

The future of digital arts

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Abstract:

The future of digital arts holds exciting possibilities as technology continues to advance and expand. Here are some key trends and directions that may shape the future of digital arts: Virtual Reality (VR) and Augmented Reality (AR): VR and AR technologies offer immersive and interactive experiences, allowing artists to create virtual worlds and overlay digital elements onto the real world. In the future, we can expect to see more innovative and artistic applications of VR and AR in areas such as digital sculptures, immersive installations, and interactive storytelling.

Artificial Intelligence (AI) in Art: AI has already made significant contributions to the digital arts, from generating art to assisting in the creative process. As AI algorithms become more sophisticated, we can anticipate AI-powered tools that aid artists in generating ideas, creating visuals, or even collaborating with human artists. AI may also push the boundaries of creativity by producing artworks that challenge traditional notions of authorship and artistic expression. Block chain and Digital Ownership: Block chain technology, known for its association with cryptocurrencies like Bitcoin, has the potential to revolutionize the art world. Through block chain, artists can establish proof of ownership and authenticity for their digital creations, ensuring that their work is not plagiarized or tampered with. Additionally, block chain-based marketplaces enable artists to directly sell their digital artwork, creating new possibilities for monetization and distribution.

Interactive Installations and Experiences: Digital technology enables interactive and participatory art experiences. Artists can create installations that respond to the audience's movements, engage with social media interactions, or incorporate data from the environment. The future of digital arts may see more immersive and dynamic installations that blur the boundaries between the physical and digital realms. Generative Art and Algorithms: Generative art involves using algorithms and computational systems to generate artwork autonomously or in collaboration with artists. As algorithms become more

powerful, artists can leverage them to create complex and evolving digital artworks. This approach opens up new avenues for experimentation and exploration in the creation of visual and audiovisual compositions. Digital Sculpting and 3D Printing: Advancements in 3D modeling and printing technologies offer new possibilities for digital sculpting and fabrication. Artists can create intricate and detailed digital sculptures that can be physically realized through 3D printing. This fusion of digital and physical mediums allows for the exploration of new artistic forms and the integration of traditional and digital techniques.

Cross-disciplinary Collaborations: Digital arts often intersect with other disciplines such as science, technology, and engineering. Collaborations between artists, scientists, and researchers can lead to innovative projects that merge artistic expression with scientific exploration or technological advancements. These interdisciplinary collaborations can result in groundbreaking artworks and installations that challenge existing boundaries. Mobile and Interactive Art: With the widespread use of smartphones and tablets, artists are increasingly creating art specifically designed for mobile platforms. Mobile art apps and platforms provide accessible avenues for creating, sharing, and experiencing digital artwork. The future may see a rise in mobile-based art forms, including interactive games, augmented reality experiences, and location-based art installations. These trends indicate a future where technology continues to shape and enhance artistic expression, blurring the lines between the physical and digital realms. As new technologies emerge, artists will have increasingly diverse tools and mediums at their disposal to push the boundaries of creativity and engage audiences in novel and immersive ways.

Keywords: Digital art –Flexibility-Motion Graphic-Graphic Design-E-Marketing

Introduction:

Digital art is an artwork or art practice, in which digital technology is used in the process of creativity or presentation. Since 1960, various names have been used to describe the process, such as computer art or multimedia art, but the term "digital art" has subsequently been positioned itself as the largest umbrella for the expression of new media art. Initially, digital art had some opponents and this has significantly influenced the concepts of many activities such as painting, literature, sculpture, and music/sound art. Thus, new types, such as Internet art, digital inauguration and virtual reality, have become recognized artistic practices. In general, the term digital artist is used to describe an artist who uses digital technologies to produce art, and in an extended sense, "digital art" is contemporary art that uses mass production methods or digital media .

Digital art techniques are widely used in advertising by mainstream media, and by filmmakers to produce visual effects of digital art initially some opponents, this has significantly influenced the concepts of many activities such as painting, literature, sculpture, music/sound art. Thus, new genres, such as Internet art, digital inauguration and virtual reality, have become generally recognized artistic practices, the term digital artist is used to describe the artist using digital technologies in the production of art, and in an expanded sense, "digital art" is contemporary art that uses mass production methods or digital media. Digital art techniques are widely used in advertising by mainstream media, and by filmmakers to produce visual effects.

