

A digital image. is a representation of visual information in a digital format, typically composed of pixels arranged in a grid. These images can be created, manipulated, and stored using digital devices such as cameras, scanners, and computers. Digital images are commonly used in various fields, including photography, graphic design, medical imaging, and scientific research. Through having different kind of digital image we can compare and contrast types of digital emage and those are.

Vector image: is the kind of digital image that are composed by the different kind of geometric shapes like line also curve and polygons wich defined by the mathematical equations, but the format of these digital image can be in SVG(scalable vector Graphics) EPS(encaspulated postscript) ,but vector image it's suitable for the logos,illustrations and diagram.

Raster or (bitmap) This is another kind of digital emage we're the image is made up of a grid of pixels, each other with its own color value.But the format of these rester image it can be in form of GIF,PNG,JPEG,Rester image its suitable for representing photographs and the quality determined by pixels per inch (ppi). But the following were the **contrast between raster (bitmap) image and vector image**

Scalability: Raster image lost quality when inlargedas the pixels become more visible **while** vector image can be scared infinitely without degradation.

File type: Vector image are commonly stored in as **EPS**(encaspulated postscript) or AI files **While** raster image are typically seved in a format like JPEG,PNG.

Quality control:Vector image quality remain consistent regardless of size changes.**While** Rester image quality is determined by resolution (ppi) with higher ppi indicating better quality.

Suitability: Vector image is suitable for illustrations, logos, and designs that require scalability. **While** Raster images are ideal for photographs and detailed graphics.

Construction : Vector images are created using mathematical formulas to define shapes **while** Raster images are built using pixels arranged in a grid pattern.