

Hand-Drawn Looking Charts

Amogh Ratna Manandhar and Chukwuemeka Nsofor

Information Visualisation SS 2026, Group 1

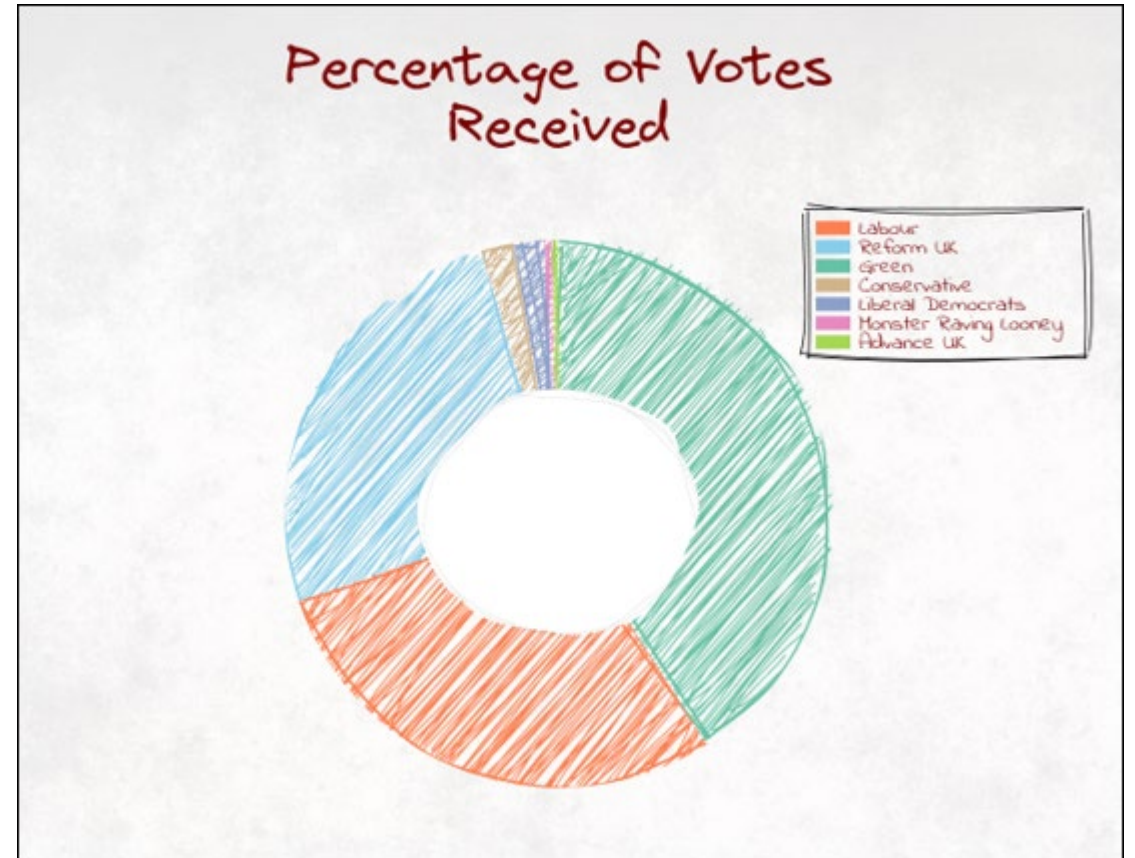
06 May 2026

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What Are Hand-Drawn Looking Charts?

- Doodle-like shapes and arrows.
- Casual or sketch-like appearance.
- Rough, uneven lines.
- Charts that look hand drawn.



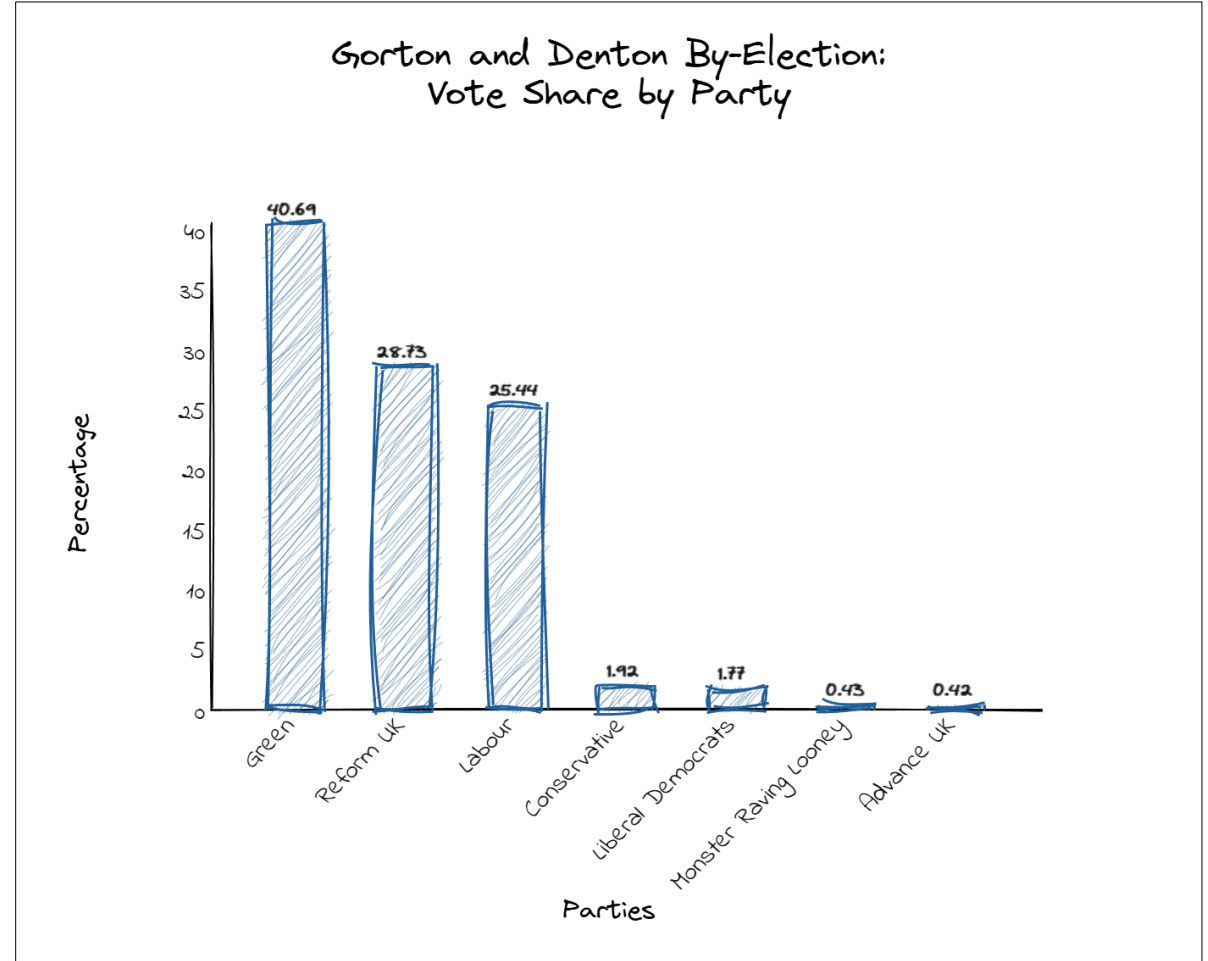
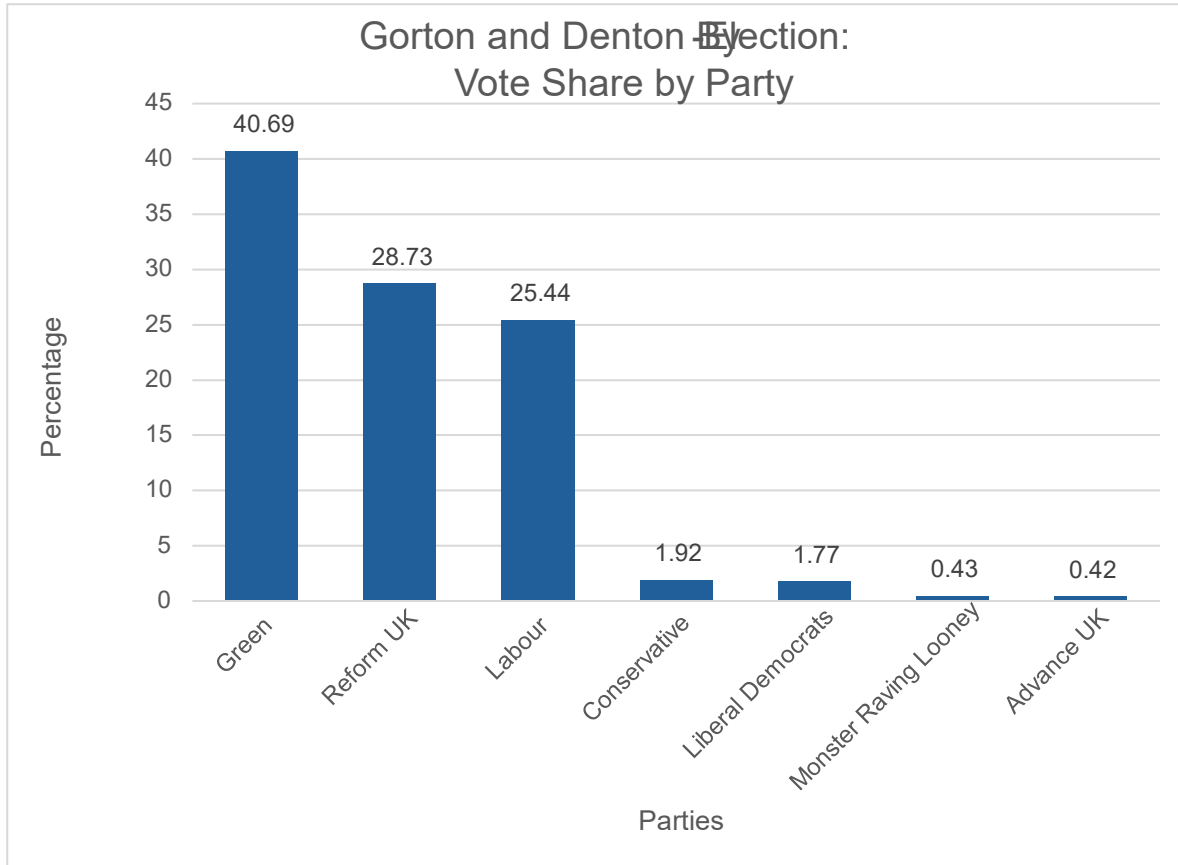
Source: Donut chart created using Gorton and Denton By-Election Results, 26 Feb 2026 data from https://manchester.gov.uk/directory_record/538292/parliamentary_gorton_and_denton_by-election_-_26_february_2026 in DrawCharts by the authors.

