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The AI Revolution: Understanding the Threat to Job Security in the Art Industry

Technology has created a new era in the modern world. Various types of technologies such as computer programs and artificial intelligence (AI) are being widely used in different industries. The technologies are replacing human beings in the performance of various tasks. According to Guo et al., AI will replace various human jobs since it is suited to take over routine tasks (32). As AI’s capabilities become more advanced and its adoption in different industries increases, there is increasing concern that it could lead to job losses in the creative industry, such as writing and art. OpenAI’s chatbot, ChatGPT, and Google’s, Bard, are examples of writing bots having a significant impact on the creative industry due to their abilities to perform tasks such as writing poems, impersonate individuals’ style of speech, and explain complex concepts (Hurst). Accordingly, they have the ability to learn faster compared to human beings and are more skilled at solving problems. As artificial intelligence continues to advance and be adopted, the art industry faces a significant threat of job displacement, requiring individuals in the sector to develop new skills to adapt to the technological changes.

**What is Artificial Intelligence?**

Artificial intelligence refers to a computer program that operates in a manner similar to the human brain and is inspired by the brain’s natural neural network (“Artificial Intelligence”). The purpose of these artificial neural networks is to perform cognitive functions such as problem solving and machine learning. They are playing a significant role in modern industries due to their ability to perform complicated tasks that usually require human intelligence, for example, speech recognition, visual perception, decision-making, and language translation (McGrow 48). Some of the technologies that enable AI to perform these tasks are machine learning, neural networks, and algorithms. Machine learning describes computer systems that can learn and adapt without the need for human instructions because they have algorithms and statistical models that generate inferences after examining data patterns, while neural networks are computer systems modeled to resemble the human brain when processing information (Chen). Algorithms are sets of rules that computers follow when calculating or solving problems by taking input, performing operations, and producing outputs (Guo 30). Therefore, AI comprises various types of technologies that enable its functionality and reduces the need for human interference.

In recent years, AI has become more interactive, allowing its adoption in the art industry. The creation of art through AI has reduced the need for human input into the process. By performing cognitive functions and solving design problems, AI can generate art that includes pictures, blueprints, and videos. The outputs are obtained by studying a considerable number of images (often more than 1000 pictures) and copying information such as the nature of lines of drawing in artwork that are used to train models and produce new art pieces (Heikkila). The learning allows technologies that depend on AI to achieve a higher level of accuracy although some risks are associated with the technology. For example, the use of blurry or cropped pictures to train machines can result in AI struggling to produce accurate images (Heaven). Furthermore, AI cannot think on its own, meaning it is not completely sentient and may not be able to distinguish what items are important and could fail to recognize certain images. Such issues indicate problems that could affect the effort to replace human beings with artificial intelligence in industries such as the arts.

**Impact of Artificial Intelligence on the Art Industry**

Artificial intelligence is causing disruptions in the art industry by offering advancements that threaten to replace human beings. As was mentioned earlier, AI has the ability to learn faster than human beings and is more skilled at solving problems. ChatGPT and Bard are some examples of AI-powered technologies that have a significant impact on the industry (Browne). They are taking over certain jobs such as writing poems and creating websites by allowing users to enter instructions that define the desired output (Hurst). AI-powered technologies use these instructions and produce content suited to the user’s needs, reducing the struggle in areas such as internet writing and image creation. They can produce the content faster and at a lower cost, reducing the need for human input in the process. Accordingly, they threaten jobs in the art industry through the automation of tasks that were previously done by humans.

