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THE IMPACT OF AI ON WORK IN THE CREATIVE AND CULTURAL INDUSTRIES

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Purpose: The paper addresses the research gap in studies on generative AI and work in the Cultural and Creative Industries (CCI) by proposing an integrated model of AI-driven substitution, augmentation and resilience in creative labour markets. It aims to analyse the vulnerability of CCI occupations to AI, stratify them into three subsectors (zones) and explain how AI reshapes employability, unemployment risk, and the qualitative features of creative work, including AI-infected creative precarity and the "humanity bonus".
Design/methodology/approach: The paper is a theoretical study developing the CCI AI Vulnerability Model. It operationalises three main risk determinants – occupational exposure to AI (replacement–augmentation–resilience), the emotional and authentic value of work for clients, and regulatory barriers – and assigns selected CCI occupations to vulnerability zones.
Findings: The model shows an impact of AI on CCI labour markets: a zone of high substitution (e.g. translators, stock illustrators or voice-over artists); a zone of transformation and augmentation (e.g. journalists or architects) where AI automates technical tasks and compresses junior roles; and a zone of resilience (e.g. star actors, fine artists or creative directors) where authenticity, biography and leadership protect labour demand. AI intensifies creative precarity through invisibilised labour, the erosion of authorship, the "junior trap" in entry-level positions, and certain psychological effects. The identified humanity bonus shows that consumers are willing to pay more for clearly human‑made works.
Research limitations/implications: The model is based on current evidence, so its long-term validity is uncertain due to rapid technological change and evolving regulations. Future research should longitudinally measure creative precarity and the size of the humanity bonus across CCIs.
Practical implications: The paper proposes several measures, including copyright protection, mandatory "Human-Made" labelling, and the design of retraining programmes.
Social implications: The findings suggest that generative AI may deepen social and economic inequalities within CCI, but that recognising the humanity bonus through transparency and labelling could help preserve human agency, diversity and trust in creative production.
Originality/value: The paper introduces a novel three-zone CCI AI Vulnerability Model that integrates substitution, augmentation and resilience mechanisms with the concepts of invisibilised labour, creative precarity and the humanity bonus.
Keywords: generative artificial intelligence; creative precarity; Cultural and Creative Industries; labour market polarisation; humanity bonus.
Category of the paper: research paper; conceptual paper.

1. Introduction – research gap, aim and problems

Labour market transformations in the Cultural and Creative Industries (CCI) under generative AI mark a fundamental shift in how creative value is produced and rewarded. Though earlier automation in CCI mainly affected routine waves, manual, and cognitive tasks, generative AI directly challenges the creative core of artistic professions. The literature reveals a research gap addressed in this paper: existing studies tend to focus either on aggregate employment statistics or individual case analyses, lacking an integrated model that captures substitution, augmentation, and resilience dynamics within the creative labour market.

The paper's primary objective is to assess the CCI sector's vulnerability to AI by identifying how AI influences work through automation, augmentation, and resilience mechanisms, and by categorising the sector into three subsectors. Granted, the CCI Sector AI Vulnerability Model was developed to account for employability, unemployment risks, and qualitative shifts in the nature of creative work.

The following research questions were formulated:

Q1: Is the AI's impact on labour demand in CCI polarised or equally distributed?

Q2: What is the role of invisibilised labour in mechanisms of AI-driven labour market degradation?

Q3: To what extent is the origin of the creative products (human-made vs AI-made) important for consumers and, consequently, impacts the labour demand?

2. Theoretical framework

For decades, creative labour has been perceived as largely unproductive (especially in the performing arts, following Baumol's cost disease), creative – where creativity is celebrated as the core of production and human capital – and precarious, marked by weak social protection, poor work–life balance, and job insecurity. The notion of modern, AI-infused creative precarity reframes occupational risk as the erosion of creativity's monopoly, once shielding artists from automation. AI demonstrates how easily technology can emulate creative processes, potentially devaluing labour by showing that creative output can be produced without human labour. This framework challenges traditional human capital theory by positioning AI as a competitor rather than merely a tool (Lee, 2024).