Desktop publishing had a significant impact on the publishing world, although it was more related to graphic design. Both digital and traditional artists use many sources of information and electronic software to create their work; To the similarities between visual and musical arts, the general acceptance of the value of digital visual art can evolve in the same way as the growing acceptance of electronically produced music over the past three decades. Digital art is simply either research-based computer creation. (such as images of fractals, geometric fractals and computational art) or taken from other sources, such as a scanned image or image painted using mouse or dashboard .Although technically, this term can be applied to art made using other modes or processes and is scanned only (scanning). They are usually intended for art that has been modified incompletely by computing (e.g. computer software, micro-controller or any electronic system capable of interpreting inputs to create outputs). Digital text data and raw audio and video recordings are not usually considered digital art per se, but can be part of the larger project of computer art and information art. Artwork is considered a digital painting when it is created in a similar way to non-digital paintings But using software on the computer platform and output the resulting image in a way that converges drawing on a canvas digitally, Andy

Warhol created a digital art using Commodore Amiga, where the computer was publicly placed at the Lincoln-New York Center in July 1985, Debbie Harry's monochrome photo was taken from a video camera and digitized in a sketch programme called Power Point. Warhol manipulated the image by adding color using a flood filling algorithm. Amidst diverse views on the pros and cons of digital technology in the arts, there seems to be a strong consensus within the digital art community that has created a "significant expansion of the creative field" digital art, whether two-dimensional or three-dimensional, is useful, as it allows history to be preserved.

1-Digital Art Features:

Digital art has many features that traditional art does not offer, including:

1. Effectiveness:

Digital art provides a lot of money needed to buy tools, as only a good computer and digital art software are required to produce amazing artworks, rather than consuming many resources compared to traditional art. It depends mainly on the quality of the tools we compare. Amazing paintings can be painted with a pencil and a white paper, but if we want to dig deep into different types of digital art, we will see that its tools are - for the most part - bought once, and are always usable, unlike a lot of extravagant traditional art tools that are bought every period.

2- Flexibility:

As far as digital art is concerned, you can add, edit or delete any item without compromising resources or buying more of it. Errors can easily be retracted, and it doesn't matter how often you delete something. The software will not be affected or torn from the frequent deletion as can happen in traditional drawing boards. Digital art is easier to publish and distribute, as it can be copied by dozens of copies of the original file, shared in various platforms, and easily saved by relying on cloud computing systems to ensure that it is not damaged or lost.

3. An influential experience:

Digital art is a pleasant and visually convincing experience that traditional art does not offer, it gives the opportunity to produce animation films, also allows the editing of images and videos and the use of various audio, kinetic and other elements, unlike traditional art. Mention should also be made of the ease of learning digital art and the diversity of its sources, which makes this feature very important for those who aim to learn new skills or want additional sources of income.

-The importance of digital art:

Digital art is of great importance to various business areas, with its digital designs that serve business activities in reaching marketing goals. If you are an entrepreneur or start-up entrepreneur, here are the highlights that require a digital artist to perform.

1. Product Design:

Digital art helps you design unique and successful products, the digital shape of product designs is the most common, you can get a professional 2D or 3D design for your product.

2. Motion Graphic:

Marketers often prefer to use Motion Graphic videos in their marketing business, as they have become an excellent marketing tool capable of attracting and influencing target audiences. The design of motion graphic graphics undoubtedly requires the use of digital drawing art tools to produce them, such as Photoshop, Adobe After Effects.

3-Graphic Design:

Graphic design is one of the most prominent forms of digital arts serving a wide range of business activities, such as: advertising designs, visual identity, logos, packaging, and much more that serves your marketing goals.

4. E-Marketing:

The attractive visual element provided by digital arts designs is one of the most important factors on which the success of digital marketing depends.

5. Animation:

The art of digital drawing enters the animation industry, helping create images and graphics using digital tools, editing them, and designing virtual elements necessary for the integration of work.

6. Software Design:

The software art system is based on codes and ciphers, a type of digital art that requires high engineering skill, to use software languages to get the required digital designs such as web designs and others.

7. Digital Imaging:

The art of digital photography is one of the digital arts that requires the use of tools and software to process images. This type of imaging will serve you in

reducing cost, speed of achievement, quality of images, easy sharing and storage compared to traditional filmography.

