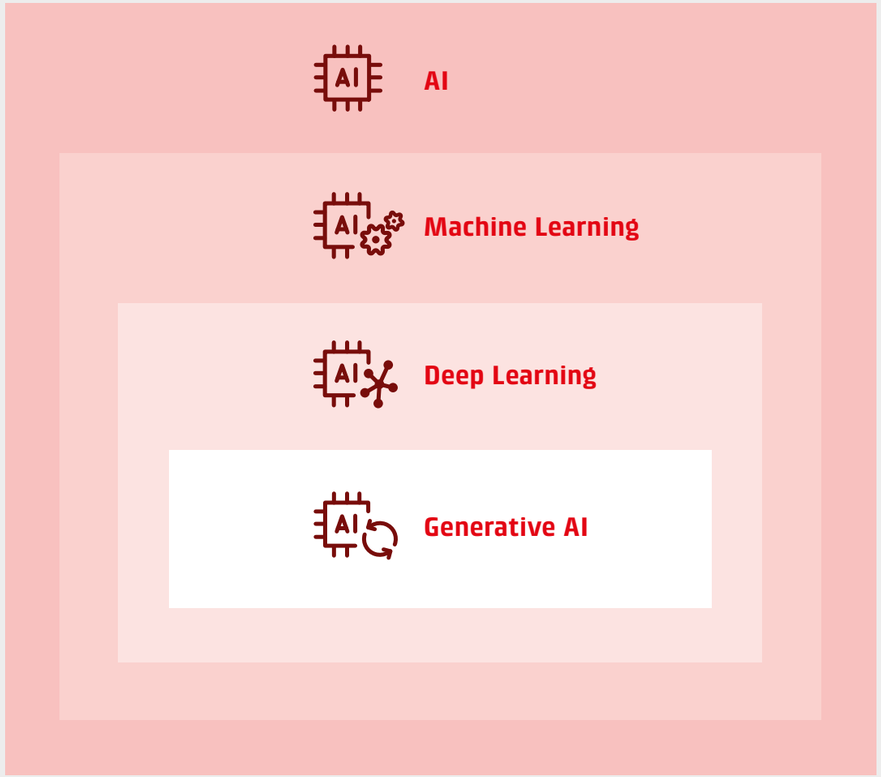
In brief, the four categories can be defined as follows:

- AI describes the development of computer systems that can simulate human intelligence.
- Machine learning is a category of AI where computers "learn" by identifying patterns in data. The algorithm can thus act in unknown situations based on analyses of existing data.
- Deep Learning is an advanced form of machine learning that uses artificial neural networks to make predictions.
- Generative AI applies deep learning to large datasets, such as text from the internet, to generate new content. Generative AI can create text, images, video, or audio that appears original. Generative AI tools are typically accessed via applications where users "prompt" with commands in plain text or speech.

This study focuses on generative AI, as this technology offers significant opportunities for journalists to generate new content. Generative AI can support or take over several workflows within journalism.

However, this does not mean that machine learning, in a broader sense, is irrelevant to journalists. On the contrary, machine learning is already used in so-called "data journalism"

Figure 1. Taxonomy of AI concepts[1]



to identify stories in large datasets that would otherwise be unmanageable for humans to scrutinise. Data journalism, however, requires specific technical competencies and is therefore reserved for a relatively small group of journalists. In contrast, generative AI is much more accessible and relevant to all journalists. Hence, this study focuses on generative AI.[2]

Throughout the analysis, we will use the abbreviated term "AI" to refer specifically to generative AI, which is the central focus of our discussion.

Mental well-being and its relation to the psychosocial work environment

Mental well-being is vital to a person's overall health and quality of life. Poor mental well-being correlates with a higher risk of developing

both physical and psychological illnesses. Individuals with good mental well-being tend to live longer than those with lower levels.

The percentage of adults in Denmark experiencing low mental health has been increasing over the past 10-15 years, and the situation does not seem to be improving.

The Danish Health Authority adheres to the WHO's definition and portrays mental health as "a state of well-being in which the individual can realise their abilities, manage daily challenges and stress, engage with others in communities, and feel good, predominantly happy, in a positive mood, and satisfied with life."

The workplace and the psychosocial work environment significantly influence an individual's mental health. If the workplace is not viewed as a supportive community, or if the work is perceived as lacking meaning, it can adversely affect mental health.

A psychosocial work environment is essential for mental health in the workplace. The Danish Working Environment Authority defines this idea as "an interplay between psychological and social factors in the workplace and the individual employees."

Psychological and social factors may encompass the nature of the work and its psychological demands, how work is organised – including opportunities for influencing one's own work, collaboration, and fostering trusting relationships with colleagues and management – and leadership elements such as strategy, communication, and workload management – i.e., the demands on the workplace, including workload and work pace – are also relevant.

Analytical approach

This report is based on a study that employs various methods and data sources. Initially, we consulted several international researchers and experts to gather background knowledge and conducted a literature review on the relationship between generative AI and the work environment. This was done to understand the current state of research and to form an impression of where challenges and benefits may lie. However, it should be noted that, as of January 2025, the academic literature on the subject remains very sparse.

We conducted eight visits to Danish media companies that employ journalists. During these visits, we interviewed managers (i.e., editors-in-chief, managing editors or AI-responsible directors) and employees to understand how generative AI is used and how employees perceive the technology's impact on the psychosocial work environment. Additionally, we interviewed 12 freelance journalists to gather their experiences and expectations regarding how AI currently affects or may influence their work situations and mental well-being.

In addition, we carried out a survey among Danish journalists – both staff and freelancers – to obtain a broader understanding of how generative AI is perceived and which concerns, challenges, advantages, and expectations are most prevalent and, therefore, important to consider.

The collected data was then analysed and is presented in this report.

Background – What we know about AI and mental well-being

The connection between AI and mental well-being is a growing area of research, although the number of studies remains limited. Several experts point out that many challenges arising from the implementation of generative AI are well-known from general research on workplace changes and that various measures from change management theory are likely relevant here. The following presents existing knowledge in the field based on our expert interviews and literature review.