According to the OECD, generative AI possesses the defining traits of a general-purpose technology – pervasiveness, continuous improvement, and the potential to spawn innovation (Calvino et al., 2025). Its influence extends to creative sectors, from skill augmentation to full automation. The shift from human–AI collaboration to substitution is becoming visible,

particularly in entry-level roles, as AI's capacity to replicate stylistic elements disrupts traditional apprenticeship models (Erickson, 2024).

Exposure to AI-driven automation varies across industries and professions but remains widespread. ILO research finds that one in four workers worldwide are in occupations with some degree of exposure to generative AI (Gmyrek et al., 2025). Earlier studies revealed that "clerical support workers" face the highest risk, with 24% of tasks highly and 58% moderately exposed, followed by "technicians", "professionals", "service and sales workers", and "managers". Certain CCI professions – such as programmers, librarians, authors, web and multimedia developers, software engineers, and translators – are likewise vulnerable (Gmyrek et al., 2023; 2025). Moreover, microdata from 59 countries highlight gendered risk patterns: female-dominated, even high-income, professions are more susceptible to automation (Gmyrek et al., 2023). OECD data estimate that high-risk occupations account for about 27% of employment (OECD, 2023), noting that while AI-related job losses remain limited, freelance wages – common in CCI – face mounting pressure from AI-driven cost reductions.

3. Methodology

This article is theoretical and systematising in nature. Its goal is to create a CCI Sector AI Vulnerability Model and prepare an up-to-date list of selected CCI occupations classified according to this model. A review of the latest literature and international reports was used to prepare an analytical model. An analysis of the main risk determinants was implemented. These determinants include occupational exposure to AI (according to the axis: replacement – augmentation (or transformation) – resilience), the emotional and authentic value of work for the client, and regulatory and protective barriers. Creative occupations were assigned to three risk zones based on these main dimensions.

4. Results: The three-zone vulnerability model

4.1. The Red Zone – high replacement risk

AI image generators can replace stock photo banks and handle entry-level graphic design projects, such as logos, game backgrounds, and storyboards. According to the Society of Authors (2024), a quarter of illustrators and over a third of translators have already lost work due to generative AI. 8% of translators and every twentieth of illustrators said they have used generative AI in their work because their publisher or commissioning organisation asked them to. Today, the post-editing machine translation (PEMT) has become the new standard.

The only task for a human (post-editor) is to verify and correct the text being prepared by the LLM. Besides, AI is widely used to generate subtitles and dubbing. Translators and adaptors for dubbing and subtitling will be strongly affected, with 56% of their revenue at risk by 2028 (CISAC, 2024). That is why the role of translators must shift from translation to cultural auditing.

The next areas at risk of mass replacement by AI are mass-market voice actors and library music composers (who create production music specifically designed for licensing in television, film, advertising, and other media projects). Voice cloning and text-to-speech (TTS) have been commonly used in advertisements, e-learning, and video games. There is a growing risk of biometric identity theft. That is why work remains only for top voices with legal protection, and "long-tail voice actors" face critical vulnerability. (Sharma et al., 2025). The conclusion is that market inequality increases, and middle-tier voice actors will disappear. As regards library music, AI generates unlimited tracks in any given style without licensing fees, posing a critical threat to independent composers. CISAC studies (2024) show that AI will strongly impact the streaming and music library markets. By 2028, Gen AI music is projected to account for approximately 20% of traditional music streaming platforms' revenues and around 60% of music libraries' revenues.

4.2. The Red Zone – summary

The CCI areas, here called the Red Zone, are highly susceptible to AI's impact. Modern algorithms deliver a "good enough" product at a drastically lower cost and significantly shorter "creative" time. Demand for human labour is shrinking to a niche or, at most, a supervisory role. This will result in a significant (estimated at over 20 per cent) decline in revenues for creators and music and audiovisual professionals over the next 2-3 years. Table 1 presents selected groups of creative professions, the mechanisms for automating their tasks, and the consequences for the labour market in each subsector.

