

**draw.io**



# Working with diagrams

How diagrams can be used in an organization

# The world is becoming visual

The world is becoming more visual - neither do we have the time nor the attention to read, our visual IQs are increasing faster than ever before, and the majority of us learn visually. Plus it's well known that complex information is easier to understand when presented graphically. Businesses can capitalize on this, and are increasingly using diagrams more widely throughout their organizations.

There are so many diagramming tools available: A huge number and variety of free online tools and desktop software are already used in companies. **But why is it useful to be able to diagram directly within your Confluence instance?**

## Confluence integration

Diagrams (and documents) in development are often shuttled around via email - who knows who has the most recent version! Asking for feedback turns into a dense mountain of email. And what about the employees who should provide input, but are forgotten?

Files and images stored on a shared drive or cloud-based service present similar problems. You can't easily search for diagrams or leave feedback, the folder structure is confusing, and you don't know if the diagram you finally found is the most recent version or not. It makes sense to keep these diagrams and documents in one central place.

Confluence allows you to embed diagrams in context - users will find the diagrams where they expect to find them. To provide the best results, the built-in search function doesn't just index filenames of diagrams, or the title and content of the page containing the diagram, but also the text contained within a diagram.

A diagramming tool for the entire company needs to be seamlessly and fully integrated into the intranet to support collaboration.

## Collaborative diagramming

There are many types of diagrams that can be used in each department and in various cross-department operational groups - human relations, sales and marketing, IT services, software development, project management - let alone their traditional uses in engineering, architecture, landscaping design, urban planning, and so on. Most of these diagrams are collaboratively developed: Project or organizational groups develop and refine plans, and prepare reports and documentation.

Collaborative development completely within an intranet like with Confluence, of both documentation and diagrams, significantly reduces email overload, increases transparency and visibility, and provides clear feedback channels. Ideally, you want to be able to track who has edited a diagram and what changes they made, just like you can track such collaboration on pages within Confluence.



