Journal of Peace, Development and Communication

Article:	**Designing the Future: Exploring AI Adoption Effects on Digital Designers in Pakistan**
Author(s):	Azra Parveen Faculty Media Sciences, SZABIST University, Islamabad
	Amna Zulqarnain Faculty Media Sciences, SZABIST University, Islamabad
	Dr. Wajid Zulqarnain Associate Professor, Head of Department, Media Sciences SZABIST University, Islamabad
Published:	27th June 2024
Publisher Information:	Journal of Peace, Development and Communication (JPDC)
To Cite this Article:	Parveen, A., Zulqarnain, A., & Zulqarnain, W. (2024). Designing the Future: Exploring AI Adoption Effects on Digital Designers in Pakistan. *Journal of Peace, Development and Communication, 08*(02), 377–389. https://doi.org/10.36968/JPDC-V08-I02-28
Author(s) Note:	Azra Parveen is serving at Faculty Media Sciences, SZABIST University, Islamabad
	Amna Zulqarnain is serving at Faculty Media Sciences, SZABIST University, Islamabad
	Dr. Wajid Zulqarnain is serving as an Associate Professor at Head of Department, Media Sciences SZABIST University, Islamabad

ABSTRACT

Modern technology of Artificial Intelligence (AI) has become a revolution in the present age, and it has been taking a fast momentum over the past few years in Pakistan, many industries of the country are using this advanced technology frequently. We can say without any doubt that the workplace is being changed due to this (AI) technology, though it is vital to investigate how and to what degree it is impacting the digital designers of Pakistan. This study aims to provide insight into AI usage in digital design at the present level, encompassing online and graphic design. Furthermore, to investigate how AI is changing the character of the profession from the viewpoints of industry professionals. It can be analyzed how AI in day-to-day tasks and workflows impacts the industry with a focus on the creative process and the creation of digital products. It can also be viewed whether implementing AI has resulted in the creation of new work processes or if traditional jobs are still being completed with AI tools. Is there a qualitative research methodology used? Have the essential data gathered and examined through reviews of the literature and conversations with pertinent designers who are currently employed in the field? The research findings tell us that the society is divided over the use of AI as there does not exist unanimous understanding on the subject. However, a plethora of software and design processes are making effective use of artificial intelligence, irrespective of the design developer's preferences for it. Resultantly, the AI appears to have taken over the digital design industry as the designs are being developed in great number with its help. At the same time, the debates and controversies also exist parallel to the growing use of artificial intelligence in design companies.

 Keywords

Artificial Intelligence (AI), Digital Design, Graphic Design, Web Design, Machine Learning

Introduction:

A major recent development in technology is the introduction of artificial intelligence (AI), a sophisticated computer system capable of learning to make predictions and solve problems (Zhang, B., Zhu, J., & Su 2023).). Experts predict that artificial intelligence (AI) will impact various industries providing unique advantages to companies (Vemprala, 2023). As AI has become more pervasive in various fields, curiosity about its potential applications in artistic fields is growing. This research seeks to investigate the incorporation of AI into the design process related to web design and evaluate its impact on the field. The concept of adoption as defined by the Oxford Dictionary (2020) refers to the process of adopting a method and starting to use it or agreeing to a particular idea. In the context of this study, it is concerned with how companies and designers in the design sector choose to incorporate AI into their work processes.

The design industry in Pakistan is experiencing a shift towards adopting AI-powered tools and technologies, which presents opportunities on one side and on the other creates challenges for designers in the region. The integration of AI into design workflows has the potential to streamline tasks, automate repetitive processes, and influence solutions.