Why Use Hand-Drawn Looking Charts?

- Grab attention.
- Resist the impression of absolute truth.
- Look approachable.

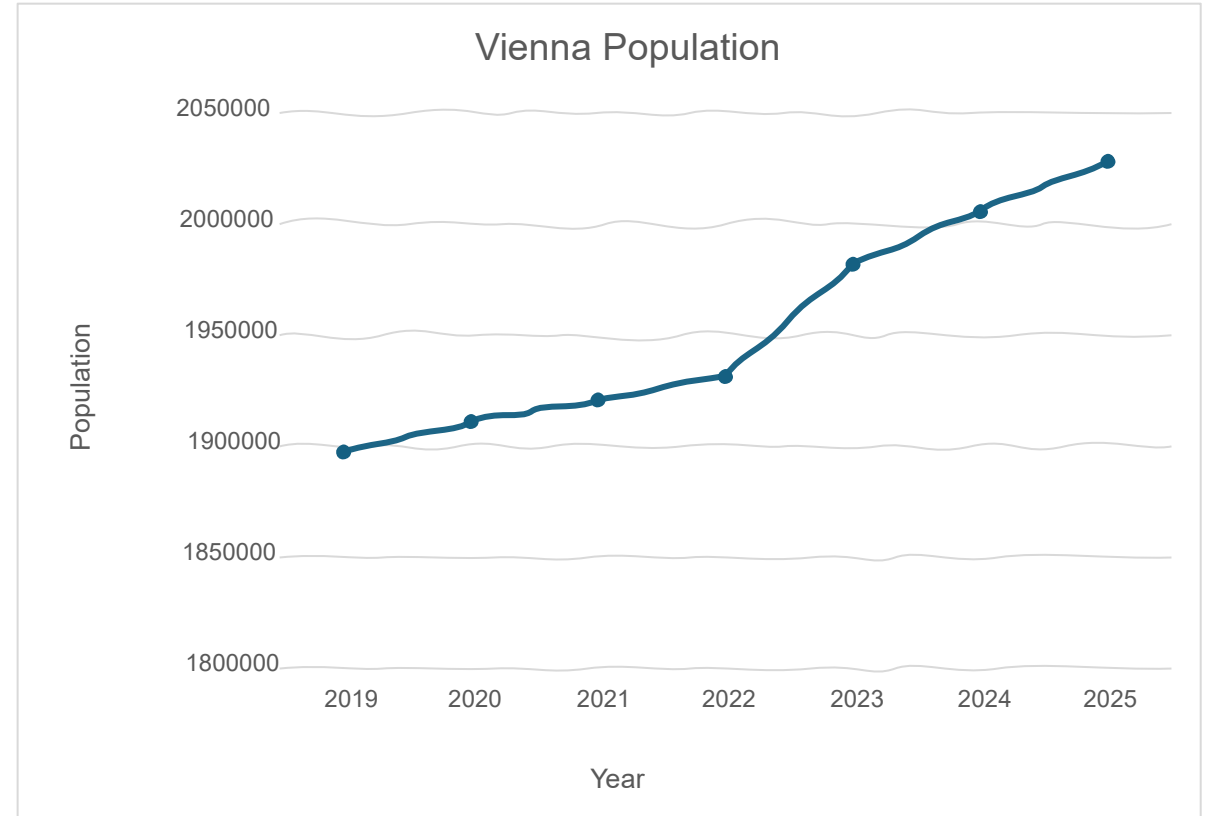
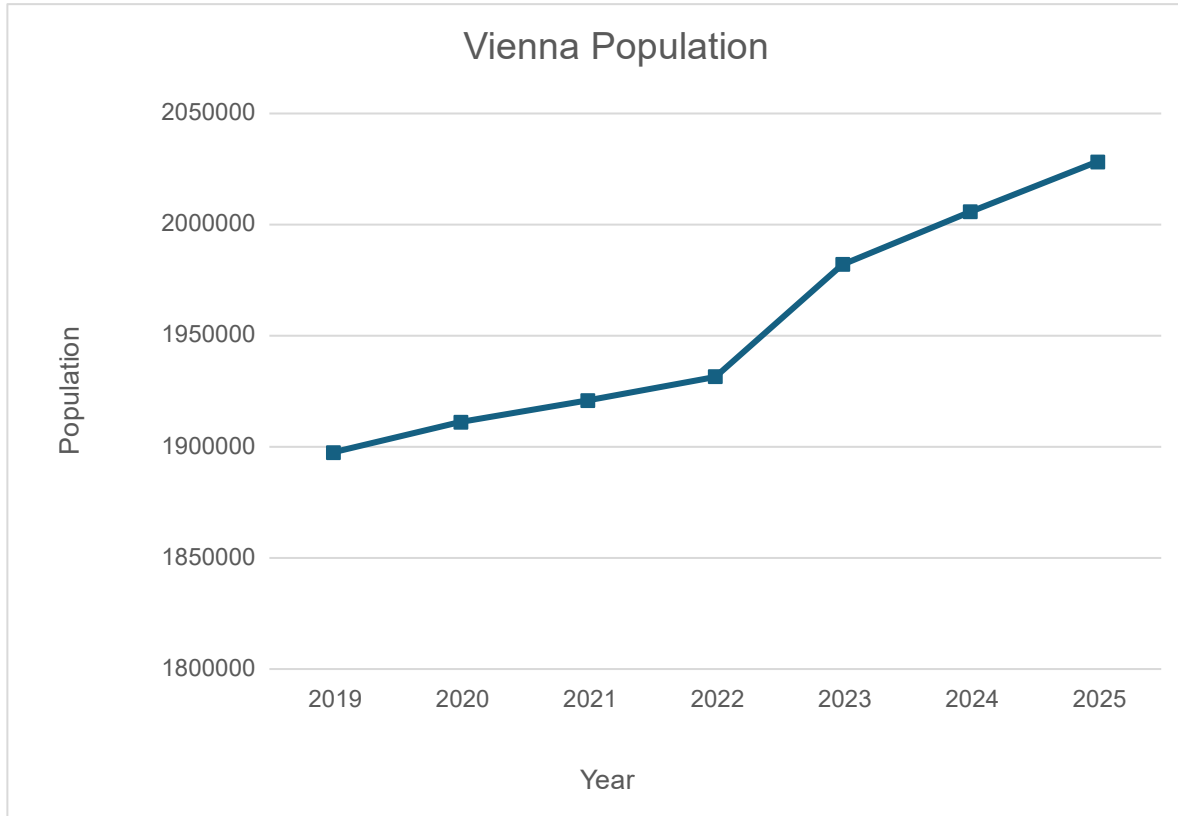
Examples of Hand-Drawn Looking Charts