The international research literature on AI's significance for journalists currently sheds limited light on how the technology affects journalists' mental well-being. This is demonstrated by the results of a review of relevant and primarily scientific literature published after 2020, including two literature studies focusing on AI and journalism.

Overall, research on journalism primarily focuses on how generative AI is expected to change journalists' workflows, what the technology will mean for news media business models, and how users consume journalism.

Several studies also address the ethical issues associated with using AI in journalism. These include the risk of increased misinformation distribution when journalistic content is automatically produced based on biased or flawed algorithms.

At the same time, several studies explore how AI may affect journalists as professionals, including their workload and professional identity. These aspects can be linked to the question of the significance of AI for journalists' mental well-being in the workplace.

Can AI increase efficiency – and replace journalists?

On the positive side, AI can enhance journalists' productivity by assuming routine tasks, such as transcribing interviews, which allows journalists to focus on more complex and meaningful activities.

This may increase job satisfaction and improve mental well-being among journalists by reducing monotony and fostering engagement with more intellectually stimulating work. Furthermore, the technology enables journalists to ground their reporting in larger datasets that would be challenging to analyse and manage without AI. In this manner, AI tools can provide journalists with additional "muscle" and opportunities to create new forms of investigative journalism. However, researchers also warn that

efficiency gains from AI can lead to increased workloads and, ultimately, stress. Journalists may be assigned more tasks, and the balance between the quantity and quality of journalism may be challenged when AI takes over specific tasks and helps journalists work faster.

The automation of tasks made possible by AI may also lead journalists to fear for their job security. Several factors contribute to this fear, particularly given that news media have long been under economic pressure and have good reason to seek efficiency improvements. This uncertainty is further reinforced by the fact that consumers may not necessarily perceive differences in credibility and quality between AI-generated and human-made journalism.[3]

Impact on the quality of journalism

AI's impact on journalism quality is significant because it is linked to journalists' self-perception as professionals. Utilising AI to generate content may lead to a loss of humanity and personality in journalistic work.

This can influence journalists' sense of purpose and job satisfaction, particularly since they typically view their core role as conveying reality and wish to maintain control throughout all phases of news production.

The automated production of journalism through generative AI may gradually shift journalists' focus from reporting facts to fact-checking the information provided by generative AI. This shift can increase their workload, as fact-checking all AI-generated content across various topics can be both complex and extensive.

When journalists are required to frequently and manually verify the quality of generated journalism, their workload increases, while their professional identity as creators and communicators of journalistic content diminishes.

Skills and adaptation

Several sources emphasise the need for journalists to understand and use AI-based tools. A better understanding of these technological solutions can reduce journalists' mistrust of AI and enable them to contribute to the responsible development of relevant AI tools. Additionally, basic knowledge of how, for example, language models work is crucial for journalists to identify new applications of AI in their work and act more effectively as quality controllers of AI-generated journalism.

However, the need to familiarise oneself with the technology and adapt to innovations, such as those in newsrooms, can present challenges. Some journalists may find it difficult to handle AI tools due to a lack of digital skills. Others may resist change fundamentally and be wary of the increasing automation of journalistic content production. In this context, the necessity for ongoing upskilling in AI may lead to lower job satisfaction or increased frustration and stress.

Another potential issue arising from the proliferation of generative AI is the risk that journalists may lose knowledge and skills. Some researchers argue that excessive reliance on generative AI for content production could negatively impact journalists' creativity and weaken their critical investigation and analysis abilities. However, other researchers highlight that AI tools can also assist journalists in working creatively and innovatively.

The research literature does not unanimously assess whether the proliferation of AI will primarily have positive or negative consequences for journalists and their work. However, there is a consensus on the need for conscious and responsible implementation of AI solutions. Research offers several recommendations on how AI can be implemented in ways that positively contribute to journalists' mental well-being.

One recommendation is to integrate knowledge about AI and relevant AI solutions into journalism and communication education. This approach equips future journalists with a necessary understanding of how AI can be applied in their work and how to engage critically with the technology.

It is also recommended that journalists be provided with ongoing upskilling, encouraging them to view technology as a collaborator that supports rather than replaces human employees.[4]

Misinformation and implementation

Due to the risk of the automatic production and distribution of generated content leading to the spread of misinformation, several researchers argue that media organisations should use AI in a transparent and ethical manner.

Clear guidelines and measures designed to minimise errors in automatically produced journalism will likely make it easier for journalists to relate to and support AI-generated content.

Furthermore, the literature emphasises the need for a human-centred approach to implementing and using AI. This involves recognising that not all tasks can be addressed by technology and that journalists have unique skills – for example, the ability to infuse journalism with a personal touch and establish trusting relationships with the audience.

With this approach, it becomes feasible to integrate AI solutions into journalism while safeguarding journalists' professionalism and identity.

Partial conclusion

This literature review has demonstrated that the impact of generative AI on the psychosocial work environment among journalists is currently underexplored in research, primarily focusing on workflows and business models. The same holds true when examining research in other industries and professional groups. Here, too, the literature regarding generative AI's connection to the psychosocial work environment is, at best, limited.

This study is, therefore, as far as we know, among the first to explicitly investigate the relationship between generative AI and the psychosocial work environment. At the same time, the literature recommends implementing generative AI under clear guidelines, further emphasising the need to understand the connection between generative AI and the psychosocial work environment.

> **AI is an important subject in today's media landscape, yet journalists still have limited experience with its routine, everyday use.**

Case studies of work places

AI is a significant theme in today's media landscape, yet journalists still have limited experience with its daily and routine use. Some media companies are making substantial progress in adopting the technology, while most interviewed companies expect to fully implement AI by 2025. In our data collection, we engaged with companies at every stage of AI usage, as it is crucial to understand their preparations and expectations regarding the impact on journalistic work and employees' mental well-being.