Table 1.
The Red Zone – CCI jobs at high risk of automation and diminishing labour demand

Jobs	Substitution mechanism	Consequences
Commercial and audiovisual translators	Automation of the preparation of subtitles for films, technical translations and manuals.	Drastic decline in labour demand. The correction function will remain.
Stock and commercial illustrators	Image generators replace purchases from photo banks and simple graphic orders.	A significant decline in demand for work. The mass-produced graphics market will disappear, leaving only recognised, legally protected creators.
Voice-over artists for the mass market	Voice cloning and speech synthesis will dominate the markets for audiobooks, advertising, e-learning, and NPCs (non-playable characters) in games.	A significant decline in demand for work. The market for mass-market voiceover artists will disappear, leaving only recognised, legally protected creators.

Cont. table 1.

Library music creators	AI generates songs in a given style without licensing fees	Drastic decline in labour demand and income.
Copywriters (SEO content)	Generating mass marketing texts, product descriptions, and social media posts	A significant drop in demand. An experienced editor oversees content previously generated by a team of people.

Source: own elaboration.

4.3. The Yellow Zone – work transformation and augmentation

To the hybrid, Yellow Zone of the model, professions such as sound engineers and video editors, journalists, copywriters, screenwriters and authors, architects and interior designers can be assigned.

Implementing AI in video production radically optimises creative processes, shortening project timelines from weeks to hours. A notable example is the AI modules in DaVinci Resolve, which automate colour grading through intelligent scene analysis, reducing the editor's workload by more than half (Gavran et al., 2025). In sound engineering, AI accelerates noise reduction, preliminary mixing, and footage sorting, boosting productivity while shrinking technical teams. In "yellow" jobs, technical tasks give way to artistic decisions, creating new competency requirements.

Another Yellow Zone field is journalism and copywriting. AI is widely used for data analysis and drafting news content, streamlining repetitive tasks such as transcription, translation, and archival research. It also helps journalists expand their reach across languages and formats (Dodds et al., 2025). These advances, however, raise concerns about declining demand in junior positions, even as investigative journalism gains value. Similarly, Hollywood writers fear replacement as AI can analyse scripts, comedic patterns, and audience responses to generate engaging narratives. Industry unions mitigate this threat by providing safeguards (BBC News, 2023). Thus, journalism faces polarisation: basic content is easily replaced, while demand for insightful opinions and sound analysis grows.

Screenwriters and authors also belong to the Yellow Zone. AI increasingly supports the creation of episode structures, dialogues, and plots, prompting companies to cut costs by limiting human participation. Entry-level screenwriter positions are particularly threatened. Although film graduates bring storytelling and technical skills, opportunities to apply them are shrinking (League of Filmmakers, 2025). Still, the industry largely agrees that human creativity and logic remain irreplaceable (Cheng, 2024). However, effective legal regulation of AI use in film production is essential to prevent market degradation.

The final Yellow Zone group comprises architects and interior designers. AI generates multiple visualisation options and optimises layouts, revolutionising design by enabling real-time monitoring and process optimisation. By analysing structural behaviour under various conditions, AI helps create safe, efficient, and sustainable buildings while improving material use and system performance. However, architects stress that AI designs lack "soul" and human qualitative value. It cannot translate intuition, especially for unique projects with limited data

(Almaz et al., 2024). Hence, AI should serve only as a “co-pilot”, with humans retaining legal and ethical responsibility. A major challenge for professionals and design education is learning to use these tools effectively.

4.4. The Yellow Zone – summary

The Yellow Zone encompasses CCI areas where AI takes over technical and tedious tasks but cannot deliver final value without a human expert. Demand for labour there is relatively stable, but the skill requirements for creators (the need to operate AI) are increasing. While complete technological unemployment in the Yellow Zone of the CCI sector is unlikely, it is worth being aware of the threat of de-skilling and polarisation, where a narrow elite of "super-creators" manages an army of algorithms, and the middle class of creators is relegated to the role of "AI operators" or proofreaders. Estimates suggest that in the United States alone, over 21% of all film, television, and animation jobs (i.e., 120,000) are likely to be disrupted by generative AI by 2026 (CVL Economics, 2024).