## Revision control

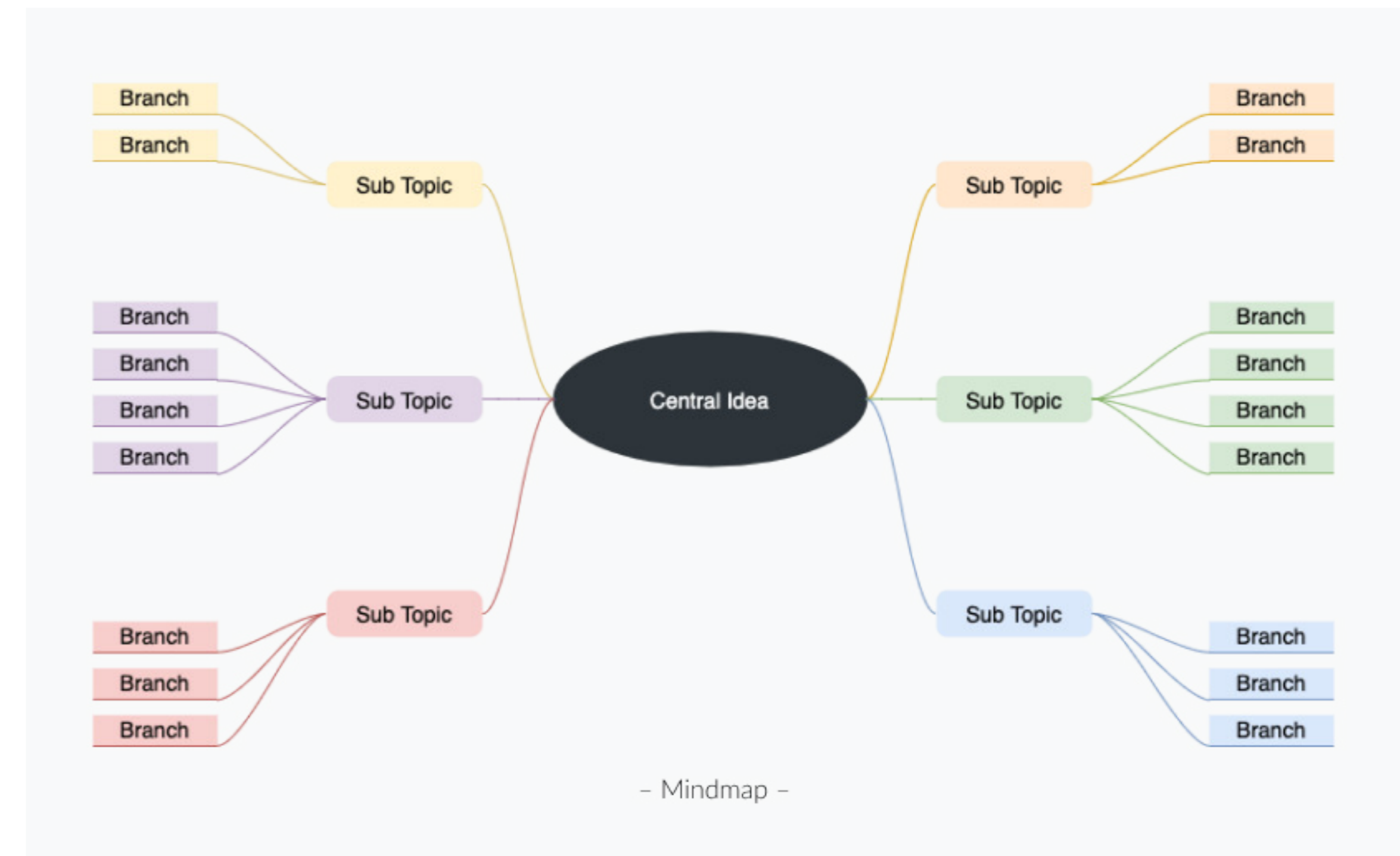
There are many scenarios where you need to track and review each stage of development of both content and diagrams. Many desktop diagramming software programs allow you to undo changes, but only to the point at which the diagram was opened in the software. They don't track changes throughout the lifetime of a diagram, and they certainly don't track changes by multiple editors. If your company is required to keep an audit trail around business and safety procedures, you must be able to record every single change made to diagrams.

Confluence has a mature revision control system: You can see who has made what changes and when, and roll them back. An integrated diagramming tool that supports this built-in versioning, and automatically records all changes to the diagram within the intranet's pages, makes preparing for audits a breeze.

The draw.io add-on is fully integrated into the editing workflow. Every change within a diagram is recorded in the page history when the diagram is saved. You can easily revert to a previous version. Right now, draw.io is the only diagramming tool for Confluence that supports this functionality. This solution fulfills the requirements of ISO standards and audits, which many companies are obliged to meet.

# What types of diagrams are used where?

We won't focus heavily on specialized diagramming applications here, but instead, we will take a look at what types of diagrams can be used in the various departments and organizational groups of a typical business. Of course, you aren't limited to just the diagram types below: draw.io can be used to create infographics, backgrounds for presentations, webpage graphics, and much more.