The next part of this report presents findings from eight case studies on Danish media companies, which we visited to conduct in-depth interviews with managers and journalistic staff on-site. These eight companies generously participated in the study, often viewing it as an important topic, even though several assessed that they had not worked with AI long enough, resulting in limited experience. In the interviews, participants shared their concrete experiences with AI and, in cases of limited exposure, their expectations, hopes, and concerns.

All eight case studies are anonymised. This was done to ensure maximum openness in the interviews, allowing both managers and employees to express concerns and frustrations, which is central to obtaining an authentic picture of mental well-being.

Generally, the eight case companies vary in size, including both smaller and larger media organisations. Most distribute journalistic content in both traditional formats (e.g., newspapers, radio, or TV) and digital formats (e.g., news websites or streaming services).

Management perspectives

Leadership staff across the eight case companies displayed diverse approaches to implementing generative AI, each with their own significance for journalists' well-being and job satisfaction. Management perspectives revealed a complex balance between technological innovation, business considerations, and employee welfare.

Strategic implementation and vision

Most media organisations viewed AI primarily as a tool for efficiency and quality improvement rather than to decrease staff. As expressed by the management of one case company, AI was introduced to eliminate "boring" work by automating repetitive tasks that did not intellectually challenge journalists. Similarly, management in another media organisation envisioned AI providing journalists with "digital superpowers" allowing them to focus on more engaging and creative work. However, some managers also believed that:

> *"A different mindset is needed now, and it may have something to do with generations how AI is perceived. There is less autonomy today. Individual employees have less de-*

cision-making power, and everyone in our organisation must aim for the same goal. AI is intended to assist journalists in improving and ensuring we achieve that goal."

The implementation strategies varied considerably among the studied organisations. Some adopted a top-down approach with mandatory usage requirements, while others embraced a more experimental and voluntary adoption model. In one instance, management mandated that all employees use AI for at least one task each day:

> *"All middle managers are responsible for ensuring that all employees utilise AI; opting out is not an option. Everyone must use AI for one task daily, and they exchange experiences during the morning meeting to help everyone get started."*

In contrast, another media organisation emphasised "freedom with responsibility," allowing journalists to decide how and when to incorporate AI into their workflows.

Managers who received a more positive response to AI from journalists typically engaged employees in the implementation process. One case exemplified this approach through an iterative "sandbox" development process, where journalists could experiment with new AI functions in a test environment and provide feedback to management before these tested functions became part of standard workflows. This collaborative method helped transform initial resistance into constructive feedback for continuous improvement.

Communication and training strategies

The case studies also revealed that communication from management significantly influenced journalists' perceptions of AI and its impact on their well-being. Clear articulation of how AI would affect roles and responsibilities reduced concerns and resistance. In organisations where management failed to provide transparent communication about long-term plans for AI, employees filled the information void with speculation about potential job cuts. One manager stated that journalists could turn AI tools into allies in solving work-related tasks:

> *"AI can act as your editor; you can ask it about interests and relevance. It is always available, and it always has time. It can help formulate creative questions and transform texts into Facebook posts, which some journalists consider a tedious task."*

Training emerged as another critical factor affecting journalists' comfort with AI. The approaches to training in the case companies ranged from comprehensive multi-level education programmes to more informal "learn-by-doing" methods. One media organisation chose to train selected employees in the use of AI. These employees were then meant to spread acquired knowledge throughout the organisation. Another case company planned a series of webinars to introduce AI concepts and applications.

The timing of training also proved to be important. In several cases, management acknowledged that busy workdays made it difficult for journalists to find time to learn new AI tools, leading to uneven adoption across teams. In one case, management recognised this challenge and planned differentiated training based on expected usage levels – from expert three-day modules to basic two-hour introductions.

Productivity expectations and ethical considerations

A significant concern across several case studies was whether AI implementation would increase productivity demands. In one case study, management explicitly anticipated that AI would double productivity requirements (from 9 to 18 articles weekly), raising concerns among journalists. This contrasted with other cases where management emphasised that efficiency gains would be reinvested in higher-quality journalism rather than increased output. As one manager pragmatically expressed:

> *"The hype around AI is beginning to fade; people no longer believe that AI can do everything. The use of AI should not focus on producing tons of articles. The question is whether people are interested in reading AI-generated articles or if customers will pay for unique quality."*

At the same time, management teams underlined the importance of human oversight in AI-assisted journalism. Some media organisations pointed out that credibility is among their most valuable assets, requiring human judgment at all stages. Similarly, one manager highlighted that professional expertise remains essential despite AI's capabilities, particularly for creating distinctive, high-quality content that audiences would value. In another media organisation, management adopted a cautious approach due to concerns about data protection and copyright issues, opting to fully resolve legal questions before the widespread deployment of generative AI. Another company established clear guidelines prohibiting journalists from uploading company content to public AI platforms (in contrast to internally developed AI solutions, which are utilised, among other things, to protect the data meant for processing or editing with AI).

These ethical considerations extended to transparency with audiences. While one company determined that AI use did not require disclosure, viewing it as equivalent to other digital tools, other organisations implemented policies requiring a declaration when content was AI-generated without substantial human editing.

Well-being and job security

When considering the direct impact of generative AI on journalist well-being, managers generally believed that the media industry's challenging economic environment created more stress than the implementation of AI itself. In several instances, management noted that financial pressures and past layoffs in the industry were much more stressful than technological changes.

Management perspectives on the long-term impact of AI on job security varied across the case studies. Some organisations were transparent about potential role eliminations, with management in one media company acknowledging that certain functions, such as captioning and layout, might eventually disappear. However, they emphasised that savings would be reinvested in better journalism rather than merely reducing headcount. Another media company planned to maintain journalist staffing levels while potentially reducing student assistant positions. This approach to workforce planning reflects an understanding that AI implementation in the future will likely affect different roles in different ways.

Journalists' perspectives

Across the eight case studies, journalists exhibited diverse reactions to the introduction of generative AI in their workplaces. Their experiences ranged from enthusiasm and curiosity to hesitation and concern, often influenced by how AI was introduced and the degree of agency they had in its adoption.

