

# FROM DATA TO DECISIONS

## A beginner's guide to data visualisation



ILLUSTRATION: ZARIF FAIAZ

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Making quick and informed decisions is crucial to stay ahead in today's fast-paced, data-driven world. As we generate vast amounts of data, transforming it into actionable insights has never been more important than now. However, how do we turn all that information into something meaningful?

Enter data visualisation—your secret weapon for transforming large and complex datasets into clear and actionable insights.

## WHAT IS DATA VISUALISATION AND WHY DOES IT MATTER?

Simply put, data visualisation is the graphical representation of data and information. By using visual elements such as charts, graphs, and maps, individuals and organisations can interpret and understand patterns and trends from their complex and large datasets. These visuals make it easier to notice important insights and changes that could be hidden in a sea of raw data.

By simplifying data using visuals, individuals and organisations can make data-driven decisions quickly and effectively. Whether it's assessing the performance of businesses,

understanding the behaviours of customers, or anticipating future trends, data visualisation empowers businesses to make informed decisions with clarity and confidence. Md. Taimur Islam, Data Science Manager at Bangalink, states, "Visualisation deciphers the hidden code of data, transforming complexity into clarity."

## HOW DATA VISUALISATION IMPACTS DECISION-MAKING IN BUSINESS

Data visualisation has become a game-changer for organisations, drastically changing how companies approach the decision-making process. Here's how. **Clear insights and swift decision-making:** Md. Abu Saleh Ovi, Principal Data Engineer at local fintech company NEXT Ventures, points out, "Visualisations simplify complex data which enables faster and more informed decisions." Whether you're analysing sales trends or assessing marketing campaign performance, visualisations allow important metrics to be understood at a glance, enabling quicker and more informed decisions.

**Identifying trends and patterns:** Atiqul Islam Chowdhury, Senior Data Analyst at NEXT Ventures, highlights, "In my experience, data visualisation has been

key to effective decision making. It clarifies complex information, making it easier to understand trends and patterns. Visuals facilitate faster comprehension, enabling quicker reactions to market changes." Spotting these trends and patterns in raw data could take hours of analysis, but with visual tools, people can identify critical trends instantly in real-time.

**Improved collaborative understanding:** One of the most valuable aspects of data visualisation is that it simplifies the communication of complex ideas. Ovi states, "Non-technical stakeholders can understand and engage with data-driven insights. Visuals are more impactful than raw numbers, making it easier to convey insights across teams." A simple visual can convey what could take paragraphs of text to explain, making it easier for both technical and non-technical stakeholders to grasp.

**Decisions based on real-time insights:** With the help of real-time dashboards, organisations can respond timely to changing circumstances. Dashboards allow for quick responses to changes in the market, making sure that companies are always informed and ready to adjust as needed.

## HOW TO BUILD YOUR DATA VISUALISATION FOUNDATION

For those who are new to data visualisation, getting started might feel overwhelming. However, by following a few simple steps, you can easily incorporate this skill into your workflow:

**Get comfortable with SQL:** Ovi suggests, "SQL is the backbone of data analytics and visualisation. Before jumping into tools, ensure you have a strong grasp of SQL queries, data extraction, and database management." A solid understanding of querying data and managing databases will set you up for success when you begin to use visualisation tools.

**Build simple projects:** Start with small datasets that are easy to understand and analyse. Atiqul recommends, "Focus on clear and concise visualisations, avoiding unnecessary complexity. Share your initial efforts with colleagues and gather feedback to refine your approach. Continuously explore new techniques and tools to expand your data visualisation skills." By choosing to build simple projects, you'll gain confidence and slowly refine your skills before taking on larger and more intricate datasets.

**Focus on storytelling:** Data visualisation is more than just creating charts and graphs; it's about telling a meaningful story. Taimur emphasises, "Focus on clarity over complexity. Learn the basics of storytelling with data before diving into advanced tools."

**Explore and test out different tools:** There is no one-size-fits-all tool when it comes to data visualisation tools, so you need to experiment with different tools. Tools like Tableau Public, Google Looker Studio, Microsoft Power BI, and Metabase are great for beginners. For those who are comfortable with coding, Python libraries like Matplotlib and Plotly provide greater flexibility and more customisation options.

**Prioritise accurate and clean data:** Before diving into visualisations, clean and prepare your data. Accurate data is the key to generating reliable insights, and investing time to clean your data will ensure better visualisations and more effective decisions.

## FROM DATA TO ACTION

The real strength of data visualisation lies in its ability to uncover actionable insights. Atiqul shared a great example from his work: a dashboard designed to help his organisation easily identify customer profiles. By pulling data from various sources, the dashboard allows the team to swiftly assess customer behaviour and their profiles to make informed decisions.

Similarly, Taimur described how a customer usage monitoring dashboard revealed a decline in data and voice usage, which was linked to a price increase in data and voice packages. By visualising historical trends, the root cause was identified, and that led to the introduction of flexible bundling options to improve customer retention.

As such, data visualisation is a game-changer for businesses aiming to succeed in a data-driven world. By transforming large and complex datasets into clear and actionable insights, it empowers organisations to make faster, better, and more informed choices.

## AI is harming your critical thinking: Microsoft study suggests

## NEXT STEP DESK

A recent study by researchers from Carnegie Mellon University and Microsoft has found that using generative AI tools—such as ChatGPT and Copilot—may be reducing our ability to think critically. The research, which surveyed 319 knowledge workers and examined 936 real-world examples of generative AI use, suggests that heavy reliance on these technologies can lead to a reduction in the mental effort needed to evaluate and verify information.

