# Data Visualization in 2024 | The Ultimate Guide

https://www.youtube.com/watch/loYuxWSsLNc

let's start with what data visualization is while the term sounds scary a data visualization is meant to make understanding information easier it's just a graphical representation of data rather than presenting data in a complex spreadsheet you can create an image that will illustrate the information in a simpler way viewers don't have to scour a fact sheet looking for the story they can easily scan and quickly find what they're looking for and you don't have to be a data genius to create them anyone and everyone can create them no matter their profession marketers teachers health care professionals consider this infographic here your profession is not an excuse to not create data visualizations you can create so much value for your audience by spending just a little bit of extra time building them i just mentioned creating value for your audience let's dive into four ways of doing so the first reason is how easy it makes data to digest you can write a full report if you'd like and hope that your audience reads it all the way through to understand your point or you can create an infographic like this which is still somewhat complex but simplifies the information in an easy to understand manner imagine if all of this was written in paragraph form yikes the second reason is the ability to discover patterns easier trends emerge from data over time and if you monitor that data through graphics they're much easier to notice scatter plots or charts can help you identify them and then once you do present them with an infographic similar to this one i haven't mentioned this yet but all the examples you'll see in this video are templates you can edit in visme right now so keep them in mind if you've been learning or gathering information for a long period of time a data visualization can help you compile that information into one place it's more engaging and an image is always easier to remember than text alone which is our fourth reason the visual nature of a data visualization helps viewers understand and remember it better they'll soak in that image like a sponge and will be able to recall the information that went with it this is a detailed infographic about bioluminescence in australia the geographical image makes it easier to remember where it's present in where it's not along australia's eastern coast all right we have our feet wet in the data visualization pond let's get a little bit deeper now and explore five ways data visualization can be used one is to plan schedules are you familiar with google calendar well that's become a data visualization you can layout a timeline or project plan for your days or months whether through google or on your own if you're on deadline a visualization showing what needs to happen before the big day is a great idea i suggest starting at the end and working backwards another way data visualization is used is to pinpoint relationships how are two or more things related this is when a scatter plot becomes your new best friend if time is one of the variables in your data a graphic can help share changes over that time period by recognizing the trends from the past your data visualization will help you predict what outcomes to expect in the future frequency falls in line with predictive ability as well after you've compiled so much data you'll have an idea of the frequency you can expect something this will require a lot of research but will be helpful for both yourself and your viewers and our last way that data visualizations are typically used is to interpret value and risk rather than sorting through pages of information a simple data visualization can help you assess a situation and determine if taking action is necessary your brain can process multiple variables much more easily in an infographic than it can in a page full of text all right you've heard me touch on various types of data visualizations already to haunt any confusion and answer any questions let's touch on some of the most popular start with graphs let me preface this by saying there are dozens of graphs you can choose from for the sake of this video i'm only going to share a couple of the most popular pie charts were our best friend in third grade and well you should reconnect after all these years if you have seven or less percentage points and their differences in value are wide use a pie chart they're simple and everyone understands them bar charts are another good example for easily understood data visualizations they mostly speak for themselves and i'm sure you've seen them before again if you're thinking there's no way you can create these visme has your back this is a template right here that you can edit to fit your data right now at visme.com line charts take one fixed value and however many variables and place them adjacent to one another these are perfect to discover trends or to see how one variable may be superior or inferior to another three prominent charts that you can use include pyramid charts stacked area charts and radar charts pyramid charts showcase visual hierarchy they can illustrate income importance or the difference between leads and actual sales as we see here stacked area charts are similar to your line charts they'll visualize changes over different values over time there's not one fixed variable here and the last chart i want to put on your radar is the radar chart you may have also heard these by the name of spyder or web charts but it looks something like this they're great for identifying if something is well-rounded or maybe lacking in one specific area against other competition infographics rely on text a bit more than a standard data visualization it's still kept to a minimum but it might be necessary depending on the type of infographic one example is a timeline infographic these will have some text but you can follow along easier knowing exactly when events were taking place by actually seeing it along the timeline an informational infographic will carry a lot more text and may even feature multiple data visualizations all in one graphic you'll want icons colors and charts but don't overload the graphic and make it too overwhelming keep it organized like we see with this visme template and while there's plenty more infographics to check out which i encourage you to do so for the sake of time i just want to touch on comparison infographics this is for side-by-side comparisons of data helping you or your audience make informed decisions they're great for comparing cars homes or banks as we see here