Bar Chart



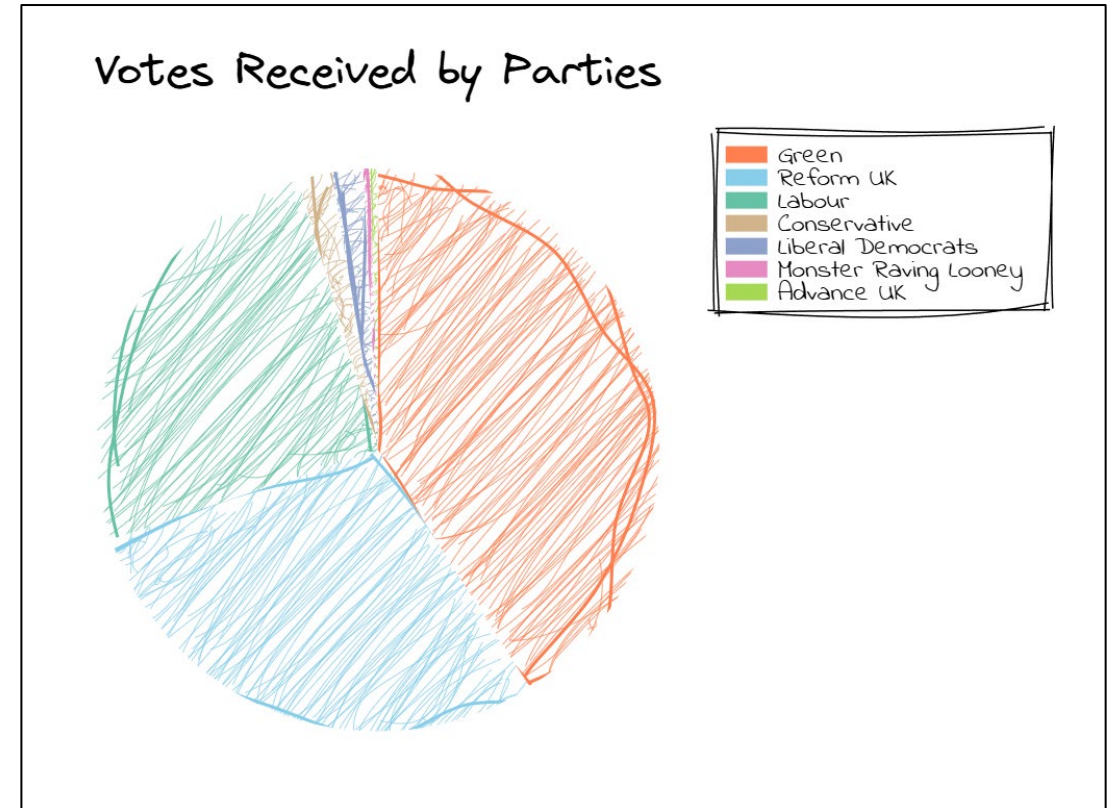
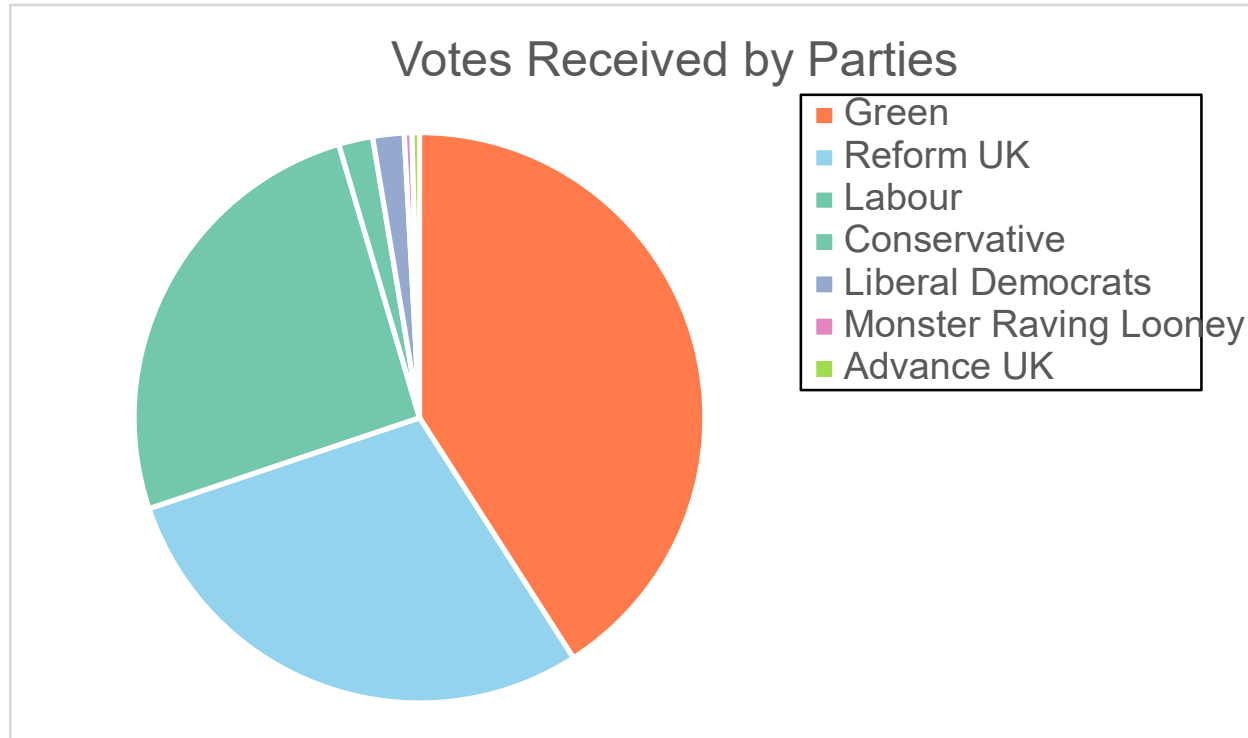
Source: Bar charts of Gorton and Denton By-Election Results, 26 Feb 2026, data from https://manchester.gov.uk/directory_record/538292/parliamentary_gorton_and_denton_by-election_-_26_february_2026. Left chart made in Excel and right chart made in DrawCharts by the authors.