Table 2.
The Yellow Zone – jobs transformation or augmentation via AI

Jobs	The role of AI in the work process	Consequences
Sound engineers and editors	Automation of noise cleaning, material sorting, and pre-mixing	Possible slight decline in demand for labour due to increased productivity of specialists having more time for artistic decisions
Architects and interior designers	Generating visualisation variants, optimising room layouts, and adaptation	Demand for labour is stable. AI is a tool that accelerates the conceptual phase, but legal and construction responsibility remains with humans
Journalists and reporters	AI analyses data, transcribes, and drafts texts	The impact on the professional group is mixed. Increased demand for investigative and opinion-forming journalism
Film and television screenwriters	AI can generate ideas, structure episodes and suggest dialogues for soap operas	The impact is mixed and depends on the strength of industry trade unions

Source: own elaboration.

4.5. The Green Zone – resilience and humanity bonus

The group of professions in the CCI sector that can be considered (at least for a while) immune to the influence of AI are well-known theatrical and film actors, fine arts artists with a personal brand, literary translators for high literature, as well as creative directors and lead designers.

The audience in theatres or cinemas is willing to pay for authentic emotions and to participate in the "star culture". Studies show that live performances evoke stronger emotional and physiological engagement than their recorded counterparts, even under identical viewing conditions. The findings highlight the unique impact of performer-audience interaction and suggest that digital media cannot fully replicate the emotional richness of live experiences (Gabriel, 2025). Cultural economists also point to a greater willingness to pay for live performances. Besides, the value of live contact in the age of digital fakery increases.

This is why AI's impact on entertainment jobs shows acting as relatively protected, while the physical presence of a particular performer is seen as an irreplaceable value.

Fine arts are relatively resistant to AI because their value is derived mainly from the creator's biography and physical execution. The collector art market relies primarily on human authorship, and the monopoly and value come from the biographical authenticity. Until now, AI as "the author" has been treated as a curiosity (Horton et al., 2023). Despite this, two-thirds of fiction writers and 57% of non-fiction writers believe that generative AI will negatively impact future income from their creative work (Society of Authors, 2024).

Literary translators for high literature also appear to remain resistant to AI. In that kind of work, there is a need to interpret cultural nuances, humour, idioms, and archaisms. The AI's translation mechanisms remain weak, and it cannot handle deep literary semantics (Belhassem et al., 2025). This is why the niche seems to be stable.

High‑level creative leadership roles – such as creative directors and lead designers – continue to focus on distinctly human abilities: articulating a vision, managing complex multidisciplinary teams, and assuming ethical and artistic responsibility for outcomes. Current AI systems can produce options and streamline workflows, but they lack genuine creative intention, moral agency, and the ability to lead people. Therefore, they are unlikely to replace human creative leaders in the foreseeable future (Anantrasirichai, Bull, 2022).

4.6. The Green Zone – summary

The Green Zone encompasses CCI subsectors that rely on unique human expression, physical presence, empathy, and name recognition. AI is not a substitute for humans in this labour market, and its use as a tool is also limited.

Table 3.
The Green Zone – CCI jobs resilience against AI

Jobs	Protection mechanism	Consequences
Theatre and film actors with leading roles	Personal brand, "celebrity", authentic emotions, physical presence on stage	There may even be an increase in demand, and face-to-face contact with a real person will be perceived as a luxury
Directors and creative directors	The need to manage complex teams of people and make artistic and ethical decisions. AI lacks leadership skills	Stable demand
Fine arts artists	The value of a work stems from the charisma and story of its creator. Context and physical, personal execution are important	Stable demand
Translators of fiction	The need to interpret and find cultural analogies, humour, archaisms, regionalisms	Demand is stable, although niche

Source: own elaboration.