Furthermore, the art industry is increasingly using AI to generate ideas and designs, which are valuable in areas such as art curation. The use of AI in this way has a significant impact on employment in the art industry because it allows more people who have ideas to visualize things that needed significant art experience, reducing the need to hire highly-skilled artists (Salkowitz). Moreover, AI-generated art and design is viewed as less valuable compared to art created by humans, and it increases the potential for a decrease in demand for art and designs (Graham). People who purchase art often buy it because it is original, meaning an artist worked to create an original piece, but the use of artificial intelligence hinders this capability. Computers cannot create an original artwork because their ideas are based on learning by examining previous works (Guo 28). Therefore, they produce what the user tells them to do using information obtained from other sources. AI presents solutions based on the study of a problem, and it makes it difficult for the technology to handle novel problems. The problems can result in declining demand for artwork, and it could result in a reduction in the number of jobs available in the art industry, particularly for individuals who specialize in creating or curating non-digital art forms.

Besides, the use of AI may lead to a shift in the skills people need to succeed in the art industry. As AI-generated art becomes more prevalent, the industry is likely to experience a shift in the type of skills required. In this case, the art industry experiences a higher demand for people who are skilled in machine learning, neural networks, and algorithms (the technologies that power AI) (Baio). They can apply these skills to create and curate artwork, and the outcome is a loss of jobs for the people who lack these skills. They are likely to be at a disadvantage because they no longer have the skills the industry needs because AI can perform traditional tasks, such as design, photography, and illustration (Salkowitz). The problem results in higher unemployment in the art industry as individuals who performed these tasks are no longer needed. Therefore, AI brings numerous benefits to the art industry, but it poses a risk to employment and job security, especially for those who lack the skills to adapt to the changing landscape.

Some experts have argued that the art industry is unlikely to experience challenges due to the advancement of AI due to the creativity needed to produce various pieces (Flynn). However, evidence shows that the industry is experiencing job disruptions because AI tools have shown the ability to do specific creative tasks better and faster compared to humans. For example, DALL-E from OpenAI gives uses images, meaning they can request pictures such as a cat planning on smartphone in an airplane, and the technology will give this image within seconds (Agrawal). The advances in AI present a problem for people who performed drawing tasks since the technology can replace them. Greg Rutkowski demonstrates how AI threatens artists by using the style of classical paintings to develop fantasy landscapes that have been incorporated into various products such as games for Sony (Heikkila). The use of AI to generate images that are included in products puts at risk the jobs of designers and illustrators who performed these tasks. Therefore, it highlights how artificial intelligence undermines job security in the art industry.

Furthermore, the advancement of AI means that the technology is capable of performing tasks that were formerly only possible for human workers. Some of the tasks that AI can perform include image and video editing, art creation, and music composition (Foster 33). Accordingly, traditional job responsibilities, for example, photographers and illustrators are facing the risk of automation of their roles, and it can lead to their displacement (Salkowitz). The challenge results in artists and other workers experiencing difficulties finding employment opportunities. Therefore, the automation of creative tasks is a problem that threatens job security in the art industry. The development of new art forms, such as algorithmic art and generative art indicates that the problem will continue to increase. As was mentioned earlier, the art industry has seen the rise of artists such as Greg Rutkowski who use AI to develop art based on classical paintings (Heaven). The development erodes traditional job roles in the industry, for example, sculptors and painters, as AI-generated art becomes more acceptable. The issue threatens jobs in the art industry since these individuals are no longer needed.

**Overcoming the Risk of Job Displacement by Artificial Intelligence**

Despite the risk of job displacement due to the adoption of AI in the art industry, individuals can adapt by developing new skills. Some of the skills they should focus on growing are creativity, adaptability, and technical skills to give their pieces authenticity, ensure they achieve innovation and originality, and give their works an element of personal branding and storytelling (Zhou 28). Although AI can generate art, it lacks the creative intuition and aesthetic capabilities of human artists (Baio). Accordingly, developing creative skills to generate original ideas can help workers to differentiate themselves and their work from AI-generated content. It increases the value of their work and reduces the problem of being displaced by artificial intelligence. Besides, adaptability is an essential skill that individuals working in the industry must develop. They can adapt to the new changes by increasing their knowledge of design principles to increase their creativity and capacity to develop original ideas, and it will support their ability to remain relevant in the industry. Finally, proficiency in software and tools that are in common use in the art industry, for example, Zbrush, Unity, Maya, and Adobe Creative Suite can help workers to automate tasks and work more efficiently, improving and increasing their output (Vaughan 57). Accordingly, they remain relevant in the art industry overcoming the risk of job displacement due to the adoption of AI.