The design computer has provided all design elements through the design software's tools, colors and capabilities of cutting, pasting, adding, deleting, creating geometric and organic forms, mixing and changing colors quickly, making many new design ideas available and finalizing them accurately, saving time and effort. When we see the production of that art from digital works, we find visual pleasure and art based on the foundations and elements of design that are the basis for the construction of the artwork, and it is not hidden to every artist whether digital, formative or other arts. The technical work is complete if all the requirements for the success of that work are implemented from the important design foundations and elements. Digital art must therefore take all the building blocks of the artwork from interdependence, balance, mobility and harmony and adhere to those elements and foundations that are the basis for the construction of a complete artwork that achieves the recipient's vision of a specialist or an artistic decency.

The analysis also relied on the pragmatic approach of transforming art into an important and successful means of communication; To reach the deepest elements of cultures' special expertise in other civilizations by transforming art into an incipient language whose mission is to communicate between society at all levels of their lives, Reaching out to their expertise and goals, making a digital designer design aesthetic vocabulary in a practical way that does not depend on society's self-change s social, political, intellectual and economic movement, making art and design part of real life. Logical philosophy has a share in its study, requiring the artist (digital designer) Have expertise and a golden idea stored from sports systems and logical relationships to build a complete design unit It makes the artist a scientific status as their science, and this art has intellectual knowledge that confirms his validity by scientific experience and his assessment by aesthetic standards so that it does not fall into the pattern of repetition and tradition. and can extract an idea that is reformulated several times and experiments with technical methods using computer applications that fit his design idea, this contributes to the development of computer applications in digital design to come up with a simple product to a product that has undergone a lot of ideas with specifications that lead to performance, function and complete aesthetic value. Accordingly, it is clear that the laws of perception theory affect the three pillars of the digital design process and the digital design, adopting visual viewing whenever the designer is able to collect more visual information through visual perception and find its meaning and transform it into expressive tools and visual means.

The second pillar is the recipient. The recipient has physiological, mental and psychological capabilities that determine a position on the content of the graphic design. The last pillar is the graphic design, and the designer takes into account the four cognitive laws, the basic character of the phenomenon, shape and ground, and the assembly of dispersed visual elements such as (Convergence - Interconnectedness - Shapes - Depth - Visual cognition stabilization (shape fastness - size fastness - light fastness - color fastness) After reviewing the application of digital graphic design according to a methodology to the communication language, digital graphic design is one of the effective means of communication and information-influencing activities in which the communication elements bear:

Sender: He is a graphic designer and must be familiar with the different sciences that serve the communication of the message in a rhetorical and convincing manner, expertise in design innovation and high technical skill in software and high observation that serves the design and enjoys a social and environmental culture in order to achieve the desired goal. The message is digital design (digital design idea), consisting of a non-dispersed integrated unit; It makes the receiver go from part to part in a non-random way, good design is that influences the viewer and prints a quantity of his cultures and values, is contemporary, responsive to need, attractive and raises eyebrows in a place and time. The sending artist and message is the artwork and the future is the recipient.

The addressee. The recipient is the person to whom the work is directed, and the designer's interest in the recipient is of the utmost importance; Because he will interpret and feel the message and is the most important link in the communication process. Means: It is one of the methods of presentation through which the message is conveyed, and the designer must choose the influential means that affects all senses, whether direct or indirect, and use effective methods that help to accurately understand the message and its content, honesty and clarity.

Digital arts are contemporary arts that occurred with technical development in the latter half of the twentieth century. and digital art depends in its basic material of production on the computer and its attached devices through drawing and modification of the drawing software, the production of digital works in Saudi Arabia emerged as the beginning of art exhibitions with the participation of the visual artist Khaled Al-Amir with a digital collection of works in 1998 in a collective exhibition of the Group of Darab Al-Najma. This was followed by a 10-year personal exhibition by artist Manal al-Ruwaishd in 2008 and a group exhibition of the digital art collection in 2009 And the beginnings of digital art in Saudi Arabia faced a lot of obstacles until it came to refuse to recognize it from within the arts department, but today with the opening of Saudi Arabia to all

things new in various fields, digital art has become the bet of the future and is receiving a lot of attention.