Line Chart



Source: Line graph of Vienna population data from <https://www.wien.gv.at/statistik/bevoelkerungsstand>. Both charts made in Excel by the authors.

Pie Chart



Source: Pie charts of Gorton and Denton By-Election Results, 26 Feb 2026, data from https://manchester.gov.uk/directory_record/538292/parliamentary_gorton_and_denton_by-election_-_26_february_2026. Left chart made in Excel and right chart made in DrawCharts by the authors.

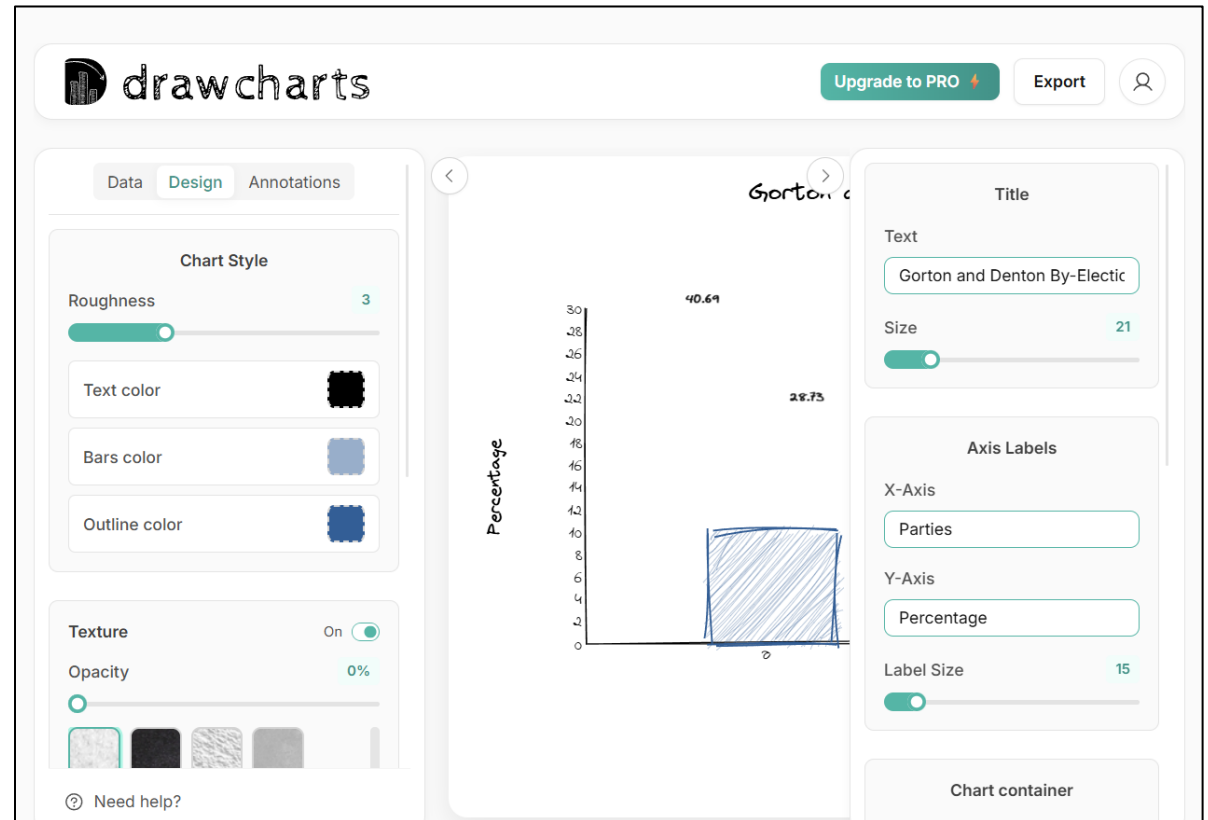
Making Hand-Drawn Looking Charts

- *Chart Editors* : DrawCharts, Chartle.
- *Illustration Tools* : draw.io, Excalidraw.
- *Post-Processing Tools* : Adobe Illustrator, Inkscape.
- *Libraries* : Rough.js, roughViz.
- *Other Tools* : Excel, PowerPoint.

Chart Editors

DrawCharts

- Free with Pro option.
- Roughness slider (0 to 10): 0 normal, 10 very rough.
- Import CSV (Pro).
- Export as SVG (Pro), JPEG, PNG.
- drawcharts.xyz

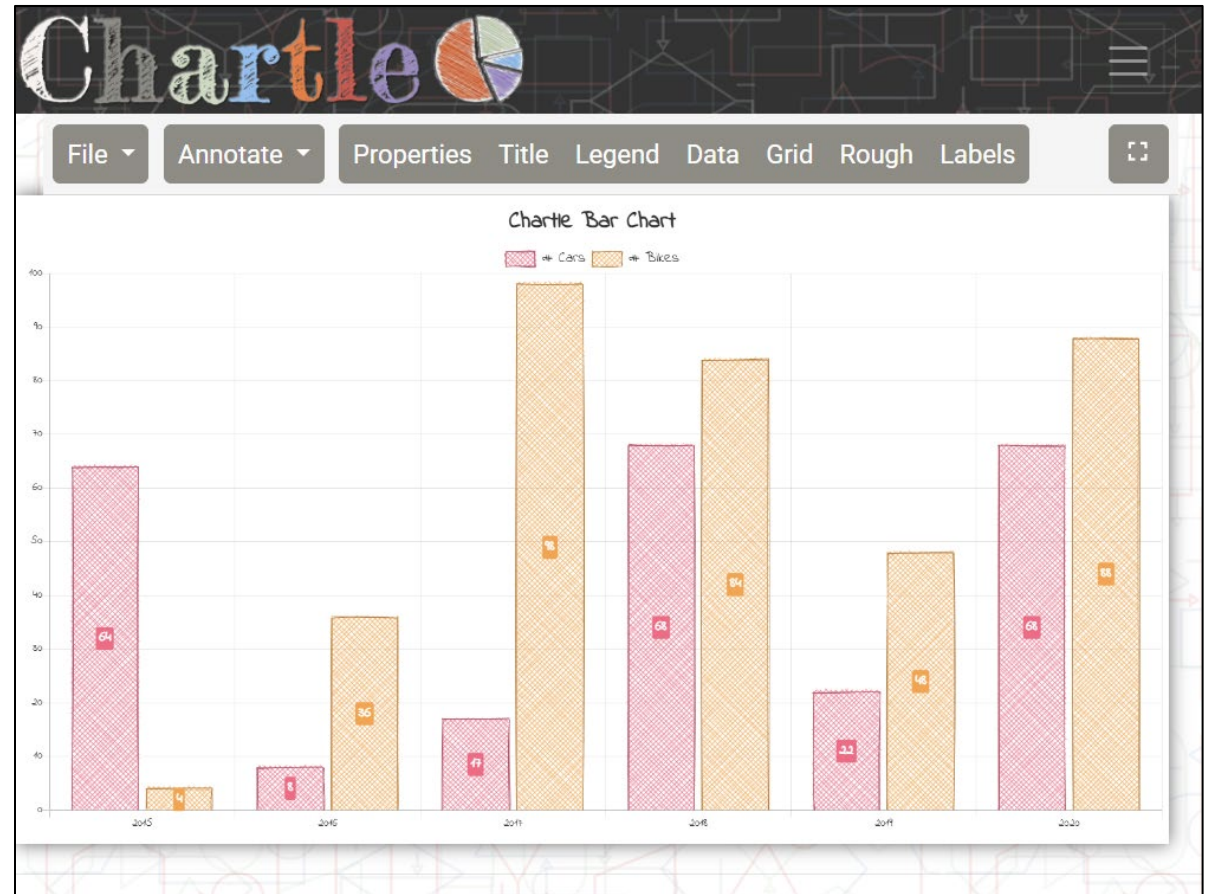


Source: Screenshot taken from DrawCharts by the authors.