Adoption patterns

Some employees felt pressured and resistant in media organisations where the use of AI was mandatory. One journalist noted that they had to "pull themselves together" to remember to use AI regularly, indicating that the technology had not yet become a natural part of their workflow. Conversely, in other cases where adoption was voluntary and driven by personal interest, journalists reported more positive

experiences as they could experiment with AI at their own pace.

The level of experience with AI varied significantly across newsrooms. While some journalists already used AI daily for tasks like transcription and headline generation, others were starting to explore its capabilities. This disparity created different perspectives on AI's impact on well-being, with more experienced users generally reporting greater benefits and fewer concerns. Notably, journalists across multiple cases mentioned that they did not initially realise how much they had already been using AI until they reflected on their daily practices during interviews. This suggests that AI tools are gradually becoming normalised in journalistic workflows, often without conscious recognition of the technological shift.

Practical applications

Journalists consistently identified specific tasks where AI provided the most value, with transcription emerging as the most appreciated application across nearly all case studies. As one journalist noted, AI transcription offered an evident relief and time-saving advantage compared to manually transcribing interviews. This sentiment was reflected throughout the cases, with transcription universally described as a tedious task that journalists were glad to delegate to AI. Other widely valued applications included headline and subheading generation, translation of foreign language content, and summarising lengthy reports or articles. Furthermore, journalists valued how AI could manage tedious or routine tasks. As one journalist stated:

> *"If AI means that I can eventually make some tasks easier, e.g., write a press release quickly and spend more time on the interesting articles, it will be fine with me."*

This sentiment was common across cases. Journalists generally welcomed AI when it freed them to focus on more meaningful and creative aspects of their profession.

Impact on work quality and professional identity

Journalists expressed mixed views on how AI affected the quality of their work. Some stated that AI improved their output by offering better language, more varied expressions, or helpful structure. Others remained sceptical about AI-generated content, noting that it often lacked the sharp angle or distinctive voice that characterised good journalism. In one case company, a journalist observed that AI-generated products frequently contained clichés and lacked the quality standard expected by their organisation. This concern about quality was tied to journalists' professional identity and pride in their craft. A journalist from a different media company articulated that the best guarantee against AI taking over their jobs was to produce articles that were more advanced and in-depth than what AI could generate. One journalist summarised his related perspective as follows:

> *"The work can be accomplished faster and more efficiently, but not necessarily better for the individual. Overall, journalism improves because working more efficiently frees up time to focus on other aspects of journalism. This includes reviewing the text multiple times and fact-checking sources. AI has not been introduced to reduce the number of journalists. That is not part of the strategy, but it might eventually become a reality."*

The relationship between AI and professional identity emerged as a crucial factor impacting well-being. Some journalists expressed concerns about becoming irrelevant due to a lack of technological skills. Meanwhile, others observed colleagues leaving the profession not specifically because of AI but due to broader frustration with digital transformation and the pressure to work more quickly.

Journalists who see AI as a tool to enhance, rather than replace, their professional judgment generally report more positive experiences. As one journalist noted, they were very aware of their responsibility to ensure that the material provided by AI was correct, maintaining their role as the ultimate authority on content quality and accuracy.

Ethical Concerns and professional values

Journalists across various cases expressed ethical concerns about AI, which affected their comfort with the technology. In one media company, journalists were particularly worried about "deepfakes" and the risk of misinformation, questioning how they could verify a video's credibility. This uncertainty emphasised the importance of maintaining journalistic integrity in an era of easily manipulated content.

In line with this, journalists consistently highlighted the necessity of human oversight to ensure accuracy and quality. As one journalist remarked, human control over AI-generated content was essential for guaranteeing high-quality, accurate, and valid information. This commitment to professional standards instilled a sense of purpose and value amidst concerns about technological displacement.

Workload and productivity pressures

While management in several cases anticipated that AI would increase productivity, most jour-

nalists reported that AI had not significantly impacted their workload or stress levels.

Some journalists found that AI actually helped reduce stress by enabling them to complete certain tasks more quickly than before. However, there was widespread concern about future productivity demands. Journalists expressed concerns that efficiency gains would translate into higher output requirements rather than improved quality or more time for in-depth reporting. This concern was particularly acute in one company where journalists were already working under individual production targets, and success was measured by metrics such as article count and click rates.

The interviews with journalists confirmed that the relationship between AI and stress significantly depends on the implementation approach. In cases where AI was presented as a helpful tool rather than a productivity driver, journalists reported fewer worries. It also seems important to provide journalists with time and opportunities to familiarise themselves with AI tools. In this context, time constraints emerged as a common challenge across multiple cases. Journalists in one case noted that busy days with time pressure made it difficult to find time to learn and implement AI tools effectively.

Job security and future concerns

Concerns about job security varied across the case studies. While some journalists expressed direct fear of AI replacing their roles, most shared management's perspective that economic pressures in the media industry posed a more significant threat than AI itself. As one journalist noted, there had been 12 to 15 rounds of layoffs over the past 15 years, making unpredictability a constant condition of their work. One journalist pointed out:

> *"Our expectation is that, starting next year, AI will be systematically implemented, and everyone has been invited to participate in webinars on its usage, which will remain voluntary. The question is whether we will have time to properly familiarise ourselves with its best usage. However, I don't believe that AI will take over our work, as there will always be someone who needs to fact-check."*

Journalists generally believe that certain aspects of their profession, particularly those involving human connection, critical thinking, and creative storytelling, cannot be replicated by AI. One journalist expects an increased demand for articles with a human and personal presentation that AI cannot deliver. Similarly, another journalist suggests that human journalists might become "truth witnesses" responsible for verifying AI-generated content.

However, journalists also recognise that specific roles may be vulnerable to automation, such as those involved in captioning audiovisual content. This can be summarised as a hierarchy of concern based on how easily AI could replicate different journalistic functions. A common concern across cases is not immediate job loss but the fear of being left behind professionally. Some journalists worry about becoming irrelevant as employees due to a lack of technological competencies, especially when organisational restrictions limit their ability to experiment and improve their skills within AI.