Since the 1970s digital art has been a prominent medium of modern media, and with the development of technology and the availability of various digital design programs, digital art has become one of the latest types of visual arts. Examples include images taken by scanner, digital camera, or images painted by various graphics programs, whether using mouse or pen and drawing board. It went beyond all this to its presence in all kinds and fields of contemporary art that here cannot be mentioned and has a clear mark in contemporary artworks. This art has evolved simultaneously with the development of technology and the history of digital art shows the extent of overlap between technology and art, this is a natural thing. Art over the ages goes in parallel with the evolution of the times and is influenced by its gifts. Our Government's interest in, support for and promotion of the arts and the creation of a suitable environment are evidence of its desire to keep abreast of the times and to advance thought to the highest levels of the world if not beyond that.

Types of Digital Art Sub:

To facilitate the explanation of subtypes of digital arts, we will divide them into two main types:

First: Computer-based digital art

The computer is known to be a key part of the art of digital drawing, but the idea here is that these subtypes rely solely on the computer, and no other external tools need to be used at any stage in the construction of the artwork.

1. Algorithmic Art:

Algorithm art is created using computer algorithms introduced by the artist, whose role depends on the creation of specific algorithms or interspersed with some random, to give commands to the computer until an identical artwork comes out every time, or different if external or random data is added.



In another way, the artist's responsibility here is limited to designing algorithms that will take over the drawing process, and rarely participate in the process itself. One of the most popular algorithmic art models is Kate Compton's Flowers.

2-Fractal Art:

A branch of algorithmic art that has been very widespread in recent times, Fractuli is based on fractals, whose idea is difficult to familiarize itself with for non-sports professionals, but simply, the fractals are intricately complex and self-similar patterns across different scales.



Nuts can be used in still or animated images and others, and it is exciting in the classical art that makes it one of the most accurate types of modern digital drawing art that no matter how zoom, there is a repetition of the same pattern. One of the most famous models of classical art is the Mandelbrough Collection, which includes expressive abstract images.

3-Datamoshing art:

The modern art of datamoshing is applied to various types of videos and images of GIF exchange graphics format. It depends on damaging or manipulating data for aesthetic purposes, or making it more consistent with the content's purpose. One of the best Datamoshing apps for iOS and Android systems is the MoshUp app.



4- (Computer-Generated Imagery (CGI:

The art of computer graphics in which the artist enters the instructions required for the computer until the drawing reaches its final form, and the artist is responsible for the idea of painting, color compositions, lighting and other elements of the painting, while the computer implements these instructions.



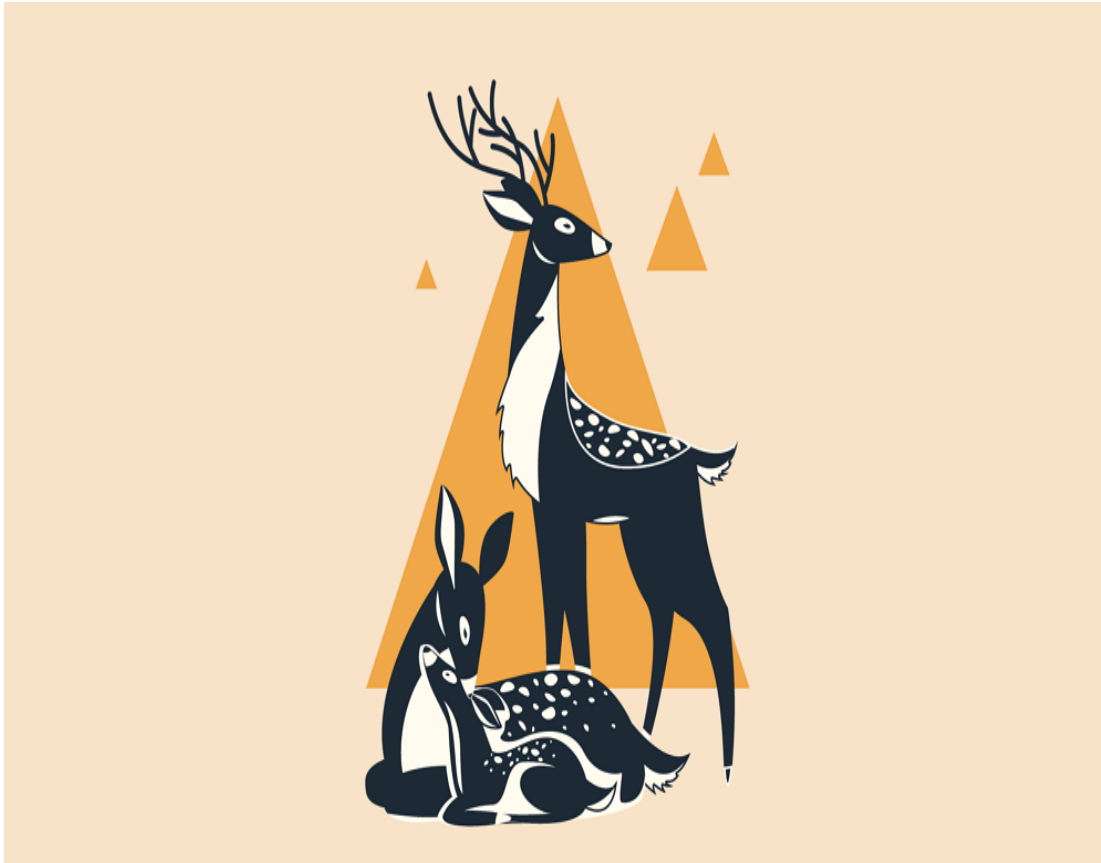
The vast majority of computer graphics (CGI) are 3D graphics, with image elements designed on the computer while creating a 3D format, thus reaching the end result.