Concerns arise when considering the impact of AI on job displacement, changes in required skills, and the creative freedom of designers. This study delves into the world of AI, which involves creating computer systems that mimic human behavior. The definition of AI may vary as our understanding and perception of it evolves over time. It includes elements such as thought processes, reasoning, behavior, and optimal performance. A computer can be considered intelligent if it can think and act like humans. Common terms used in this field include machine learning (ML), deep learning (DL) and artificial neural networks (ANN), which are subsets of AI. Machine learning refers to the ability of a program to make predictions by adapting patterns to situations. Artificial neural networks are algorithms inspired by networks in the human brain that can model non-linear relationships and learn from input data. Deep learning involves techniques that use neural networks with multiple layers to efficiently process data to solve complex problems. (Mohsen, 2023)

Literature Review:

The Artificial Design Intelligence is meant to create designs with the assistance of artificial intelligence. The ADI is programmed in such a way that its machine learning coding possesses capability to comprehend ruled pertaining to design, understand design concepts, detect latest trends in design industry, and can create designs on its own. In this scenario, the job of a human designer is being replaced with ADI technologies as the users prefer AI for its efficiency and quality.(O'Brien, 2019). During the past decades, in order to develop graphic and web designs, a number of companies have shown interest in developing their own AI software. Many companies have hit success while others are still putting in strenuous efforts to achieve the goal. In addition to professionals, the newly developed AI systems are meant to equally facilitate new users also to help enhance their creativity and idea-developing capacity. For instance, the Pinterest is widely searched and used engine to be deployed in both the categories. This is a testament of friendly use of AI which is accessible in everyday use as this AI based system helps those who venture to explore new ideas, categories them and then, preserve them on various canvass and in different modes. Moreover, learning from previous searches carried by the users, the AI-driven software proposes new visuals and designs. The

AI makes good use of deep learning as its machine language is codified in a way that it can detect a pattern in searches of a user and thereby takes little time in knowing his intentions. Similarly, the behavior of user is also tracked and it also helps calibrate discovery paths. On the basis of these intelligent machine traits, the AI system suggest you a variety of recommendations to choose identical images in terms of themes and visuals. Furthermore, the artificial intelligence has grown its expertise in undertaking image-by-image search by relying on image recognition technique and can distinguish between color themes, detect objects and develop patterns in visuals. (Wired Insider, 2022). In this age of technological revolution, it is almost impossible to avoid the growing use of AI as a great number of most famous software and programs are already equipped with the facility of artificial intelligence which is dedicated for digital designs. These softwares are capable to make ultimate creative decisions, skipping many stages in creation process while carrying out autonomous and semi-autonomous decisions. The principal software in market that has built-in AI feature is Adobe. It utilizes AI in myriad ways. All the Adobe products have integrated AI and machine learning attributes as the Adobe Sensei technology is specifically designed in these characteristics.

The Adobe Creative Cloud is specifically designed to incorporate built-in AI software in all its other products such as the Photoshop, Illustrator and InDesign and others. It is the revolutionizing quality of AI driven design software that it endows you with a deep insight, augment your creative expressions and steps up tasks and maintain workflow, and reach out real time decisions. The AI driven framework in design machines has eased the unnecessary burden of manual work and process as well as the tasks of little value and worth. The artificial intelligence has optimized the system of analytics, improved marketing, enhanced creativity potential and augmented advertising. (Adobe Sensei, 2020) while developing designs and crafts in art work, the decision-making is critical stage for the designers which have been duly facilitated and assisted by the AI-powered tools as it provides you with in no time the options and choices to make for, leading to better decisions and profound insights. The team members of the Adobe machine recognize the revolutionary impact of AI system in raising human creativity to new heights. In the long run, the AI driven system is not meant to uproot human beings job or root out human intelligence. Rather, it offers a set of wide ranging technologies that assist human intelligence and ease out human effort in meeting the tasks. In this way, AI tools partner with creative professionals to give out the best output and increase productivity, coupled with efficiency and performance.

AI software is designed such that it explores new ways of interaction and derive insight from customer preferences and interaction, that would ultimately leads to the innovation and reach out tailored and thoughtful solutions. Although it is axiomatic to say that no machines is good enough to replace human intelligence, but Adobe CEO Shantanu Narayan thinks that the technological revolution has been augmented by the emergence of machine learning. Date driven science is integrated with creativity through the help of AI tools. (Adobe Enterprise Content Team, 2019). With the goal in mind, Wix ADI machine or development system was initiated in 2016 to overcome the basic challenges in the development of websites with the interplay of time, design and content creation. In order to create marketable online presence, the websites are designed to cater to the needs and preferences of the clients and customers with the special programming of AI system. AI arranges data related to the users and applies to the business models and helps recalibrate the entire web designing in light of its content