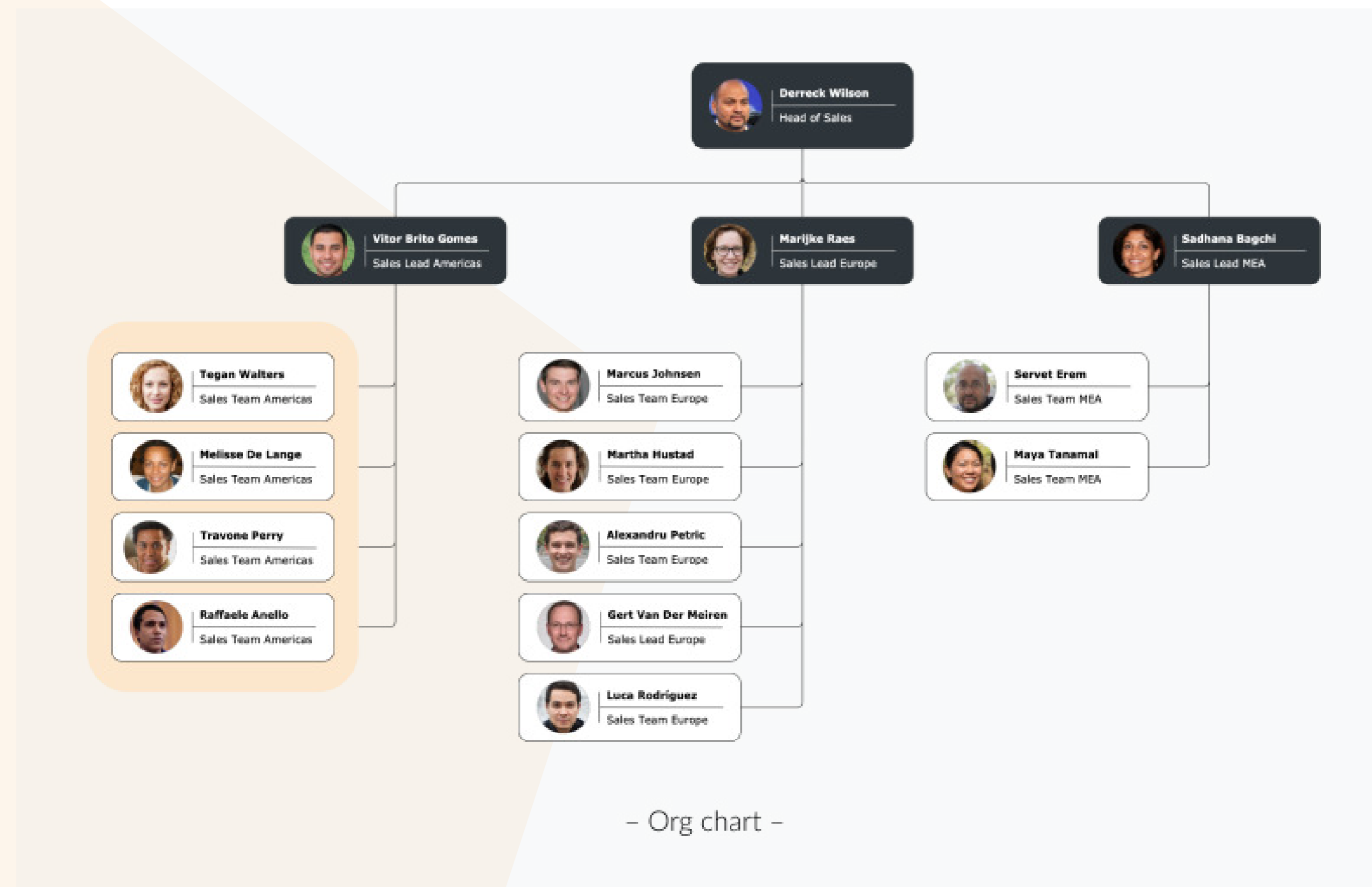
## Mindmaps

Mind maps are one of the most common types of diagrams, and used by a large number of employees, mostly to informally organize their own thoughts.

Although they can be used in any setting, they are most appropriate for use in project planning, documentation and course design, to note stakeholders for projects, or for showing what activities each department or group is responsible for. Mind maps are very flexible, and are perfect for a wide variety of scenarios, especially when developed collaboratively.

# Tree diagrams and organization graphs

Organization charts have been used for decades to show the hierarchy within a company. Organization graphs are slightly different, in that they show more process-oriented relationships between 'silos' within a company. Both are useful to various groups within businesses.