It is important to know that the drawing will only appear at the end, meaning that the artist will not be able to see the results of the instructions he enters immediately.

Second: Other types of digital art

Vector drawing

Vector or victor fees are a type of systemic drawing that depends on the victor formula that is not influenced by the magnification degree, as the image maintains a high resolution under any degree, unlike the pixel art in which the pixel appears or jammed, the higher the magnification.



The vector includes straight lines and shapes that can be easily adapted through geometric formats, with full control over the degree of transparency, colors, shades, etc. It is used in the manufacture of corporate logos (logo), billboards, animations, even printing vector drawings on paper and clothing.

2. Raster Drawing

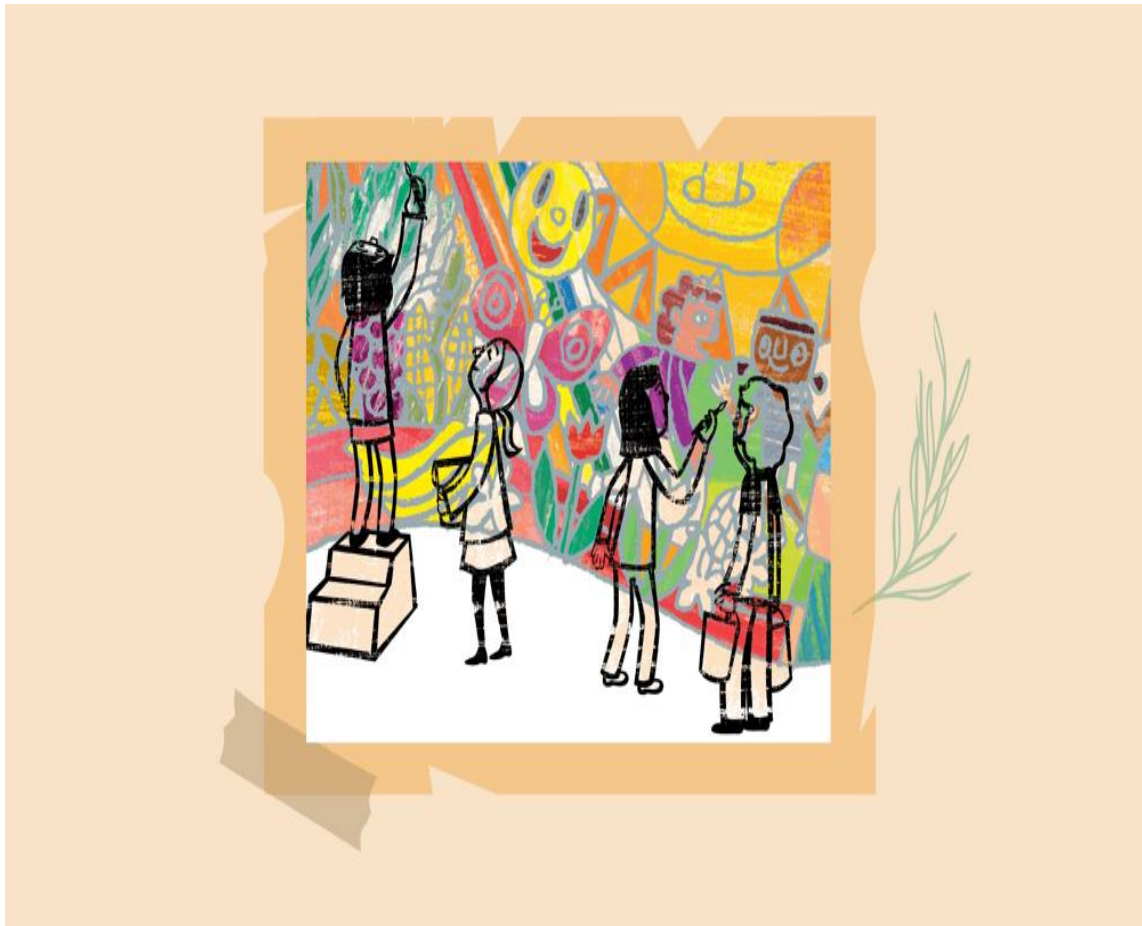
The art of Raster Drawing dots consists of pixel points adjacent to each other, and the more pixel units in the image, the more quality they are. Raster art is widely used throughout the web and Windows backgrounds and others.