Showcase Video: <https://youtu.be/2IcFVo0Xy4w>.

Chartle

- Free to use.
- Toggle roughness and change rough level.
- Multiple fill styles, fill density, pattern angle, pattern gap.
- Import CSV.
- Export as JPEG, PNG, WebP.
- chartle.com



Source: Screenshot taken from Chartle by the authors.

Showcase Video: <https://youtu.be/xUWDc-ACw28>.

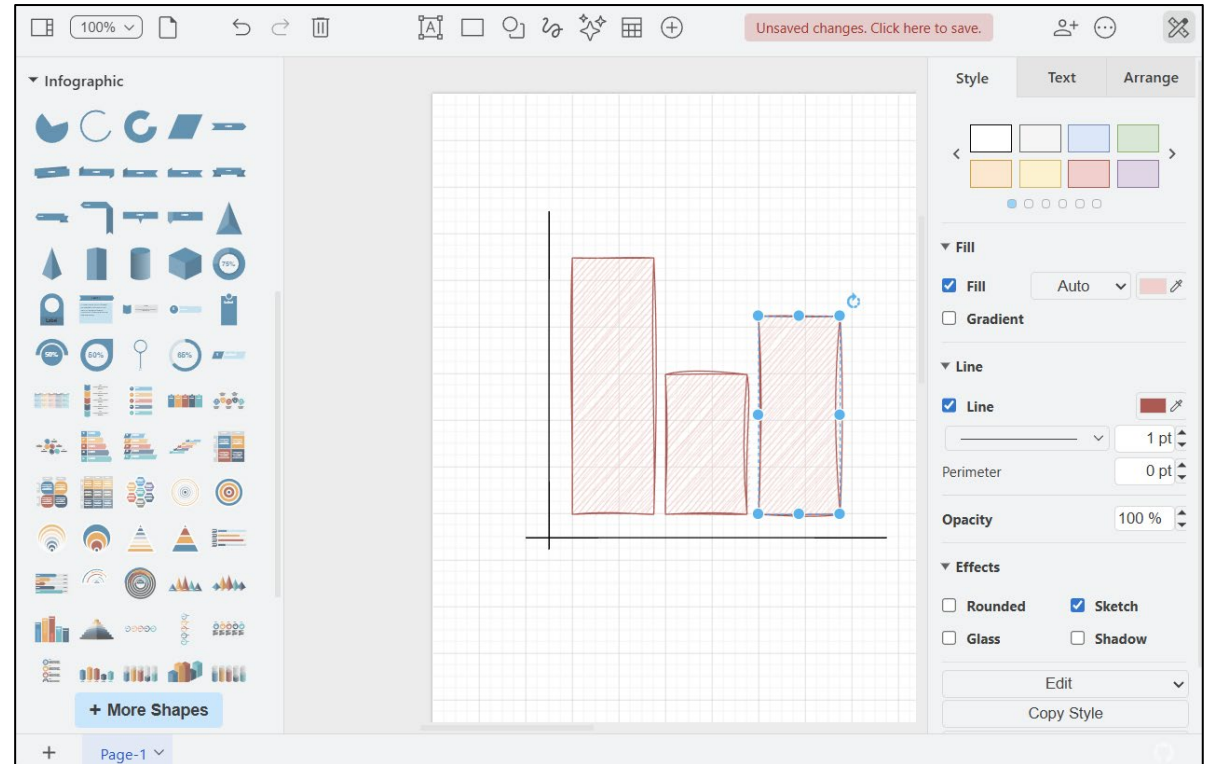
Comparison of Chart Editors

Feature	DrawCharts	Chartle
Change Roughness	✓	✓
Toggle Hand-Drawn Look	✓	✓
Fill Customisation	✗	✓
Freehand Drawing	✓	✓
Import CSV	✓ [Premium]	✓
Export SVG	✓ [Premium]	✗
Licence / Business Model	Free/Premium	Free
Open Source	✗	✗

Illustration Tools

Draw.io

- Free to use.
- Hand-drawn style toggled by “Sketch” flag.
- Customise: jiggle, hachure gap, hachure angle, multi-stroke, comic style, etc.
- Export as SVG or PNG.
- drawio.com

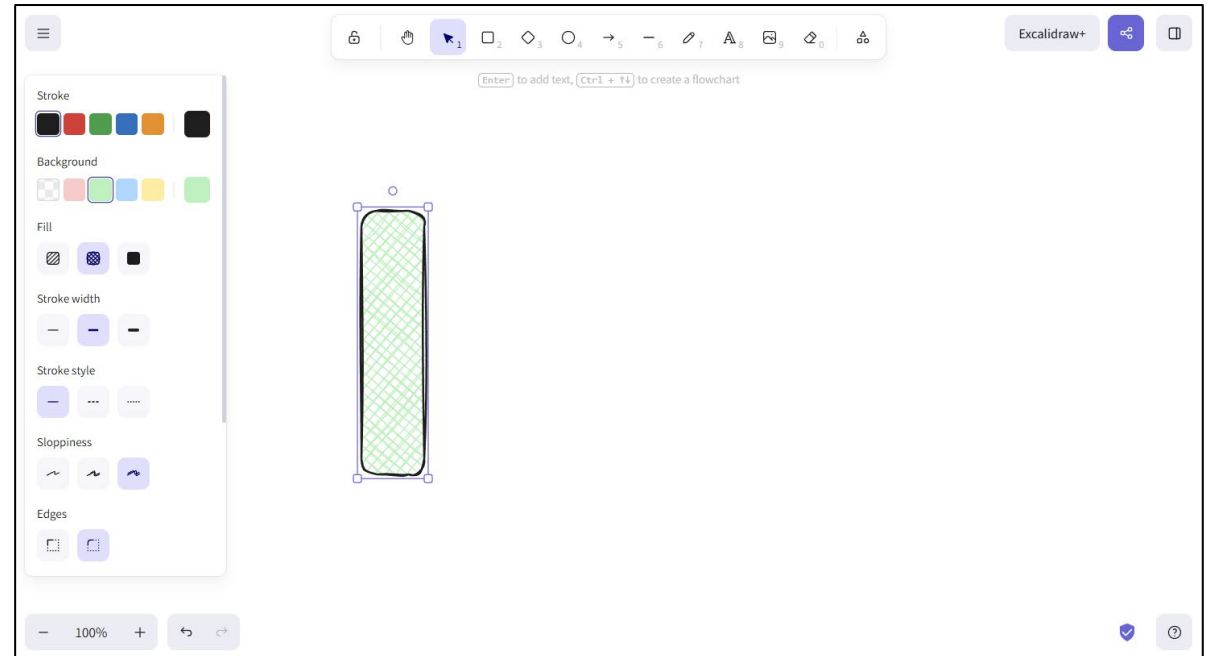


Source: Screenshot taken from draw.io by the authors.