Training and competency development

The adequacy of training and support significantly influenced journalists' comfort with AI and its impact on their well-being. In cases where comprehensive training was provided, journalists reported greater confidence in using AI tools. Conversely, in organisations with limited training, journalists expressed frustration about their inability to utilise AI effectively. In one media company, several journalists felt less prepared and requested more consistent training and information across departments. In one case, journalists received an initial basic course followed by an "advanced" session six months later, with the expectation that they would experiment independently between sessions. Some found this approach challenging, noting that they still felt uncomfortable with many AI functions even after both training sessions.

Several cases underscored the significance of peer learning and knowledge sharing. In one media company, the selection of AI ambassadors was viewed favourably as a way to spread expertise throughout the organisation. Likewise, in another case, "digital frontrunners" (i.e., journalists who were more skilled or confident in using generative AI) continually explored and implemented new AI opportunities, which helped their colleagues feel more comfortable with the technology.

Collaboration and workplace relationships

The introduction of AI has affected workplace dynamics and relationships in various ways across the case studies. In one case, the most experienced journalists had traditionally served as the "collective memory" that colleagues could consult when seeking older material in archives. AI's ability to search through company archives quickly challenged this role, potentially diminishing the value of institutional knowledge.

The implementation of AI sometimes strained the relationship between journalists and management. One journalist expressed frustration about the disconnect between management's enthusiasm for AI and the practical limitations faced:

> *"The managers are extremely focused on it [AI], and the rest of us don't get much information about what's coming. There is a mismatch in expectations regarding AI. Management is very enthusiastic about it. They are the ones spending time on it. The rest of us don't use it much."*

However, in cases where management took a more collaborative approach, journalists reported that this agile approach to AI implementation made most individuals comfortable using the technology.

Partial conclusion

DThe case studies reveal both convergence and divergence in how management and journalists perceive the impact of generative AI on well-being within Danish media companies. Both groups recognise AI's potential to enhance journalistic work by automating routine tasks like transcription, potentially freeing up time for more meaningful work. They also agree that economic pressures in the media industry create more fundamental stress than AI itself and that human oversight remains essential for maintaining journalistic quality and credibility.

However, important differences emerge regarding their priorities and concerns. Management tends to focus on efficiency gains and organisational adaptation, while journalists are more concerned about professional identity, meaningful work, and future job security. A key tension exists around productivity expectations. Some managers anticipate increased output following AI implementation, while journalists fear that efficiency gains will translate into higher workloads rather than improved quality or more in-depth reporting.

The implementation approach significantly influences journalists' experiences with AI. Top-down mandates with obligatory usage requirements generate resistance, while collaborative approaches that preserve autonomy foster greater acceptance. Similarly, adequate training and clear communication about organisational AI strategies are crucial for reducing concerns and building confidence.

As the case companies continue implementing generative AI throughout 2025, these findings suggest that its impact on journalist well-being will depend largely on implementation ap-

proaches rather than the technology itself. By involving journalists in the process, providing sufficient support, maintaining a focus on journalistic values, and setting realistic productivity expectations, media organisations may be able to harness AI's potential while safeguarding the well-being of their staff in an already challenging professional landscape.

Survey of Danish journalists

To gain broader insight into journalists' experiences with AI and its impact on mental well-being, Danish Technological Institute conducted a survey from October to November 2024. The questionnaire was primarily distributed via email to members of the Danish Union of Journalists. Additionally, it was referenced and featured twice in the trade magazine Journalisten and highlighted on LinkedIn through various profiles.

Despite significant efforts to gather many respondents, only 85 employed or freelance journalists fully completed the questionnaire. Therefore, the responses should not be viewed as a representative reflection of the entire Danish journalism community, as the number of responses is too low compared to the 18,000 members of the Union of Journalists.

The 85 responses generally align well with the knowledge gathered from the interviews conducted. However, the survey responses reflect a slightly more critical and concerned perspective on how AI will impact employees and workplaces. This may suggest that the journalists who responded to the survey are more inclined to worry and maintain a critical view of the consequences of AI implementation. Alternatively, it could be that the individuals we interviewed belong to a particularly positive segment or that they found it inappropriate to express very negative opinions during the interviews. However, the latter does not align with the interviewers' impressions.

About the respondents

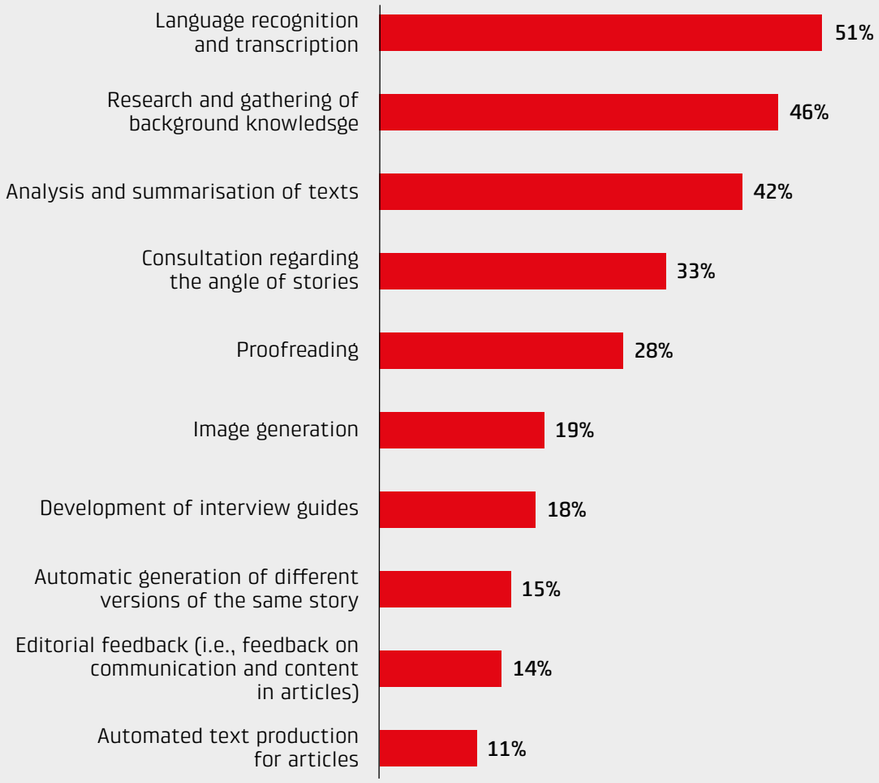
- 62% male and 38% female
- 87% are permanently employed
- 68% are aged 45 to 64
- 63% work in print or online media
- 68% work in companies with 50+ employees
- 25% use AI on a daily basis
- 51% use AI on a weekly basis
- 11% never use AI

What is generative AI used for?