Although the Raster graphics can be scaled down without any problem, when the image is enlarged, the pixel problem will appear as small boxes that confuse the quality of the drawing. One of the most important features of Raster fees is that they are less expensive than Vector, but in return they require a higher storage space the higher the image quality.

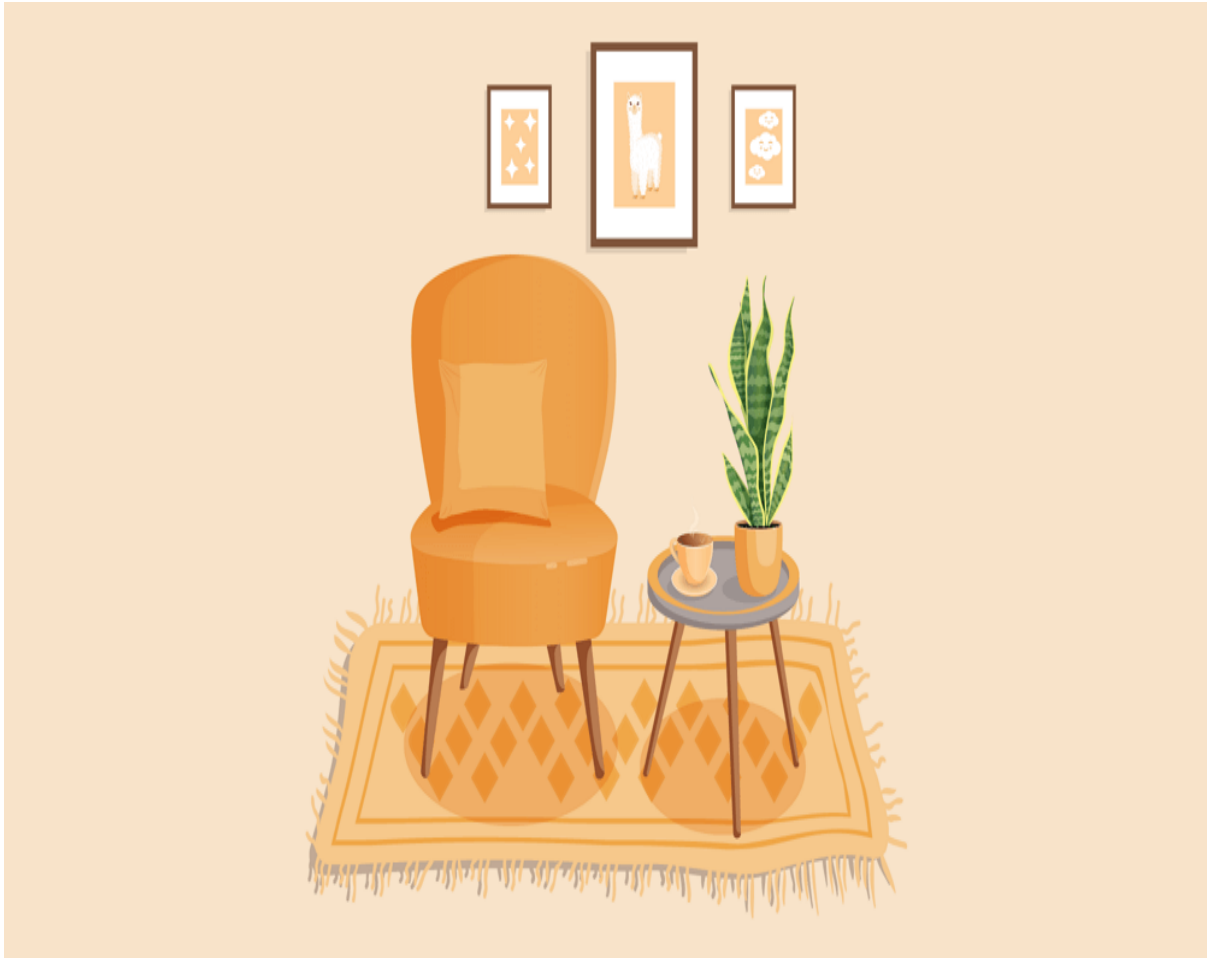
3. Integrated Art

Integrative art is evolving rapidly, with the advantage of creating an artwork in which more than one digital art program has been used, or one program has been used to produce an image in which more than one art type has come together. Vector and Raster drawing can be used together, photography with one, or Vector's computer drawings with another manual.



2D digital painting:

Two-dimensional digital drawing is similar to a traditional drawing, but instead of painting on a white paper or similar, one of the graphic tablets is used, and the drawing process proceeds on an empty surface without adding any other effects. Two-dimensional digital drawing plays an important role in designing striking digital graphics.