The study, titled 'The Impact of Generative AI on Critical Thinking', shows that when people have high confidence in AI's ability to handle tasks, they tend to skip important steps of critical thinking. Instead of carefully checking facts or questioning the AI's output, many users simply accept what the tool provides. In contrast, those who trust their own judgment are more likely to double-check and integrate AI suggestions into their work thoughtfully.

The study also highlights a noticeable shift in cognitive effort when using generative AI. Traditionally, knowledge work involved gathering information, solving problems, and crafting detailed responses. Now, with AI handling much of the initial work, users are mostly left with tasks like verifying AI-generated content and making sure it fits their specific needs. While this shift can improve efficiency—especially for routine tasks—it also raises concerns. The researchers warn that over time, relying on AI to do the heavy lifting may result in a "mechanised convergence" of ideas.

## Skills vs. networking: Why you need both in your job hunt

## SHAMS RASHID TONMOY

New job hunters often wonder which is more important: skills or networking? The truth is, you need both. Your skills are the magic you bring to the table—everything you know and can do to get the job done. Networking, on the other hand, is all about making sure the right people know just how capable you are.

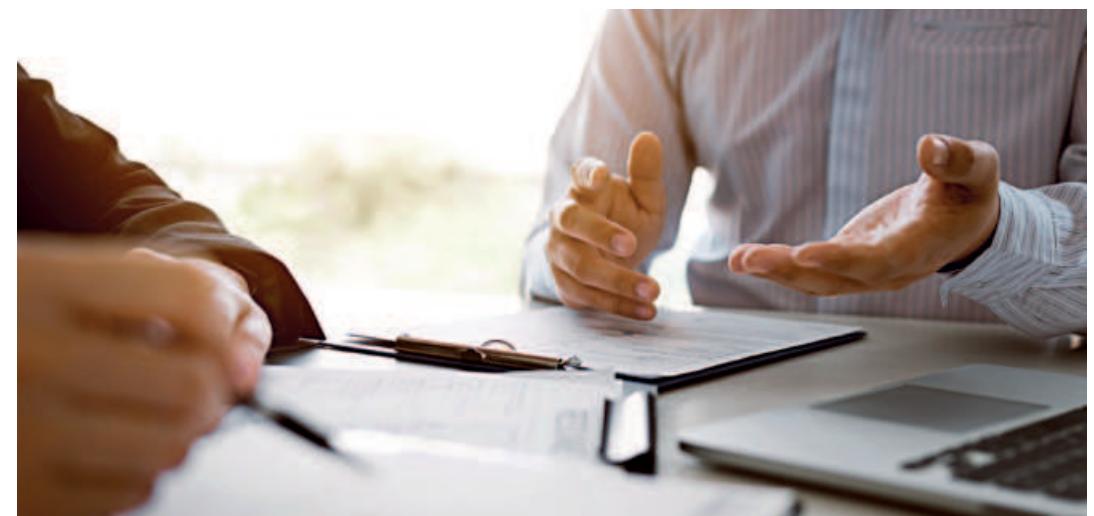
When you combine in-demand skills with a strong network, you open the door to new opportunities, recommendations, and promotions. Let's break it down.

## Mastering your skills

Your skills are the core of your professional value. Think of them as the building blocks of your career. Whether you're coding in tech, crafting campaigns in marketing, or channelling creativity in the arts, having a robust set of skills is what makes you indispensable. But here's the thing—skills aren't a one-and-done deal. They need constant nurturing and updating.

Imagine you're renovating your home; if you don't maintain the foundation, everything else eventually starts to crumble. That's exactly how skills work. Invest time in learning new techniques, stay updated with industry trends, or pick up fresh tools that can make your work more efficient. Maybe you take an online course to master new software, attend workshops to sharpen your problem-solving abilities, or volunteer for projects that push you out of your comfort zone.

Every bit of knowledge you gain not only improves your performance but also boosts your confidence. Over time, these improvements make you the go-to person in your field, ready to tackle bigger challenges and add more value to your team.



## Making the right connections

You might be an expert at what you do, but if no one knows about your expertise, it's hard for opportunities to come knocking. Networking is all about spreading the word and building genuine relationships that can help your career. It isn't just about having a long list of contacts; it's about cultivating relationships with people who truly support you and can help open doors.

Networking can be as simple as striking up a conversation with someone after a meeting or leaving a thoughtful comment on a LinkedIn post. These small interactions can add up over time, building a community around you that recognises your talent and potential. Think of networking like tending to a garden—you plant seeds by reaching out and nurturing those relationships, and eventually, you'll see them bloom into

## JOBS SPOTLIGHT

## Foodpanda

Manager, Strategy &amp; Performance



Deadline: N/A

## Eligibility:

• University degree in Engineering, Statistics, Economics, Business or any other analytical discipline.

Minimum experience: 4-5 years

## Sheltech (Pvt.) Ltd.

Email Marketing Specialist



Deadline: February 25

## Eligibility:

• Bachelor's degree in Marketing, Communications, or a related field, is preferred, with prior experience in a related field.

Minimum experience: 3-4 years

## Healthcare Pharmaceuticals Ltd.



Executive, Commercial

Deadline: March 6

## Eligibility:

• Master's degree in any discipline with prior experience in the relevant field.

Minimum experience: 2-3 years

## Panjeree Publications Ltd.

Executive, Digital Marketing

Deadline: March 12

## Eligibility:

• Bachelor's degree from any reputed university, with previous work experience in digital marketing.

Minimum experience: 2 years

FOR MORE DETAILS AND THE APPLICATION LINKS, SCAN THE QR CODE BELOW.



**"If you turn up worrying about how you're going to perform, you've already lost. Train hard, turn up, run your best, and the rest will take care of itself."**

USAIN BOLT