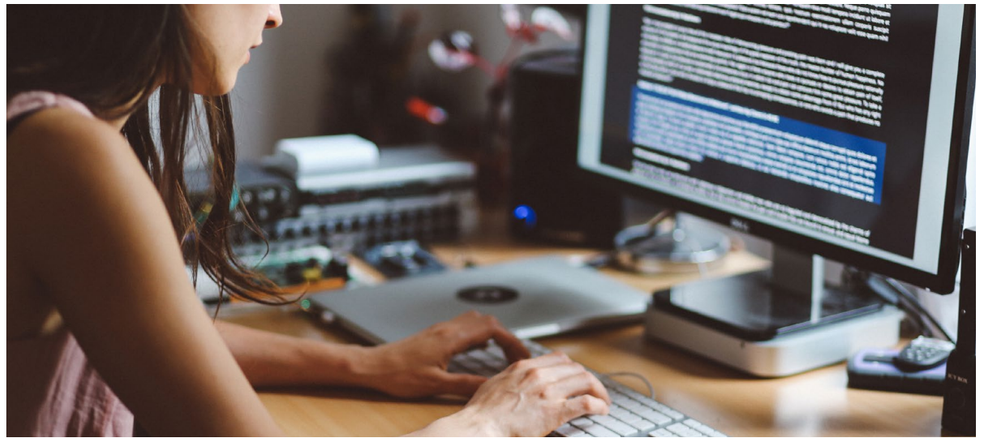
Respondents were asked about their use of generative AI. The responses indicated that AI was mainly used for speech recognition and transcription (51%), research and background information gathering (46%), analysis and summarisation (42%), brainstorming story angles (33%), and proofreading (28%) – see also Figure 2 below.

- 54 % of respondents found that the tasks AI takes over are, to a high or moderate degree, tasks they would prefer to avoid. Conversely, 28% responded that AI, to a high or moderate degree, took over tasks they enjoyed doing themselves.
- 24% of the journalists surveyed stated that they only to a low or very low degree have sufficient skills to use and benefit from generative AI tools in their work.

Figure 2. Top 10 tasks that surveyed journalists address using generative AI



n=85. Data gathered by DTI, October-December 2024.
Question: Which tasks have you used generative AI tools for in the past month?

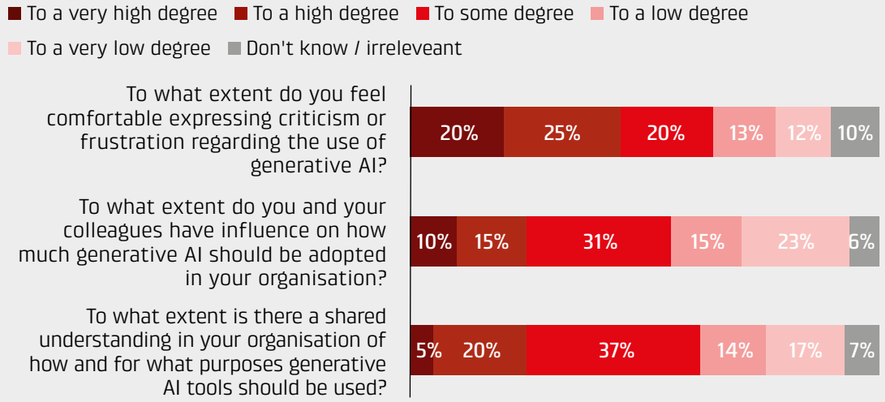


How do journalists view the introduction of AI in their workplaces?

31% of respondents believed there was a low or very low degree of shared understanding in their workplace regarding how and for what AI can be used.

38% felt they had no influence over the extent of AI implementation in their workplace. 65% stated that they felt comfortable expressing criticism about the use of AI, indicating they were willing to voice any concerns they had about AI and the perceived lack of a shared understanding of its applications and purpose. These results are illustrated in greater detail in Figure 3.

Figure 3. Workplace handling of AI implementation



n=85. Data gathered by DTI, October-December 2024.

How do journalists perceive being influenced by AI?

56% of respondents assessed that it was positive that they could complete their work tasks faster using AI, while 29% believed that their efficiency was unchanged. The distribution was almost the same regarding whether AI influenced the quality of their work. Here, 52% stated that the quality of their work had improved, while 30% replied that quality was not affected. Moreover, 38% believed that the introduction of AI had significantly or somewhat increased their job satisfaction, while 11% thought that AI had somewhat or significantly reduced their job satisfaction. Additionally, 42% assessed that AI did not affect their job satisfaction (see Figure 4).

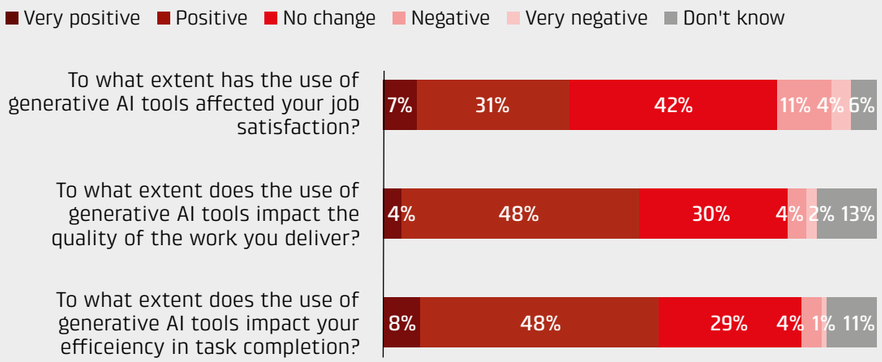
In relation to mental well-being, the above information is crucial. Nearly two out of five journalists believe that their job satisfaction has increased after the introduction of AI, which is likely because AI often takes on tasks they prefer to avoid, such as transcription.