**HR** uses organization charts to bring new employees up to speed on the corporate structure, and to let them know who they can ask for help in various areas.

**Management and project management** use organization graphs to show the relationships and communication channels between stakeholders and groups within a company or project.

**Documentation and training** traditionally use tree diagrams to plan the structure and hierarchy within a book, training manual, or set of training courses.

To illustrate more complex hierarchies and relationships, being able to explore a diagram dynamically is ideal for new employees.

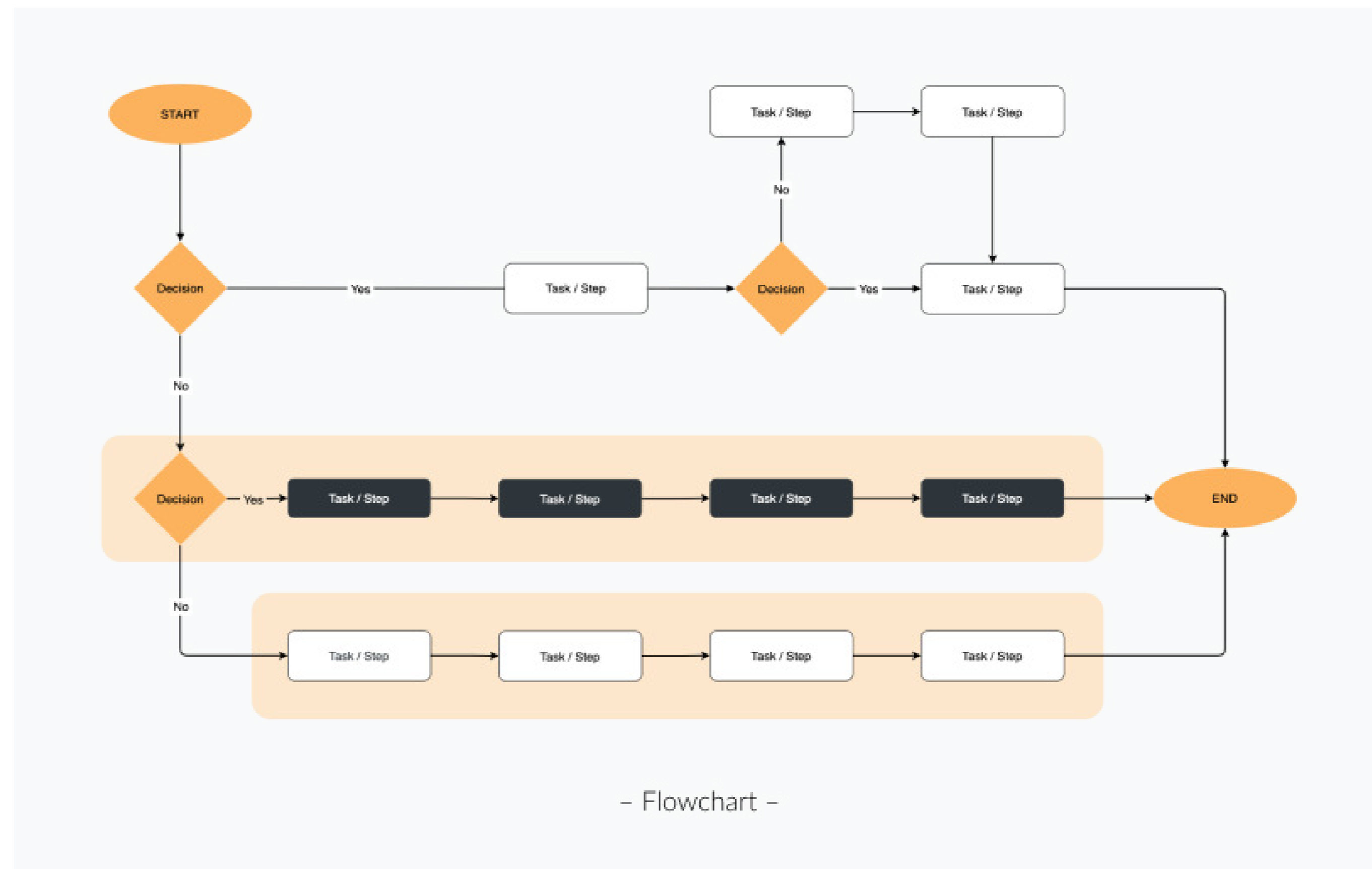
# Flowcharts

Flowcharts help all departments in all industries visualize their workflows and processes. They are often used to help customers identify product errors and solve problems without involving service personnel.

Of course, there are many specialized types of flow charts that are routinely used in various industries. For example:

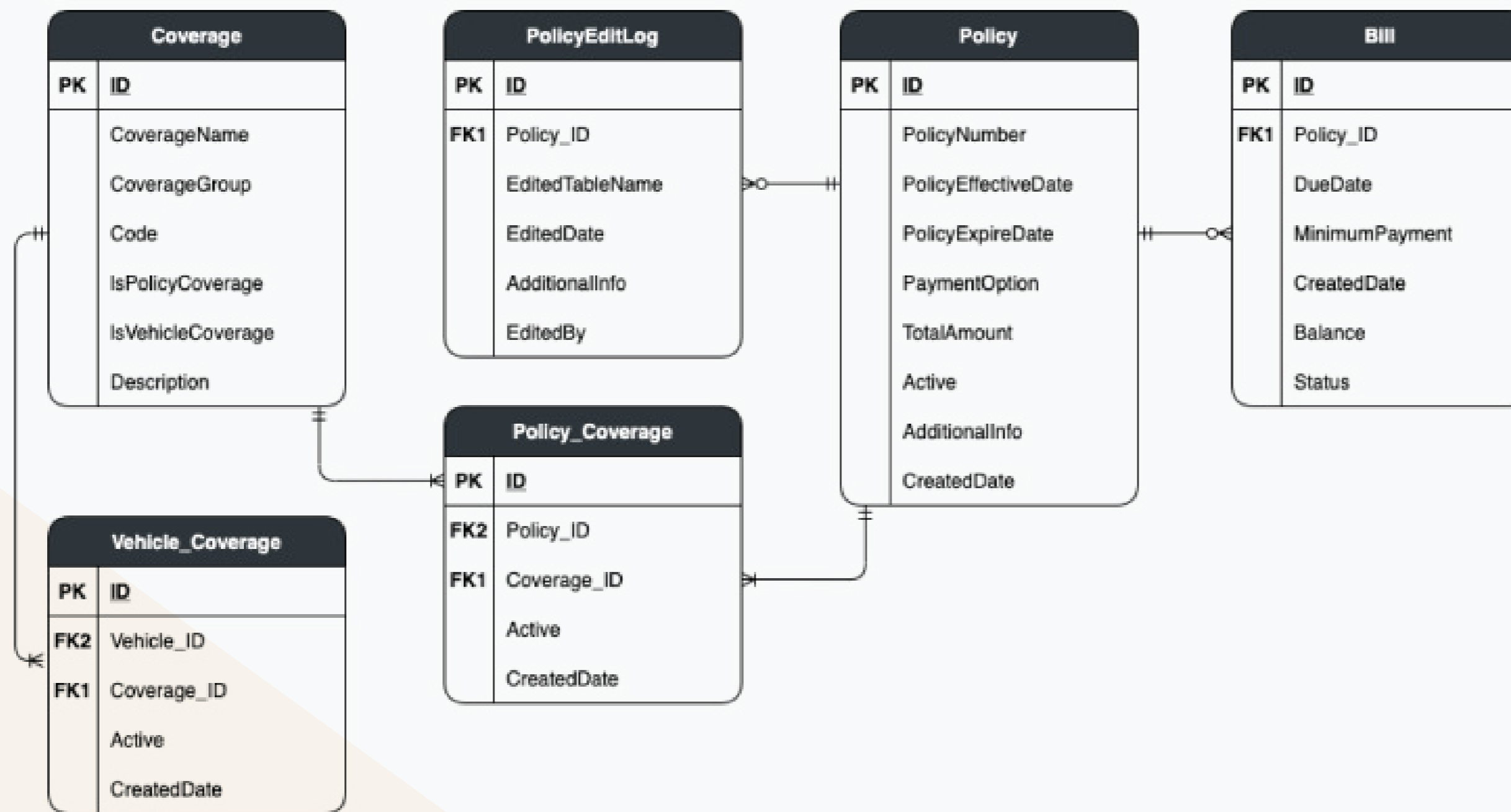
**Business processes and workflows** are explained with BPMN diagrams.