Showcase Video: <https://youtu.be/NdPKUDxw8Bs>.

Excalidraw

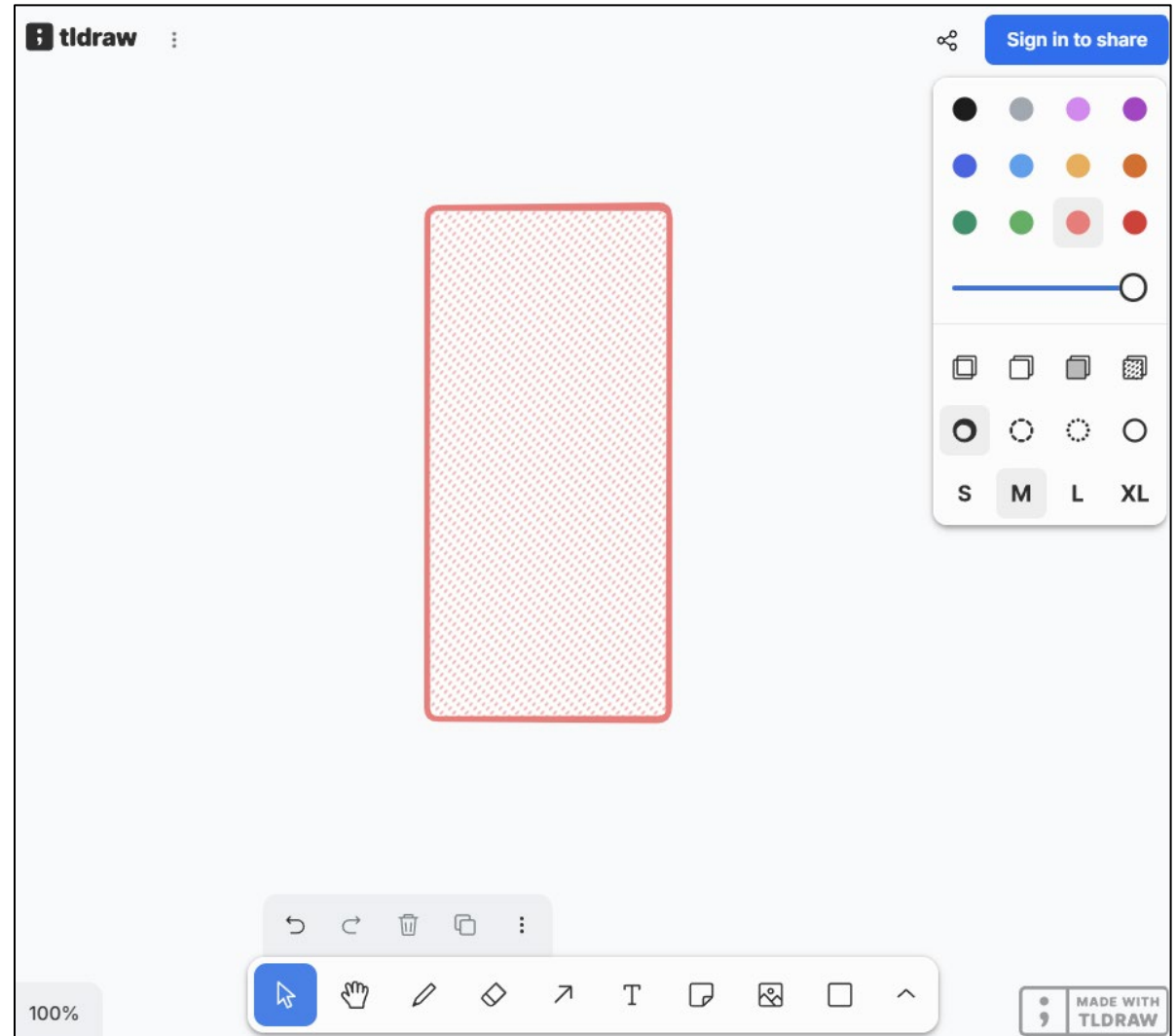
- Free to use with premium option (plus).
- Hand-drawn style toggled with the “Sloppiness” option.
- Customise: fill, stroke.
- Excalidraw library : Data Viz
- Export as SVG or PNG.
- excalidraw.com



Source: Screenshot taken from Excalidraw by the authors.

Tldraw

- Free to use.
- Hand drawn look is subtle.
- Stroke style change with "Draw" or "Dash".
- Export as SVG or PNG.
- tldraw.com



Source: Screenshot taken from tldraw by the authors.

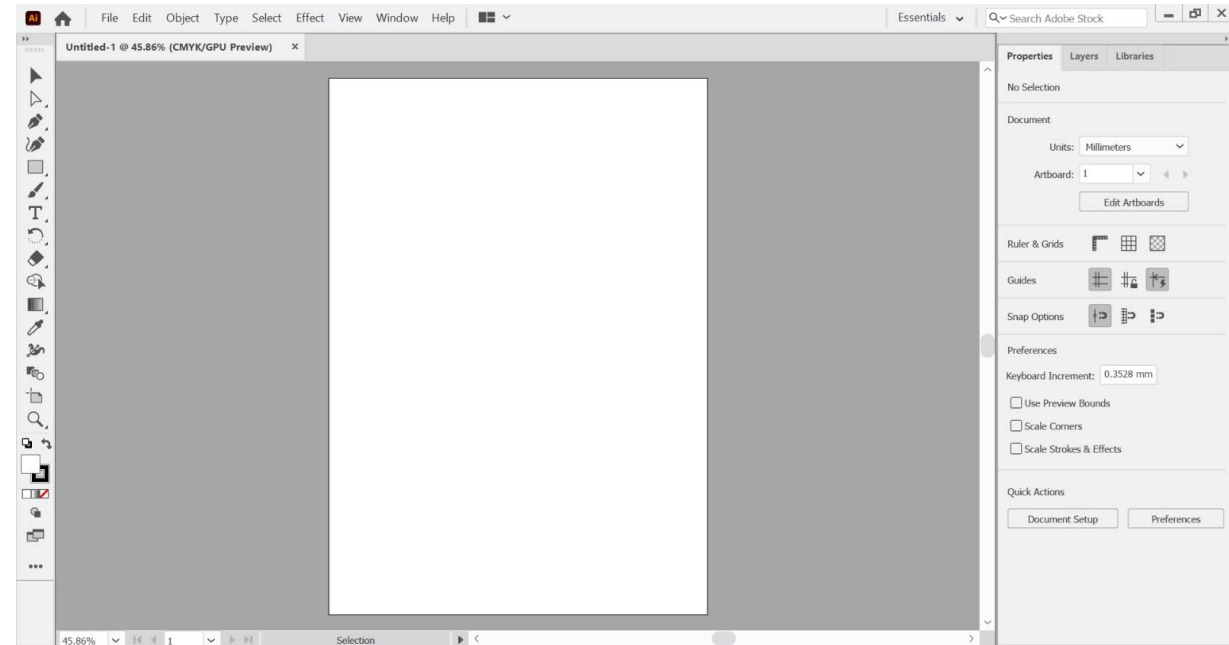
Comparison of Illustration Tools

Feature	draw.io	Excalidraw	tldraw
Change Roughness	✓	✓	✗
Toggle Hand-Drawn Look	✓	✓	✓
Export SVG	✓	✓	✓
Freehand Drawing	✓	✓	✓
Chart Library	✗	✓	✗
Open Source	✓	✓	✗