collection. As a result, the customers and the users end up having classy, unique and customer friendly environment. (Korfias, 2016) Firedrop is another firm that relies on AI to create design engines with the combination of the machine learning in conjunction with optimization algorithms. The resultant AI system led to increased creativity and removed repetitive tasks. Through the analysis of previous designs and cluster data, the AI powered tools recalibrated themselves to offer quick solutions and create optimal layouts in designs by overcoming limitations. (Firedrop, 2022). No doubt these companies have considerably eased the work of designers and artists by incorporating artificial intelligence in their software. Nevertheless, the need for active participation of human being and their input still remains valid and relevant there to perform the core job of design making.

The debates and discussions on the application of AI tools in design industry and work places show that the AI driven design industry is widely welcomed by the professionals as well as the users and customers as it equips them with an wide array of choices and preferences. The designers have shown inclination to learn relevant technique of AI technologies to make maximum use of it in their work during planning and development process. The application of machine learning in the development mechanisms make the job of professional designers difficult in comprehending the AI thought process but the AI can learn quickly the new techniques that were not fitted into the design system.(Verganti, 2020). Owing to this difficulty in interpretation of designs, the systems are usually termed as black boxes and fuzzy. In this way, the collaboration of humans with AI machines becomes difficult as they find it almost impossible to alters the solution to help the clients in comprehending them. (Burgess, 2022).

Much has been debated and discussed about the role of creative individuals in the design industry with the emergence of AI tools and machines. Many are threatened with the pessimistic prospect that the growing tentacles of AI technologies would ultimately render them jobless while the majority is optimistic about the beneficial aspects of AI tools in boosting revenues, improving efficiency and creating new opportunities. The growing significance of AI in designing is hard to dismiss as it has colonized other spheres of industries as well. The inevitability of the AI is undeniable form another angle as well as the need for creativity and social intelligence are integral part of the design professionals work. Some believe that the application of artificial intelligence cause an unwanted intrusion in the field of art, which is rooted in human spirit and emotions and the AI would kill the human essence in the artwork. (DUMITRU, 2024). The debates is centred on the question whether AI would completely take place of human effort in performing creative tasks and generating innovative ideas or its automation is possible? If the answer is in the negative, the future of these professions is safe. But, the rapid march of AI-powered tools is likely to overtake humans in spheres of the creativity and innovation. In the ideal situation, one can envisage a beneficial use of AI in the realm of art and creativity by professionals as it is being used in other industries as well. This is why, to improve workflow and reduce time spent on labor, making processes more efficient. To examine the possibility of computers performing creative tasks, the understanding and thoughts about the use of creativity and intelligence are required out of box thinking. The skill of creativity is one dimension of human intelligence amongst other aspects of it, which the AI tools can emulate. (Ali, 2023). Nevertheless, there is a lot of contradiction and ambiguity about the nature of creativity and its adoption by the AI driven machines in future. To those who term the creativity is an outcome of divine inspiration or brainwave or insight, the prospects of AI

taking place of creativity are bleak. But, the act of understanding creativity poses a conundrum to researchers, professionals and the users. But, there is other league of professionals who dismiss creativity as mysterious thing or product of divine inspiration. They think that the creativity could be effectively simulated and stimulated by computers. (Rinko, 2023).

The debate also touches on the question of whether awareness plays a role in creativity, suggesting that computers lack the ability to truly innovate. According to Lexico (2020), creativity is defined as using imagination or fresh ideas to make something fundamentally easier. The few practitioners underscore the need not to miss it as valueless and irrelevant to all intents and purposes. It could be safely assumed that the artificial intelligence would develop judgment skills and evolve self-criticism, such that it would not replicate or repeat previous mistakes or will avoid random solutions. In order to further optimize the job of artificial intelligence, its software or learning machine need to be plugged in with additional knowledge and experience. But, with the current system, it could only perform a limited task of creativity and innovation. In this way, one can assume that the imagination characterized by intention and desire constitute a difference between the men and machine. (Pataranutaporn, 2023)

Research Questions:

- How has the adoption of AI technologies in Pakistan affected the skill needs of professionals in the digital design industry?
- What are the fundamental changes in work practices within the digital design profession in Pakistan due to the integration of AI technologies?
- How do professionals in the digital design industry in Pakistan perceive the evolving nature of their profession in light of the advancement of AI?
- What are the key characteristics that define the digital design profession in post-AI adoption in Pakistan, and how do they differ from pre-AI characteristics?
- What strategies are digital design professionals in Pakistan adapting to the changing landscape of their profession influenced by the advancement of AI?