The majority of respondents (65%) felt that the pace of work was not influenced by the use of AI in the workplace, whereas 21% thought that the pace of work had increased. Meanwhile, 71% indicated that AI did not change their ability to organise their work, and 74% noted that AI did not affect their stress levels.

The 10 respondents who reported experiencing heightened stress levels due to the introduction of generative AI solutions were asked a follow-up question about the factors influencing their experience of stress. The most important themes were concerns about the quality of the content produced by AI, ethical issues (e.g., algorithmic bias and lack of transparency), and worries about job security due to the increasing use of AI.

Finally, respondents were asked about their expectations regarding other effects of AI on their working lives. This was formulated as an open question, allowing respondents to express their thoughts freely, and 33 people answered this question.

Figure 4. The impact of AI on the work of journalists



n=85. Data gathered by DTI, October-December 2024.

A central concern among the respondents was that the intense focus on productivity gains might lead to a decline in the quality of content, which could potentially undermine the credibility of the media in a digital age marked by misinformation. Some respondents argued that the media should prioritise human authenticity to remain relevant.

The responses acknowledge that economic pressures may force the media to make short-term decisions, potentially weakening democratic debate. A sceptical and concerned respondent expressed the following in the comments section:

> *"I believe the corporation has an entirely naïve (or cynical economic) approach to AI usage, as we are told that we can feed all articles into ChatGPT within our closed system. The tech giants will exploit this, and ultimately, they will skim the profits while we end up unemployed. Management also has a declared goal of reducing staff (lower wage costs), so in that regard, it makes sense that they are asking us to dig our own graves."*

Some respondents experienced considerable internal resistance in the workplace toward using AI, which could create a divide between employees who use AI and those who do not.

> *"To me, the use of AI at work is multifaceted: At my workplace, we are prohibited from using AI in our tasks. This results in 1) us being unprepared for future jobs, and 2) us working more slowly than our competitors. Conversely, people use it anyway because it is readily available. This leads management to believe that some individuals can produce articles extraordinarily quickly, thanks to AI assistance. Consequently, this places greater demands on those who do not use it. Now, individuals are expected to complete tasks that an AI could handle without the benefit of AI tools. This inevitably induces stress.*

> *The reason we are not allowed to use AI is (as far as I can see) that management cannot be bothered to familiarise themselves with regulations, security, copyright, etc."*

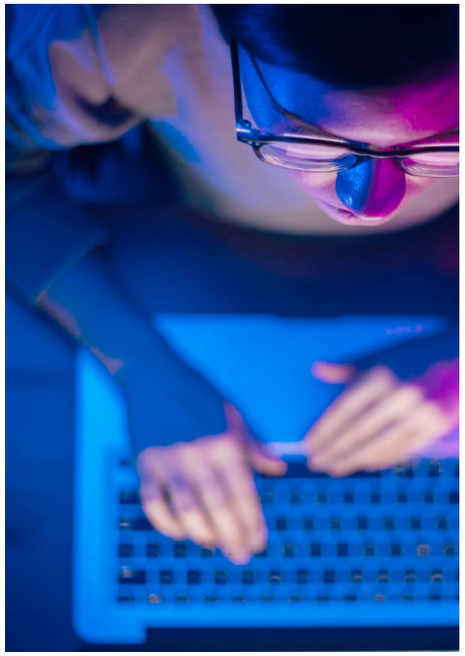
Some respondents believed that AI could lead to stress due to management's unrealistic expectations of employees' productivity. Others assessed that AI's potential impact on the quality of journalism was problematic, as management was often suspected of perceiving AI as a cost-effective substitute for human work. This could result in lower journalistic quality and, ultimately, a loss of readership.

However, there was also recognition of AI's potential as a tool to handle routine tasks, enhance data processing, and enable better segmentation of content for different target audiences. AI was seen as a method to free up time for more creative and meaningful work. Some also pointed out that the use of AI could reduce human interaction and collaboration in the workplace.

Lastly, concerns were expressed that AI, despite management signalling otherwise, could result in staff reductions.

AI in freelance work

Freelancers are regarded as a distinct category in this report. This is partly due to the fact that the field of journalism is characterised by a high degree of freelance work, and partly because freelancers' generally more precarious working conditions may mean that AI impacts their well-being differently compared to permanently employed journalists. Freelancers may view AI as a greater threat since they are often the first to be laid off during periods of reduced demand for journalistic work. On the other hand, it may be easier for them to adapt to AI, as their self-employed status affords them greater flexibility to decide when and how to utilise the technology without relying on management decisions or an implementation process in a larger company.



We interviewed 11 freelance journalists and the chairperson of the Danish Union of Journalists' freelance group to gain insight into how extensively freelancers use AI and how it affects their work and well-being.

Like other journalists, freelance journalists vary in their use of AI in daily work. Many reported using AI only a few times a month. However, during interviews, several freelancers were surprised by how much they actually used AI when reflecting on their practices. This suggests that AI is gradually becoming a regular tool in the freelancer toolbox, as they do not always actively consider its use each time.

For those who did not use AI, the primary reasons were scepticism about the quality of AI-generated content, copyright concerns, and professional pride.

Use of AI

The free version of ChatGPT is primarily being used, although a few freelancers also use other AI services for transcribing interviews or generating images. When they used AI, it was particularly effective in the early phases of a process, where information needed to be gathered, or as a sparring partner and aid for brainstorming. The latter was perhaps especially relevant for freelancers, who often work alone. One interviewee noted that freelancers may lack colleagues to brainstorm with and that AI can serve as a substitute.