Two-dimensional digital drawing may be used for companies' advertising campaigns, and other propaganda purposes. For this, many companies and entrepreneurs hire specialists in this type of art, especially with easy adjustments compared to traditional drawing, saving time and resources.

5. 3D Digital Painting

3D digital drawing is one of the kind of sophisticated digital drawing art, and has achieved greater popularity than 2D digital drawing graphics, adding some effects that bring the image closer to reality, giving it a deep dimension and a better visual location, which has made 3D digital drawing images capture the viewer's attention more than 2D graphics.



This affected the size of customer visits, as advertising campaigns containing 3D graphics were more successful than 2D graphics campaigns. The main programs of 3D drawing are:

- [Adobe Substance 3D Painter](#)
- [Pixologic Zbrush](#)

6-Digital collage:

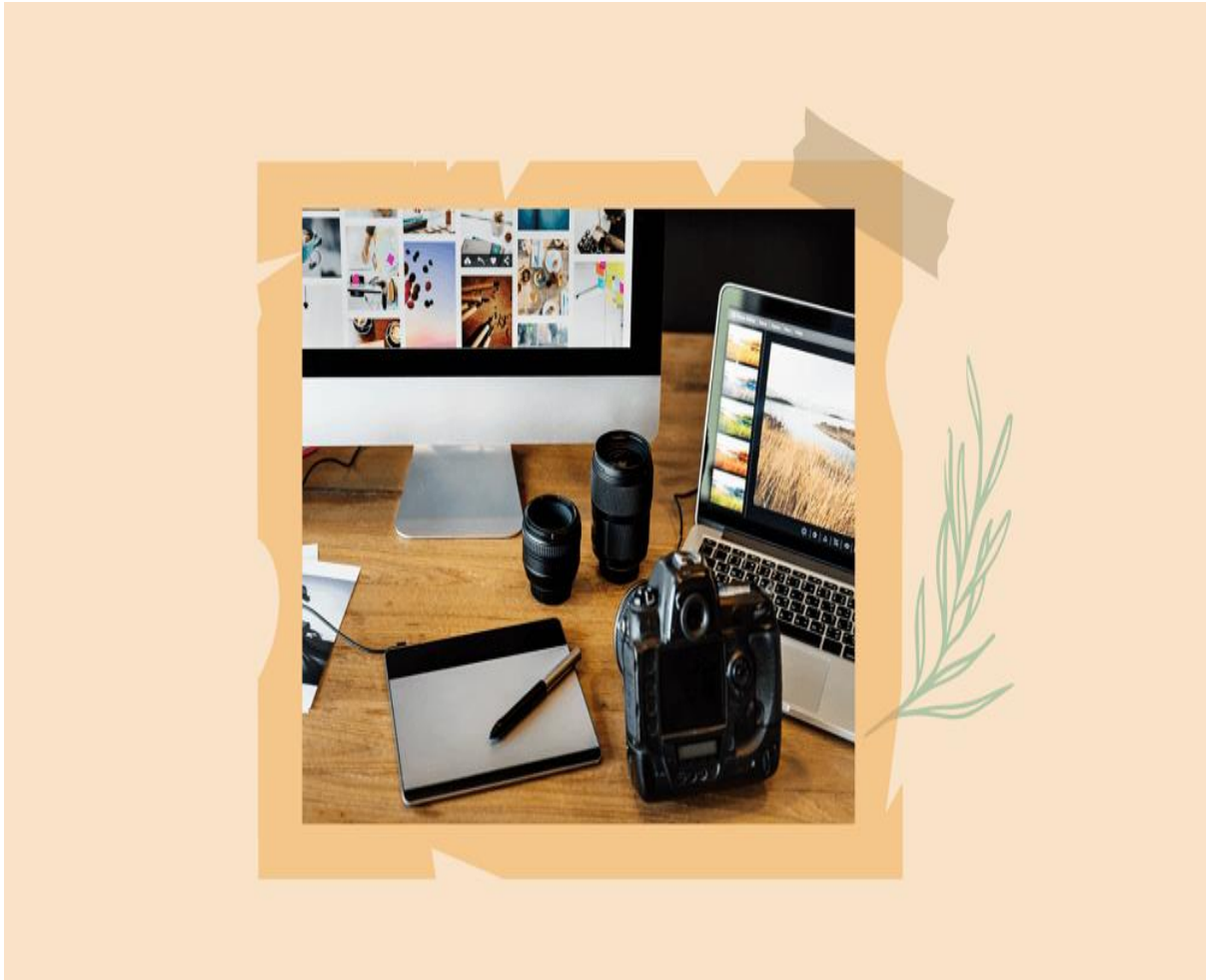
The art of cutting resembles the process of collecting images from different occasions to create a uniform image containing the added images. Digital collage uses a range of elements with varying ideas, mixing them together to produce a new image.