Methodology

The study adopts a qualitative methodology which is rooted in exploratory research. This study investigates how AI technologies affect the design process in a qualitative way in the digital design industry. The chosen methodology is semi-structured interviews of 75 digital designers whose respective designers are currently working in the industry from different cities of Pakistan, the proper analysis of the collected data is carried out in the study. Through interviews, the perspectives and minds of the interviewees have been explored about the efficacy of AI use and its future role in design work and an effort has been made to dig out their experience and interface with the AI tools. Through interviews, the study identifies the extent to which AI is used in the creative process, and highlights general feelings toward AI, including expectations and concerns.

The study involves professionals, practitioners and designers who are actively associated and working in the design industry and affected by the rapid march of AI use in it. Hailing from various commercial cities of Pakistan, they belong to fields of media communication, advertising, and IT, branding, web design, product design and UX/UI design. The study aims at gathering participants comprising men and women from all walks of life, keeping in mind their age and experience. The study has accorded special space to newcomers

in the field to seek their understanding on the matter as the extended base of target group helped achieve comprehensive and holistic view of the industry. The respondents were sent emails requesting their participation in the study and was searched on the social media platform like the Facebook where the various groups of designers were found active. The message was posted to these groups seeking their consent to participate in the study. The purpose of the study was explained to them in a brief and concise messages. In order to undertake face to face interviews, the companies in Rawalpindi and Islamabad were requested to help achieve the required task in the study. Many professionals and designers were contacted in Karachi via the Facebook, which consented for participation. In this way, the researcher remained successful in hunting relevant participants by undertaking a broad based selection of the respondents. Furthermore, it helped elicit a vast experience and wide ranging perspective of the participants hailing from different location and environment. Given the availability and comfort of the participants, the interview was planned and structured accordingly like a semi structured interviews. They were facilitated by providing options for online interviews or face to face interaction or in writing or through video chat.

Analysis:

The analysis is organized around key themes and patterns found in the interview questions and findings. Insights are based on professionals who shared their experiences and opinions. The major bulk of professionals and designers are found to be performing their jobs in the fields of content development, digitalized designs and communication firms. Others are freelancers. Their work is comprised of important tasks ranging from web designing and art development, art direction, ideation, concept development, motion graphics, illustration, branding, UI components, UX themes, design guidance and print work and others.

Awareness and knowledge of AI

The study found a broad based awareness on the application AI in design work and development. The interviewees revealed that their companies are preferably incorporating and encouraging use of AI in designing and art work as they have arranged lecture series to equip their workforce with the understanding and beneficial use of AI in the industry. The lectures enlightened them with prospective use of AI and easing of their job by learning AI tools in performing their assignments as well as creating better experience for their clientele. For instance, online shopping facilitate users and customers to choose better products after AI suggest them options based on their previous experience. One designer commented that the due to limited use of AI, the customers and professionals are constrained to take full advantage of AI tools as the technology is new in the market and we are still getting accustomed to it. Another professional designer was of the view that lots of debates and discussion on the hazards and opportunities offered by AI driven system are held in his company as we are inquisitive about its magic and growing efficacy in helping design better. Another group of participants apprised the interviewer that they are well cognizant with the importance of AI in design industry and use the Adobe software. At the same time, the rofess their ignorance of other AI tools that are embedded in their software and they don't know how to take advantage of it or detect their working behind their working. One experienced and senior designer expressed his inability to take advantage of AI tools for they are too costly and expensive but he was motivated enough to experience the miraculous use of AI in design creativity and developing innovative ideas. Despite the massive spread of awareness about AI use in design industry, the

websites admit that the digital designer's profession lack in the skills and competence to perform their job using AI tools. But, she told us that she relied on Sketch and InVision software with build in AI features.