5. Discussion: Invisibilised labour vs humanity bonus

5.1. Invisibilised labour as the source of creative precarity

The mechanism of "invisibilized labour" explains how AI degrades work quality without causing immediate unemployment. As Erickson (2024) notes, in creative SMEs, AI implementation may even increase total labour hours, yet shifts work from creative authorship to technical data cleaning and output refinement. Sometimes this human effort is intentionally hidden from clients and staff to preserve the "magic of AI technology" narrative. Notably, similar issues emerged earlier during the digitisation of work, before the rise of artificial intelligence (Justesen, Plesner, 2024).

Psychological effects of AI in CCIs include a loss of agency, alienation from work, and burnout, even amid greater productivity. Hye-Kyung Lee (2024) calls this phenomenon "creative precarity." Generative AI enables automation and higher productivity but also causes job losses, an unequal distribution of gains, changed creative roles, reduced control over copyright, and a deeper disconnection between creative identity and cultural labour. It also heightens uncertainty about audience responses. Moreover, generative AI's growing creative capacity may further marginalise human labour and accelerate its assimilation into capital, reinforcing creative precarity in the sector.

On the macroeconomic level, AI may slow employment growth rather than trigger job losses. This occurs when firms reduce junior recruitment, creating a "junior trap" as entry-level positions vanish. Research by the ECB (Albanesi et al., 2025) suggests that new technologies mainly slow employment growth in creative sectors and concentrate human capital at the upper skill levels, without immediate job destruction.

5.2. Humanity bonus as a market defence mechanism

Evidence shows that consumers are willing to pay markedly less for AI-labelled works, even when they are visually identical to human-made works. This willingness-to-pay gap represents a measurable "humanity bonus". Yet when audiences are unaware of a work's origin, they prefer AI-created works nearly half the time (Hall, Schofield, 2025).

A new phenomenon – moral evaluation of art – has also emerged. Awareness of AI authorship reduces empathy and appreciation for the creator's effort, transforming artworks into utilitarian products. Granted, human authorship functions as a market premium: works marked "AI-made" receive lower aesthetic and moral ratings than identical pieces labelled "human-made" (Horton et al., 2023; Bara et al., 2025).

These findings carry policy implications. The humanity bonus indicates that mandatory labelling of AI-generated content could help safeguard human creators.

6. Conclusions, recommendations and limitations

The three-zone model illustrates that AI's impact on CCI labour markets is deeply polarising. Craft-based creative work is vanishing, and the gap between creators who effectively use AI and those who do not is widening. The Red Zone faces substantial AI-human substitution; the Yellow Zone undergoes a competency transformation; and the Green Zone retains labour demand through an authenticity premium, as certified Human-Made content gains value amid the flood of AI-generated works. Yet across all zones, the overarching threat remains creative precarity – the erosion of work quality and professional identity.

Several policy recommendations arise from this model. First, copyright protection should extend to artistic style and voice to prevent AI training without creator consent; otherwise, the sector risks economic degradation, reduced to a data source for AI systems. Second, mandatory labelling or "watermarking" should implement a "Human-Made" certification to capture the humanity bonus. Third, the CCI requires large-scale reskilling, with funding focused on AI management and cultural auditing rather than purely technical skills. Finally, artist and creator unions must strengthen collective bargaining to protect against AI-driven invisible labour exploitation. Artists' and creators' unions should focus more on cataloguing the threats of copyright infringement to recommend to legislators laws that adequately address the social risks faced by creators. Laws currently lag behind technological advancements, but if enacted alongside a community that can identify and name threats, they can minimise the negative consequences of the progress being observed.

The three-zone AI-vulnerability model is based on current data on AI capabilities and skills. However, given the rapid pace of technological change, long-term effects on CCI labour markets remain uncertain. Future research should monitor the evolution of creative precarity and measure the humanity bonus across cultural sectors, while continuously examining how regulatory frameworks interact with technological development.

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