Post-Processing Tools

Adobe Illustrator

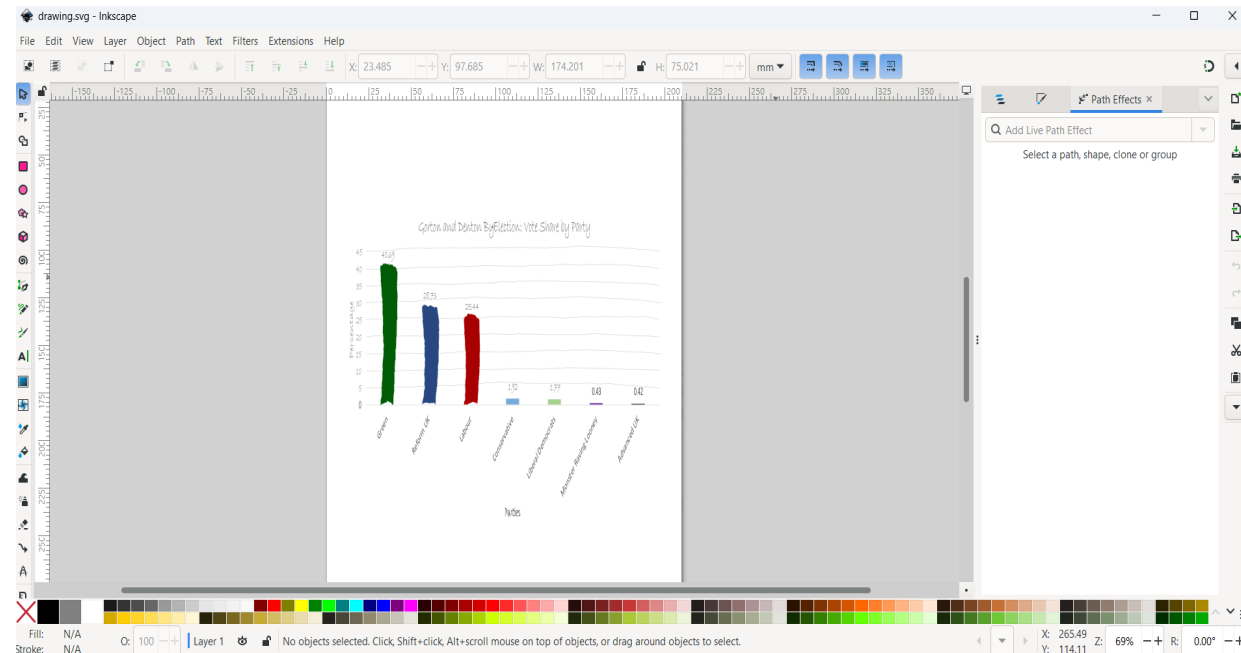
- Paid (subscription via Adobe) – No free version.
- Can import SVG/PNG and apply effects (e.g., Roughen, artistic brushes) to modify existing graphics into a rough, hand-drawn style.
- Full control over vector design.
- Custom brushes for hand-drawn or sketch effects.
- Advanced stroke, dash, and path tools.
- Export as SVG, PNG, PDF.



Source: Screenshot taken from Adobe Illustrator desktop app by the authors.

Inkscape

- Free and open-source (no subscription required).
- Can import SVG/PNG and use path effects (e.g., Roughen, Jitter) and filters to transform existing graphics into a rough, sketch-like appearance.
- Full control over vector design.
- Custom brushes and path effects for sketch-style drawings.
- Advanced node editing, stroke, and path tools.
- Export as SVG, PNG, PDF.



Source: Screenshot of Inkscape desktop app by the authors.

Comparison of Post-Processing Tools

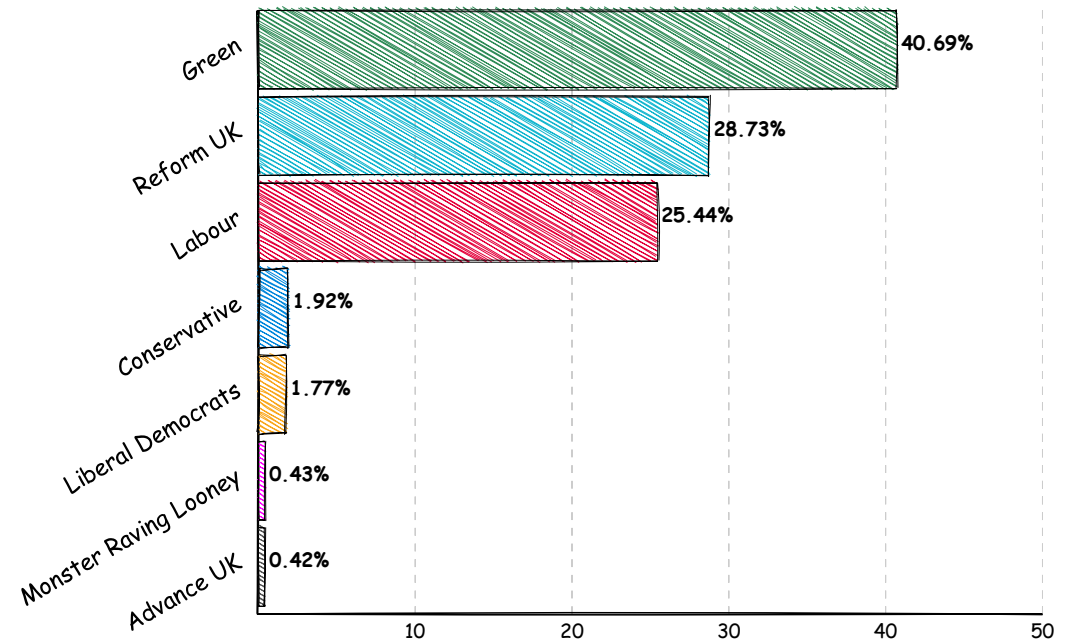
Feature	Adobe Illustrator	Inkscape
Change Roughness	✓	✓
Toggle Hand-Drawn Look	✗	✗
Export SVG	✓	✓
Freehand Drawing	✓	✓
Predefined Shapes	✓	✓
Open Source	✗	✓

Libraries

Rough.js

- Create hand-drawn looking elements like lines, rectangles.
- <https://github.com/rough-stuff/rough/wiki>
- Not specialized for charts.
- Roughness (0 to 10): 0 normal, 10 very rough.
- MIT license

Percentage of votes for top seven parties

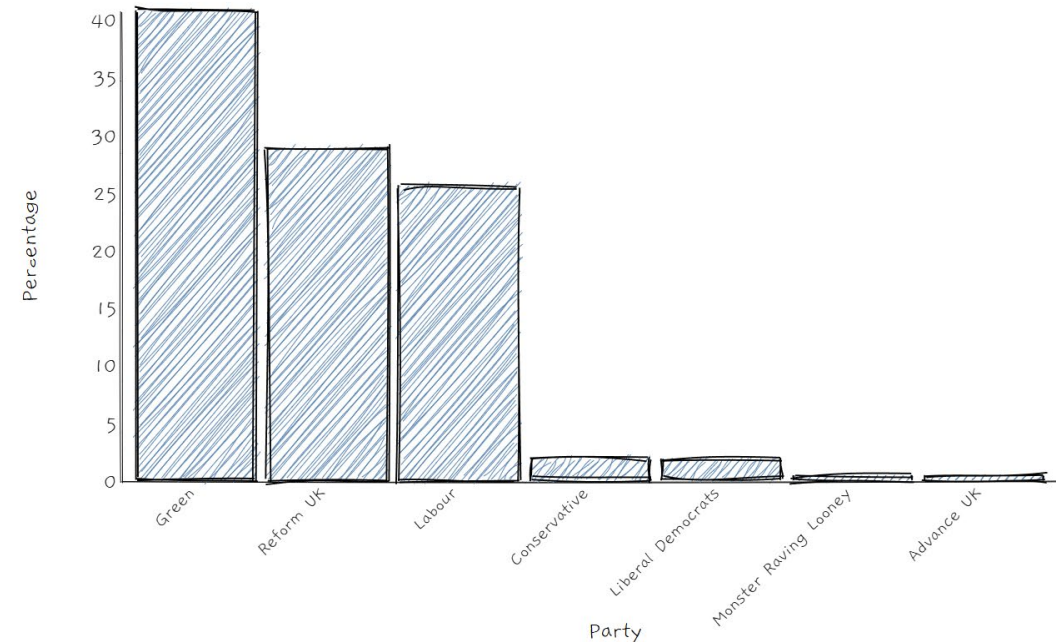


Source: Bar chart of Gorton and Denton By-Election Results, 26 Feb 2026, data from https://manchester.gov.uk/directory_record/538292/parliamentary_gorton_and_denton_by-election_-_26_february_2026 created using Rough.js by the authors.