In this view of general awareness, the research findings suggest that the community of designers and professionals have varied amount of consciousness about AI features and tools. However, the study found it shocking that certain software have built-in AI feature and the practitioners are oblivious to its use and functioning behind their work. The Adobe software is widely used and accessible to professionals for instance, XD, Illustrator, InDesign, and more Photoshop, but only a few of them know about AI-powered features. In this instance, a digital designer is quoted to have professed his incompetence and ignorance that he does not know how to make use of AI tools and feature while working within Adobe software. She further added that her colleagues also do not use AI feature in their projects. These assertions point towards a paucity of knowledge and awareness about how AI will be employed in the designs tasks.

Effects of AI on work processes

Majority of the participants revealed that their project and design work is still impervious and uninfluenced to the use of AI powered tools. The digital designers think that artificial intelligence will create little impact on their project in designing and art but it could potentially result in bigger achievement on later stage. Another professional designer who works with the WordPress for most of 95% of his time, express that he like to use AI tools in his design work and intends to further initiate more projects in the Content Manager System (CMS), commonly known as Kirby. Currently, the said designer is dependent on page builder termed as Elementor for targeted customers if they can't afford and wish to seek a quick result. Moreover, the Visual Designer expresses its preference to take advantage of the embedded AI in the design layout and tools of color palette in artwork in a bid to step up the workflow. He referred to its basic support that has grown a lot. He explains that the AI driven system by eliminating repetitive tasks and removing testing, creates more space for original designing. In this scenario, the AI turned out to be a blessing in disguise where the freedom to use it has enhanced awareness about its use and deepened the quality and creativity in the design work. Other participants, particularly web developers and senior designers in the category admitted using Isolation methodologies and tools for removal of background in the images, commonly known as remove.bg. One of them commented about its perfection as unsatisfactory but requires a quick fix to perfect it.

The professional and experienced designers also informed about using ColorMind, which is generator making use of color palette in order to foster deep learning. They prove his point by asserting that they rely on AI tools in order to carry out their exploratory and experimental venture such that it eases the ideation process and they enjoy doing their work. They posit that AI is being used seamlessly and flawlessly in their daily workflows, adding that no amount of resistance has been noticed by far in the use of AI in his firm because this company and its employees are open to new idea like AI driven engines. His industry prefers to automate and steps up repetition in process and integrate tools that efficiently provides results and assist in getting the job done.

Attitudes Toward Artificial Intelligence

The participants' response towards the application of AI in designing and layout work was favorable and positive as they were positively predisposed toward the growing use of AI in their work. In the fields of design, creative departments and movement zone, the usage of AI tools is making inroads with blossoming opportunities for others to take advantage of this technology. Many visionary and experts designers could discern the benefits that accrue with AI application but equally acutely aware of the problems and dangers it poses to human intelligence and labor. Majority expressed little resistance in adopting AI as the web developers were of the view that it has helped them ameliorate the workflow. Many companies are already making use of AI-powered tools and features. He portends that AI may replace him in future as employee. The other designer take it as fun and entertainment using AI to perform its job and achieving excellence. Employed for a game studio, another designer said that his assignment is technologically dependent and he is oriented to use it by default. As such, he is obliged and compelled to incorporate latest technologies in his profession and field. Perhaps, for these reasons, his other colleagues do not resist in using AI tools. He pointed out the frustration of graphic designers who are more pessimistic and fearful of losing their jobs with the onward march of AI in their field but he says they are not looking on the positive side of the picture. Apart from these concerns.

The usage of AI in industry also depends on availability of budget and knowledge base of the design firms. This is the plausible reason that the digital designers offer while expressing their reluctance to incorporate AI tools in their project, with a mixture of skeptical attitudes about AI. She thinks positive, constructive and healthy critique is welcoming aspect especially when latest technologies prevail in the market because we have no proper sense how it would turn out in future. Being a believer in ethical designing, she thinks it inevitable for customers to recognize that what data is chosen for them and provide them control over it. She emphasized on the deliberate and careful implementation of these tools. The senior designers and experienced professional have also made similar reservations about its use, showing their unease with AI pertaining to threat to information integrity, democracy and media industry. Another female interviewee or participant manifests her worry about the indirect impact of pernicious culture that AI is promoting, though she is positively oriented towards AI. She is dreadful of loss of millions of job for human beings with the increasing reliance on AI machines and may be in future a virtual human may commence doing jobs of too many professionals in design industry. The virtual human will be able to perform the jobs related to film production and photo shoot. She also refers to the impact on social media influencers, finding it amazing to consider it. However, in her opinion, working with a robot sends a scary experience and chills down her spine.