The idea of collage art is not new, as Picasso was the first to use this idea in oil paintings, and as technology has evolved, artists have used this technique in various digital works.

7-Digital Photography:

Perhaps the most widely used type of digital art, as computers and processing systems evolved, the concept of digital imaging, in which digital technology is used to process images, arose rather than the chemical processing previously done in film cameras.



One of the most important factors that helps the success of digital imaging is lighting and post-photography modifications. The photographer can use dozens of programs and applications to adjust and modify the images taken. Perhaps the most popular software used for this Adobe Photoshop program.

8. Digital sculpting:

Digital sculpture is quite similar to the idea of real sculpture on clay, as the software used for digital sculpture has many possibilities such as: pulling, smoothing, pushing, removing the object and other traditional sculpture movements. One of the most outstanding programs in digital sculpture is Zbrush, which offers comprehensive features for those interested in 3D sculpture.



Digital Art Methods:

Digital art methods can be divided into three main sections:

- 1•Zero style: the artist adopts this method if he will start designing all the elements of his project from scratch without copying or imitating other designs.
- 2•Compilation style: This style is spread in the art of digital collage, as the artist selects a set of pre-designed items and assembles them in a single file.
- 3•Mixed style: A style between zero and synthesis, the artist selects a set of images that he may modify according to his vision or project requirements, and may leave some other elements unedited, or there is a whole new element with a pre-designed element.

Digital Art Schools:

Modern digital drawing art is divided into three main schools depending on the design idea, as follows:

1. Factual Digital Art School:

Design represents forms that actually exist, such as: rose, house, person, horse and other elements. The artist here tries to be realistic to express a tangible real vision or part of it, without making any fictional effects.

2. School of Imaginary Digital Art:

The artist at the School of Fiction Art is not committed to a realistic vision, but can add and develop what he sees as diverse and opposing influences and overlaps, which are more like surreal school in traditional art, but using the computer as a tool to express the artist's imagination.

3. Expressive Digital Art School:

The School of Expressive Art takes elements of reality, but is designed according to the artist's feelings, regardless of their compatibility with the facts, and this is done by a strong change in lines, colors or proportionality between the size of shapes in the design.

Best digital art platforms:

And now we're talking about digital drawing art platforms where you can go through different business models if you're a project owner, or publish your work if you're a digital artist. There are already many expert designers who share their business in their accounts on the platform of the five largest Arab market for the sale and purchase of micro-services. In addition, these are some important platforms for those interested in digital art:

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