roughViz

- Uses D3 and Rough.js .
- Built-in classes for charts.
- Roughness (0 to 10): 0 normal, 10 very rough.
- Tooltips and hover effects support
- Supports CSV through D3.
- MIT license

Votes Received by Party

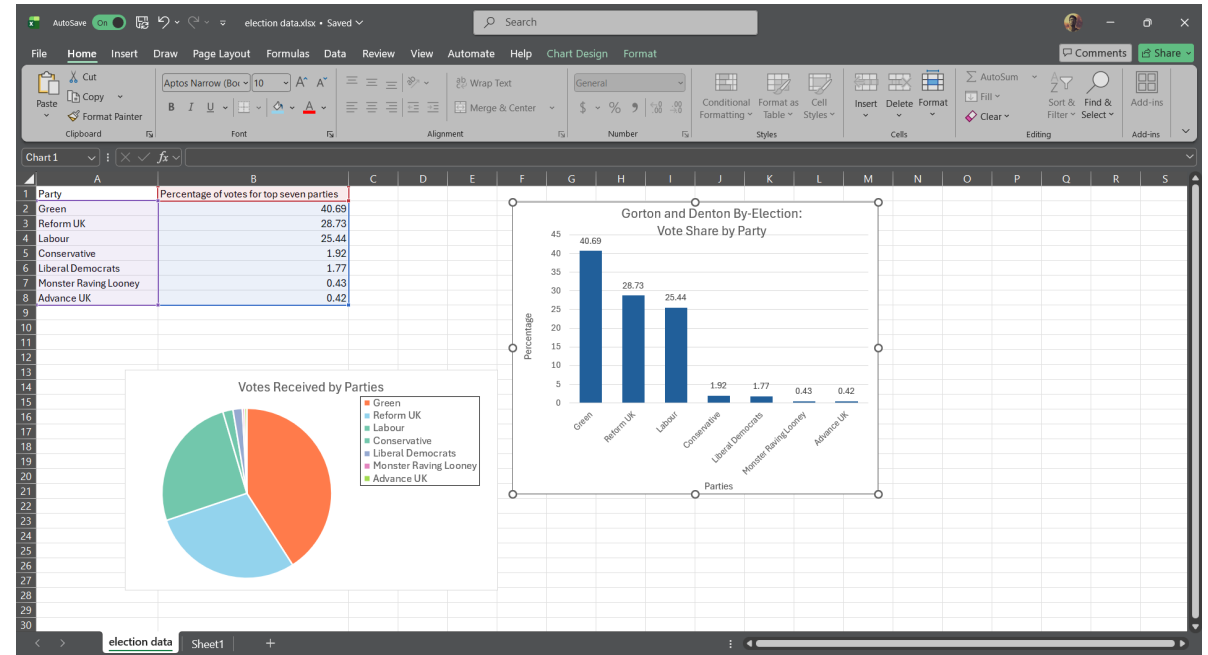


Source: Bar chart of Gorton and Denton By-Election Results, 26 Feb 2026, data from https://manchester.gov.uk/directory_record/538292/parliamentary_gorton_and_denton_by-election_-_26_february_2026_created_using_Rough.js made by the authors using roughViz.

Other Tools

Excel

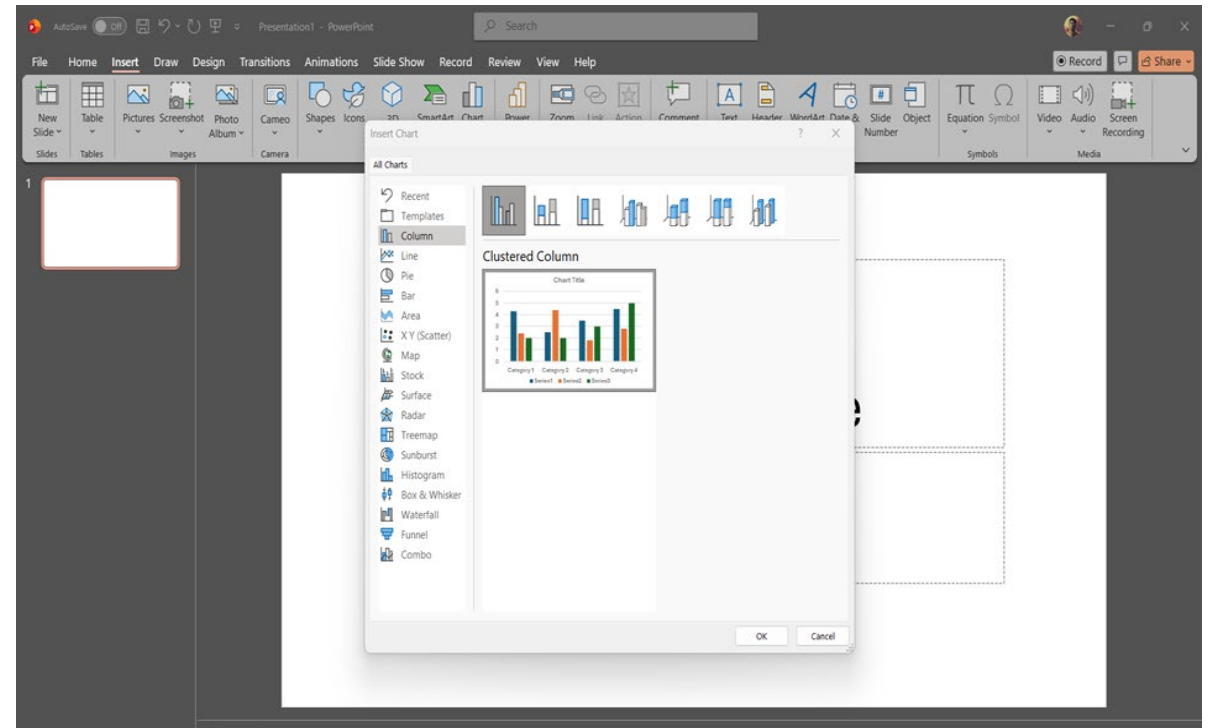
- Enter, select data and create chart.
- Change roughness by "Sketch" option value.
- Change fill style with pattern fill.
- Export in SVG, PNG, JPEG



Source: Screenshot taken from Excel by the authors.

PowerPoint

- Enter data and create chart.
- Change roughness by “Sketch” option value.
- Change fill style with pattern fill.
- Export in SVG, PNG, JPEG.



Source: Screenshot taken from PowerPoint by the authors.

Comparison of Other Tools

Features	Excel	PowerPoint
Change Roughness	✓	✓
Toggle Hand-Drawn Look	✓	✓
Export SVG	✓	✓
Import Data from Files	✓	✓
Predefined Shapes	✓	✓

Questions?