Influences:

Majority of the participants were found oblivious to the outward factors in external world impacting their professional responsibilities, for instance transformations in customer attitudes or their pleas or queries. One of the digital designers highlighted that there is limited number of clients who request the implementation of AI utilization in their websites development because the technology is latest and many are unaware of its use and understanding. Indeed, most clients are dreaded by the fact that AI may replace them, least knowing its benefits. Being associated with bigger companies, the digital designer shared her observation about minimal shifts in pleas and attitudes. Nevertheless, smaller firms are

increasing their use of self-hosted sites. Irrespective of this, the clients require changeable and adaptable designs. It is true that the Content Management Systems (CMS) turned accessing designs comfortable and user friendly, but no remarkable impact has been detected. According to the digital designer, the client behavior will be eventually influenced and modified by the experiencing the collaborative, user-friendly software. By contrast, the visual designer believing in the uniqueness of their job terms AI to be more of a buzzword than a material reality.

Anticipated AI Outcomes

By integrating AI in the profession, a revolution can take place in the design industry which can provide unprecedented support and remarkable solutions. AI is driven and designed to provide dreamy, flawless and seamless and smooth experience to customers. Participants believe that AI channelize processes, remove problems and arduous task, and endow us with ample time to undertake a creative exploration. Nevertheless, the experienced and senior designers opine with caution that we should avoid over use and reliance on AI as it could lead to death of creativity in the field. He vouched for the wise and sensible application of AI tools and machine to create original value. The warned against the AI-dependent solutions that could result in self-oriented creativity and allow AI to take center stage in value addition and creation. While bewitched by its boosting efficiency and soothing stress, the other designers consider AI as priceless assistance as it performs tireless job with work ethics. It could turn out to be a game changing worker or employee in any firm. Though this hypothetical scenario is far-fetched, but it has manifested AI potential in a graphic and vivid way. According to designers, AI is already revolutionizing creative work and products with efficiency and speed. It is also causing happy incidents that trigger innovative ideas and designs. Furthermore, machine learning will give birth to personalized user experience to art work and designs in the belief of visual designers who see unparalleled creativity, and massive improvement in design and systems.

Artificial Intelligence in Creative Endeavor

The participants are unanimously agreed that the creative fields are likely to excel in adopting AI in future as the digital designers have talked about its increasing potential to augment user experience. One cannot surmise correctly or guage the exact amount of contribution AI will make in creative process but it is expected that AI could play a key role in enhancing creativity and innovation. According to visual designers, the essence of creativity lies in human mind and imagination as they are true source of creativity and innovative ideas but computers can simulate and imitate patterns of creativity and innovation. Without a human touch, a design loses its charm and elegance, but AI could definitely add value to human creativity and inspire new designs. For lack of social comprehension and absence of emotional intelligence, it has become a difficult challenge of AI driven robots to completely take place of human designers. Nevertheless, exercising meticulous guidance, AI can be trained to think in creative way and apply logic to its operations, that could deliver benefits to the professionals of design industry. To the dissent of one participant, AI does not possess a chance to occupy the role of human designer in creativity because of the objective nature of design, where the line between right or wrong is blurred.

Discussion:

The study examines the impact of AI on the field of digital design, focusing on barriers such as knowledge gaps, demand, and financial resources that hinder AI adoption. Clients and

designers often lack understanding of AI's capabilities, leading to low demand. Responsibility for AI integration is debated between agencies and clients, with the idea that mutual knowledge drives innovation. Skepticism stems from misunderstandings about the role of AI, with some predicting AI applications such as robot employees, raising unrealistic expectations. Many people fail to recognize the current influence of AI in everyday tools, especially experienced professionals. However, different interpretations of the effects of AI arise, influenced by factors such as personality and employment conditions.