Besides, people can avoid the risk of job displacement by AI in the art industry by embracing the technology as a tool for collaboration and developing skills to ensure the effectiveness of the collaboration. The goal is to explore the potential of AI to augment the creative process. For example, they can use AI to obtain inspiration, generate ideas, or create new artworks, and the collaboration between artists and technology results in the creation of unique artistic outcomes. Generative adversarial networks (GANs) and deep learning algorithms are examples of AI-powered technologies that can assist artists and other professionals in the art industry in the creation of new ideas and for inspiration. According to Foster, GANs are machine learning models that comprise two neural networks: a discriminator and a generator (15). The generator network creates new samples of data, for instance, music, text, and images, and the discriminator assesses the samples to ensure their originality (Foster 22). They work together to ensure AI-powered technologies produce realistic outputs. Therefore, artists can collaborate with the technology by inputting datasets and artwork to train generative adversarial networks or create variations of their work, leading to unique pieces. The collaboration between artists and AI technologies reduces the risk of job displacement.

Finally, individuals in the art industry can reduce the risk of job displacement by artificial intelligence by focusing on replicating uniquely human qualities in their pieces. Although AI can replicate various artistic methods, the technology lacks the capacity to emulate human experiences, emotions, and viewpoints (Baio). Artists should respond by emphasizing and communicating their stories, interpretations, and emotions in their work to provide a human connection that AI cannot replicate. For example, they can employ metaphors and symbolism to convey emotions and ideas. Through metaphors, symbols, and allegories, they develop layers of meaning and invite their audiences to engage with and interpret artwork, and it allows artists to communicate their emotions, experiences, and stories in a manner that engages people (Sanchant et al. 25). Therefore, they can achieve a deeper level of connection with audiences, obtaining a technique that maintains their relevance in the art industry. The focus on replicating human qualities in art pieces ensures that artists remain relevant to the art industry and avoid the risk of job displacement by artificial intelligence.

**Conclusion**

The art industry faces a significant risk of job displacement as it continues to adopt artificial intelligence due to the advancement of artificial intelligence, and it requires individuals in the sector to develop new skills to adapt to these changes. Artificial intelligence is a technology that functions in ways similar to the human brain, and it uses past information to learn and produce new ideas, for example, images, videos, and written content. Accordingly, it is displacing individuals from their roles due to its capacity to perform repetitive tasks. For instance, the art industry is increasingly using AI to generate ideas and designs, which are valuable in areas such as art curation. The use of AI in this way has a significant impact on employment in the art industry because it reduces the need for human beings performing these tasks, replacing individuals such as artists, graphic designers, and video editors. Furthermore, AI has the ability to learn faster than human beings and is more skilled at solving problems. ChatGPT and Bard are some examples of AI-powered technologies that have a significant impact on the industry. They are taking over certain jobs such as writing by allowing users to create content by giving them a set of instructions that define the required output. Such issues indicate the need for workers in the industry to adapt by developing new skills to remain relevant to the industry. Some of the competencies they can focus on growing are creativity, adaptability, and technical skills. By developing these skills, employees improve their relevance to the industry. As an example, creativity helps the generation of original ideas that AI cannot generate. Furthermore, individuals can reduce the risk of job displacement by embracing AI as a collaborative tool for generating ideas and inspiration. Imparting human experiences, stories, and viewpoints through metaphors, symbols, and allegories are techniques that can engage audiences to enable individuals compete with AI in the creation of art pieces. Therefore, these techniques highlight the potential approaches for adapting to the threat of job displacement by AI in the art industry.

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