Some utilised AI to translate or adapt content more quickly, both to and from English, and from one platform to another, such as from a website to a company's social media profile. Others employed AI to diversify their writing style. One interviewee emphasised that every individual has a unique writing style and that it can be advantageous for "engagement" if social media posts sound distinct. In such instances, AI could be applied to generate various iterations of an original post. None of the interviewees reported using AI to produce the final product.

Well-being and working conditions

None of the interviewees had yet experienced a change in demand for their work due to AI, nor had their task execution been significantly affected.

The general trend in freelancer interviews was that AI had a small positive impact on their work and no effect on their well-being. However, several expressed concerns about the long-term consequences that AI might bring. One individual reported that she had initially been "afraid", but that it seemed somewhat "overblown. " Thus, while AI does not appear to be a significant factor in well-being, the technology can still create uncertainty among some freelance journalists.

One respondent explained this apparent paradox – namely, that it can feel shameful to admit that one experiences stress, feels unwell, or fears the consequences of new technology. The individuals we interviewed who were the most concerned were, however, very open about it.

The respondents' perception that AI does not affect them much is likely linked to the fact that most of the freelance journalists surveyed, as previously mentioned, have not yet used AI on a daily or weekly basis. This explains why the technology does not play a major role in their daily lives.

One respondent highlighted the possibility of branding oneself as someone who does not use AI. For this individual, avoiding AI offered branding potential, which may be easier for a freelancer than for a journalist who must follow a company's AI guidelines.

Depending on the type of content the freelancer produces, there can be differences in whether AI is useful and in demand by the client. In our interviews, one freelancer believed that AI created duller and more uniform journalism, while another, who worked with social media, thought that AI could make posts more creative and diverse.

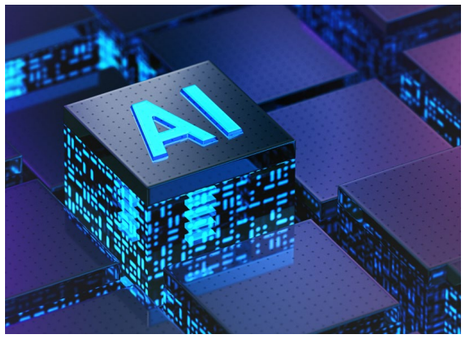
Overall, freelancers have greater freedom to choose whether to use AI, which means that the technology, in principle, has a more positive impact on their mental well-being, as no one is forced to use it against their will. In terms of the technology's potential for efficiency and quality improvement, freelancers were entirely aligned with other journalists in both optimism and scepticism. For freelancers, however, there was slightly more uncertainty associated with the introduction of AI in the profession as a whole, as they are particularly vulnerable if media companies choose to reduce the number of journalists they hire due to a more efficient use of AI. Nevertheless, this concern was not widespread among the freelance journalists interviewed, who still believed that the human journalist remains a central part of most journalistic products.

Conclusion

When considering findings from the literature review, case studies, freelance interviews, and surveys among journalists, it becomes clear that the Danish media industry in 2024 was still orienting itself in terms of what AI can and should be used for. A few media companies are advanced in using AI, where journalistic employees are already working with the technology in their daily tasks. In these frontrunner companies, the adoption of AI is very much the result of a management decision to utilise the potential generative AI offers.

The majority of our sources point out that the use of generative AI in journalism has the potential to enhance journalists' job satisfaction and mental well-being by reducing monotonous tasks and freeing up time for more creative and meaningful work. AI can act as an effective partner in routine tasks such as transcribing, idea development, and research.

Our study shows that AI has the potential to revolutionise journalism by streamlining workflows and enabling journalists to focus on more in-depth and investigative work. At the same time, the analysis highlights that implementing AI also brings challenges, particularly concerns that AI will lead to less job security. Journalists at companies that have not yet fully adopted AI technology express worries about falling behind due to a lack of skills in utilising AI. Additionally, there is a shared belief that AI will ultimately result in increased productivity pressures, even though this has not yet occurred. This sentiment persists despite company leaders participating in the study unanimously emphasising that AI should not be used to generate more output but to enhance the quality of journalism.



Journalists' well-being and job security depend on guidelines established by management, access to sufficient training, and a balanced approach to AI implementation. It is essential that AI is deployed responsibly and strategically, fostering transparency and ongoing dialogue between management and employees. This can ensure that AI becomes a resource that strengthens the work environment rather than creates insecurity and stress.

Finally, there is a need for an ongoing debate about how AI might affect the quality and credibility of content presented to media consumers. Particularly, journalists with limited or no experience with AI express concerns that AI-generated material will increase the risk of fake news and lead to a production characterised by high quantity but low quality. In this context, it is important to discuss the journalists' role as guarantors of the products delivered. AI should not replace journalists' expertise and human judgment but instead serve as a tool that supports and enhances journalism.

A successful integration of AI in the media industry requires that, alongside the introduction of AI, attention is given to journalists' well-being and the integrity of journalism. By focusing on upskilling, ethical considerations, and open dialogue, the media industry can effectively navigate the complex AI landscape and harness the potential of this technology to enhance journalism in the future.

Notes

[1] Adapted from McKinsey, 2024. What is AI (artificial intelligence)?

[2] Danish Technological Institute & Pressens Uddannelsesfond, 2024. AI-kompetencer i medie- og kommunikationsbranchen, p. 16.

[3] DalBen & Jurno, 2021. More than code: The complex network that involves journalism production in five Brazilian robot initiatives; Gutiérrez-Caneda et al,. 2023. AI application in journalism: ChatGPT and the uses and risks of an emergent technology; Seyfodin & Tabrizi, 2024. Effects of Artificial Intelligence on the Future of Journalism

[4] Tang, C, 2023. An Analysis of the Impact of AI from the News Practitioners' Perspective: Opportunities and Challenges. Lecture Notes in Education Psychology and Public Media, 28,166-171.

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