Participants view AI positively as a productivity aid, predicting automation of tasks, streamlined workflow, and more time for creativity. They anticipate AI's role in decision-making and generating new ideas, which adds value to the profession. Nevertheless, concerns emerge about AI software competing directly with designers, potentially replacing human roles, particularly in tasks such as web development. Some note AI's lack of authenticity compared to human work but recognize its growing influence, especially in smaller agencies or freelance settings.

The research highlights the need for greater AI literacy, collaboration between designers and clients, and ongoing adaptation to the changing role of AI in the design industry. While AI offers efficiencies and new possibilities, its integration requires careful consideration of job roles and its impact on creative processes.

Conclusions

There are diverse understanding and various definitions to explain and comprehend the term digital design as it is on the whole a generic term. As one can anticipate from the term Digital Designer that it already involved the sense of technology and application of AI in it algorithm would not constitute a problem. Nevertheless, the graphic designers are found to be apprehensive of the onward march of AI in their industry as they think they will soon become irrelevant in the industry. But, they hope that because their fields provide them with versatility, they could overcome the challenge by exploring new innovative ways to combat the challenge posed by AI. But, they think we cannot miss the train of AI in design industry for our selfish ends as it is the future. The functions of digital designers are primarily oriented on the creativity and innovation instead of technology driven problems. In order to undertake creativity and innovative projects, people will use their own techniques and methods to do the job. In terms of art form, it is better to embrace AI to empower the employees or workforce in the company to improve the efficiency in the work. It streamlines their things and improves marketing of their products. The latest research on the subject by this scribe aims at providing fresh perspective on the function and role of AI-enabled tools in the work environment, incorporating findings from the prevailing research data from the other industries. Though the designers largely differ in their opinion about the impact of AI in their industries, but the research findings make worthwhile revelations that this perspective about AI impact is rooted in experience, subject matter, personality, and demographics. It is noted that the design process witnessed transformations owing to use of AI-powered software, enhancing creativity and efficiency. The automation of monotonous tasks and repetitive patterns, AI could tap into human potential; explore their strength to the limits, resulting in innovative solutions. Some designers have expressed their eagerness in adoption of AI driven new technology but the rest need fostering care and guidance in harnessing the true potential of AI usage in designs. While revealing a stark contrast in opinions and experiences regarding AI's impact on the digital design

profession, our findings underline the immense need to unlock and tap the potential of AI in making new developments, bringing into focus the imperative for designers to be more receptive to innovation and creativity to meet the challenges of modern age. By doing so, they will not only thrive in this rapidly changing field but also unlock new possibilities for creative expression and innovation.

Exploring AI Adoption Effects on Digital Designers in Pakistan

References:

Ali Elfa, M. A., & Dawood, M. E. T. (2023). Using Artificial Intelligence for enhancing Human Creativity. Journal of Art, Design and Music, 2(2), 3.

Dumitru, g. (2024). navigating a truly criticalarea of today'sworld" polycrisis": artificial intelligence"(ai). romanian review of political sciences & international relations, 21(1).

Runco, M. A. (2023). AI can only produce artificial creativity. Journal of Creativity, 33(3), 100063.

Pataranutaporn, P., Liu, R., Finn, E., & Maes, P. (2023). Influencing human–AI interaction by priming beliefs about AI can increase perceived trustworthiness, empathy and effectiveness. Nature Machine Intelligence, 5(10), 1076-1086.

Vrontis, D., Christofi, M., Pereira, V., Tarba, S., Makrides, A., & Trichina, E. (2022). Artificial intelligence, robotics, advanced technologies and human resource management: a systematic review. The international journal of human resource management, 33(6), 1237-1266.

Venkatesan, R., & Lecinski, J. (2021). The AI marketing canvas: A five-stage road map to implementing artificial intelligence in marketing. Stanford University Press.

Verganti, R., Vendraminelli, L., & Iansiti, M. (2020). Innovation and design in the age of artificial intelligence. Journal of product innovation management, 37(3), 212-227.