**Software development** uses data flow diagrams to indicate what information is communicated between processes, as well as UML activity diagrams to indicate workflows.



**Industrial engineers** use flow process charts to map the stages in the production of a product, especially when optimizing a process for efficiency. Industrial engineers also use functional flow block diagrams to represent complex multiple flows, documents, dependencies and their relationships.

Control flow diagrams are used in many industries to visualize processes in **project management, configuration management, process management and quality control.**



- Entity-relationship model -

## Relationship models

There are a wide variety of diagrams that show relationships. Although many are used in software engineering and IT, they are also used by management, in project management and a few specialist professions.

**Software engineering** uses entity relationship models and UML class diagrams to visualize complex data structures.

**IT services** use network diagrams to show the relationships within the company's IT infrastructure.

**Database engineers** use such diagrams to represent the abstract data in relational databases.

Venn and Euler diagrams show the logical relationships between data sets. **Management and analysts** use these to explore problems, reason through logic, and compare products, services and processes.

Use case diagrams are used by **project management teams** to show the relationships between actors and use cases, and between different use cases.

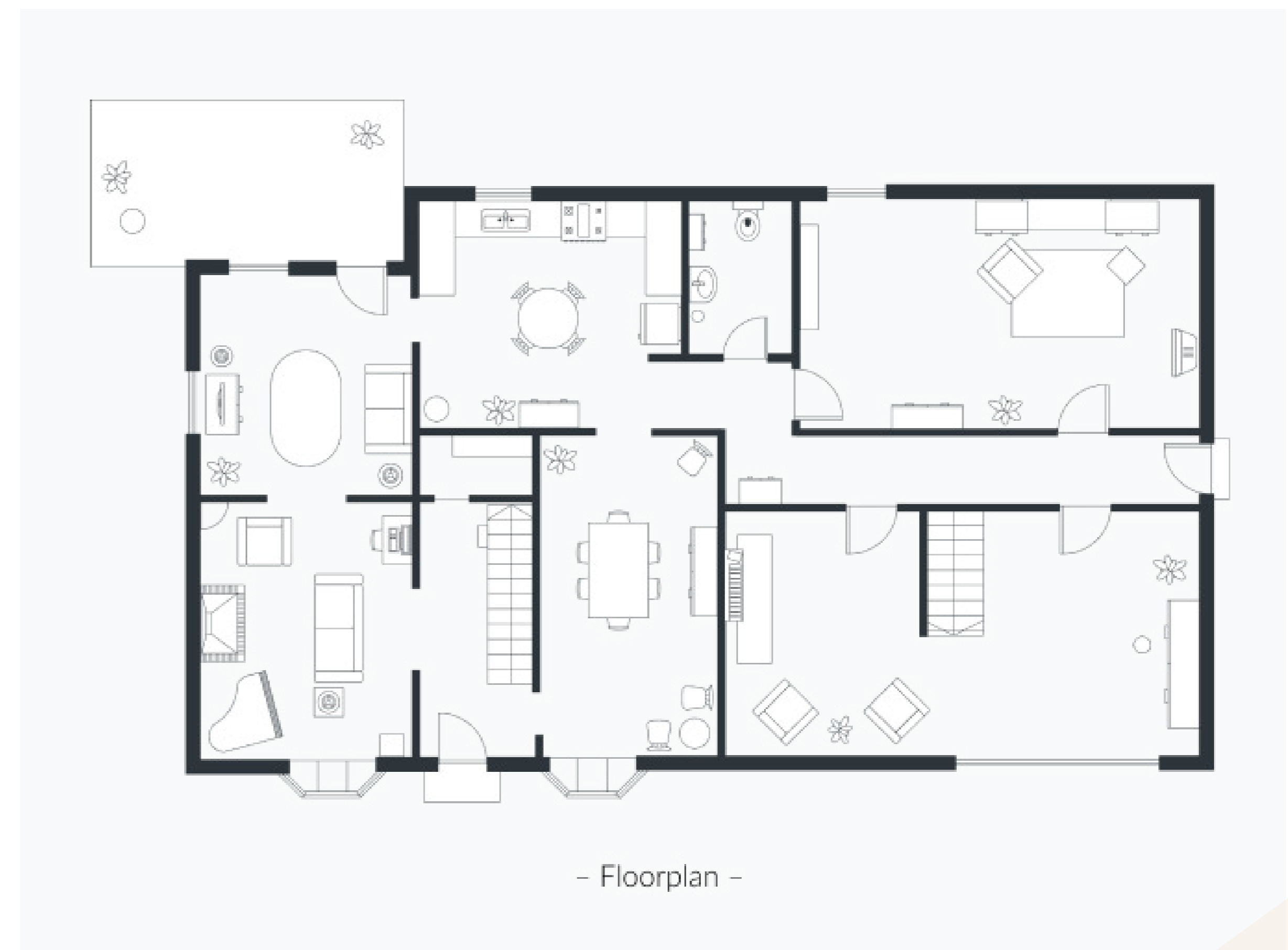
## Maps and floorplans

These are not just created by architects and landscape designers, but also by plant and facility designers or process engineers to optimize factory layouts, conference organizers to specify booth placement, safety officials to indicate evacuation routes, and for simply planning office layouts. Any company with multiple businesses or locations can provide employees with such diagrams, helping them reach their destinations faster.

Floorplans help project teams, management and administrators check that the space they intend to use will suit their needs, before purchasing any equipment, installing wiring or other amenities, knocking down walls, or physically moving any furniture around.

It is important, if not mandatory, that public, retail and warehouse spaces are well designed to deal with the large number of people that will move through the area, and plan for any safety or security considerations.

Circuit diagrams, rack diagrams, and other schematics used in various fields of engineering and IT are some examples of more specialized plans.





# Wireframe models and mockups

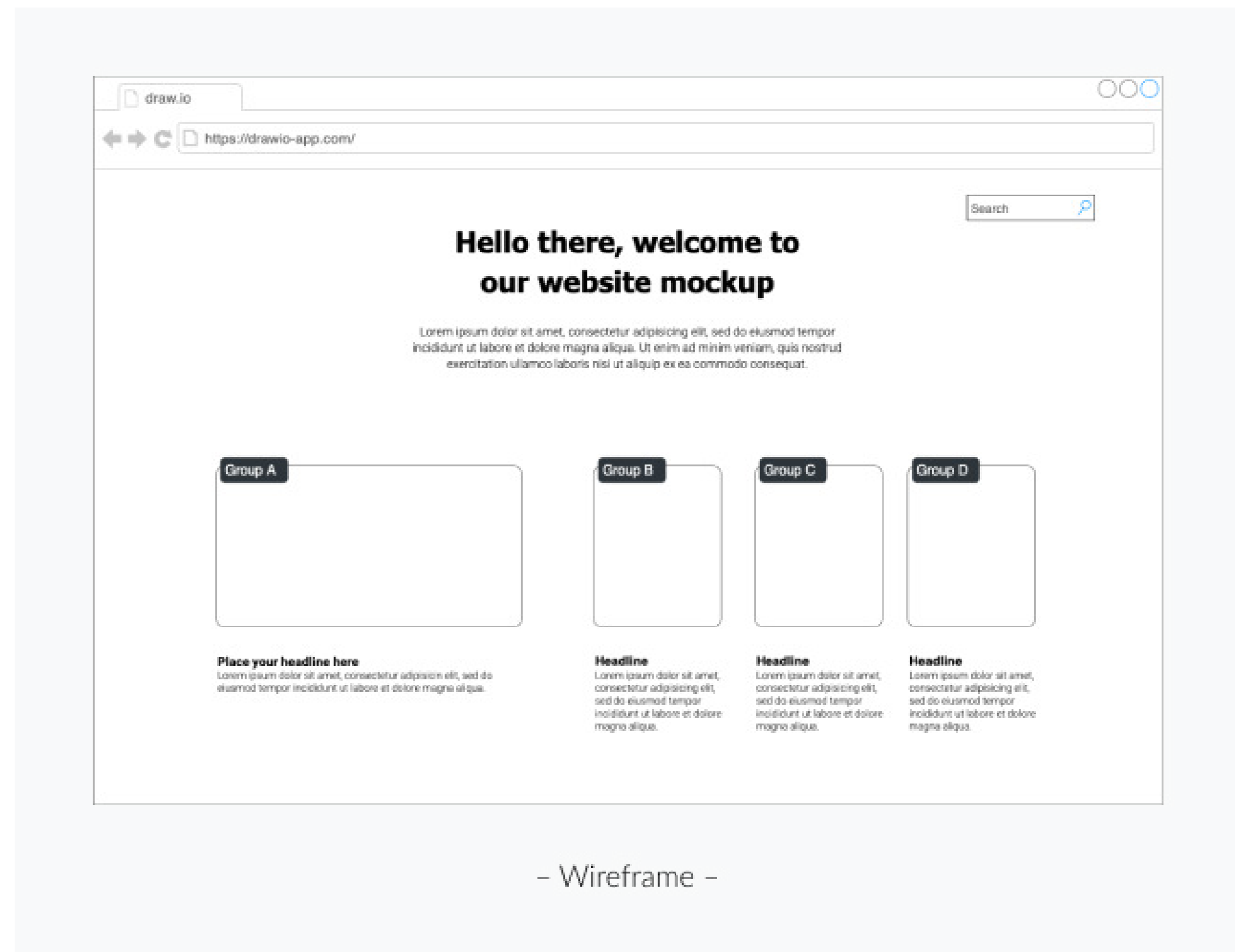
Development in all industries is under pressure to both move more rapidly, and create products that are more usable for consumers. This is why wireframe models and mockups of interfaces are becoming more heavily used.

**Designers** use wireframe models and mockups when they develop websites or other graphic-intensive content for print or other media.

**Template designers** use these diagrams when prototyping office document or website templates.

**Software engineers** use these types of diagrams to explore interface options.

Use case diagrams are used by **project management teams** to show the relationships between actors and use cases, and between different use cases.



# draw.io for everyone

If you are a software engineer, project manager, retailer, designer, office assistant, or manager, or if you work in any of the specialized professions mentioned above, draw.io lets you create the diagrams you need.

You can add your own custom libraries with your own shapes and graphics, if the comprehensive shape libraries built into draw.io don't have the specific elements you require.

When integrated with Confluence, draw.io enables you to collaborate on all of these diagrams with your colleagues, and do that without losing any data because of the built-in comprehensive revision history. Plus you can easily find diagrams throughout your company's intranet using the built-in search function that also looks at any text within your diagrams.

By making draw.io available to everyone in your company, along with Confluence, you enable all teams in all departments to take advantage of the increasing power of diagramming to work faster and better than ever before.

