

# Design System (v5) – Mimica Analytics Platform

## Clone & Extension

This design system defines the visual language, components and interaction patterns needed to replicate Mimica's Mapper UI and extend it with cross-region analytics. It draws inspiration from the existing platform: clean layouts, pastel colours, clear hierarchy and minimal clutter.

### 1. Design Principles

1. **Consistency** – Use a single font family and consistent spacing; align cards and charts in a grid. All icons, buttons and charts follow the same design language.
2. **Clarity** – Present information hierarchically with clear labels and legends. Avoid visual noise; emphasise key metrics with larger font sizes and contrasting colours.
3. **Efficiency** – Provide quick navigation with search, filters and tabs. Use tooltips and hover interactions to reveal details without overwhelming the user.
4. **Accessibility** – Ensure colour contrast meets WCAG 2.1 AA. Support keyboard navigation and screen-reader labels. Provide alt text for charts and icons.
5. **Responsiveness** – The layout should adapt gracefully to different screen sizes. Use a 12-column grid with breakpoints at 640 px, 768 px and 1024 px.

### 2. Colour Palette & Typography

Token	Hex	Usage
primary-blue	#1E88E5	Primary actions, selected state
secondary-green	#4CAF50	Success indicators (Automatable, High)
warning-orange	#FB8C00	Warnings (Medium ease, bottlenecks)
info-purple	#8E24AA	Secondary accents (variant labels)
neutral-light	#F5F5F5	Background panels, cards
neutral-dark	#212121	Primary text
neutral-grey	#757575	Secondary text

- **Typography** – Use **Inter** or **IBM Plex Sans**. Titles: 24 px bold; subtitles: 16 px medium; body text: 14 px regular; captions: 12 px. Line height 1.4× font size.
- **Spacing** – Base unit of 4 px. Small gap 8 px, medium 16 px, large 24 px.

## 3. Component Library

We build upon **21st.dev** components as the primary UI toolkit; fallback to **shadcn/ui** for missing primitives. This section defines custom components and their behaviour.

### 3.1 Process List Table

- **Columns:** Process name (with version tag), Ease (label with colour-coded badge), Automatability (badge), Time Spent (numerical). Column sorting and search bar included.
- **Row States:** Hover highlight; selected row highlighted with `primary-blue` left border.
- **Interactions:** Clicking a row opens the summary panel.

### 3.2 Summary Panel

- **Layout:** Card with sections separated by dividers. Top row for metadata; middle for key metrics (Time Saved, Automatability rating, SMEs); bottom for charts and counts.
- **Widgets:**
- **Time Saved Card:** Large number (bold 32 px) with subtitle ("hrs/y"). Sub-labels: Automatability rating, Per SME/day, Number of SMEs.
- **Ease of Deployment Gauge:** Semi-circular progress bar segmented into categories (Actions, Virtualised Actions, Structured Inputs, Semi-structured Inputs). Use 21st.dev gauge component or custom SVG.
- **Counts Grid:** Small cards for Actions, Inputs, Decisions, Applications, Websites, Decision Paths; each with number and label.
- **Donut Charts:** Two donut charts – Applications (top 4 categories and "Other") and Websites. Use 21st.dev chart component or `react-chartjs-2`. Each slice labelled and coloured using palette.

### 3.3 Tabs & Navigation

- **Top Tabs:** Within the summary panel, include tabs such as "Summary", "Map", "Variants", "Bottlenecks", "Analytics". Use primary colour for active tab and underline indicator. Tabs change the main content region without page reload.
- **Sidebar:** Left side persistent navigation listing modules (Miner, Mapper, Measure, Analytics) and processes. Collapses on smaller screens.

### 3.4 Process Map & Flowchart

- **Canvas:** Use `react-flow` or similar library to render directed graphs. Nodes shaped as rectangles or diamonds; colour nodes by automata score or step type.
- **Toolbar:** Zoom in/out, fit to screen, toggle variant overlay, toggle transaction paths. Provide a legend explaining colours and shapes.
- **Step Details Panel:** Slide-out card on right; shows step name, automata score (badge), average duration, variance, decision outcome distribution and a screenshot placeholder. Include an "Add description" field for user notes.
- **Interaction:** Hovering over a node highlights it; clicking selects and opens details. Multi-select to compare steps across variants.

### 3.5 Dashboard Charts

- **Region Comparison:** Vertical bar chart showing average cycle time per region; interactive filtering when clicking bars.
- **Variant Distribution:** Stacked bar chart; region on x-axis, variant counts on y-axis; legend for variants A–E.
- **Bottleneck Table:** Simple table with columns “Action”, “Avg Duration”, “Occurrences”; sortable by each column. Row click highlights nodes in map.
- **Summary Cards:** For each region, show median, max and min durations; display in a horizontal scrollable row.

### 3.6 Tooltips & Hover States

- Charts and gauges provide tooltips with exact values on hover.
- Nodes and edges show aggregated metrics in a tooltip when hovered.
- Buttons include aria-labels and keyboard focus states.

## 4. Interaction Patterns

- **Filtering** – Selecting a region or variant filters all dashboard components (charts, tables, map). A “Clear filters” button resets the view.
- **Drill-Down** – Clicking on a variant or bottleneck row updates the map to highlight relevant steps and updates the summary panel with variant-specific metrics.
- **Export** – Provide export options (CSV, PNG) for charts and maps via a dropdown menu.
- **Responsiveness** – On small screens, collapse sidebars and stack summary sections vertically; charts become full-width scrollable elements.

## 5. Documentation & Versioning

- **Design Tokens** stored in `design/tokens.json` with semantic names (primary, secondary, neutral variants) for easy updates.
- **Component Library** documented in Storybook or 21st.dev’s doc site; each component has props table and usage examples.
- **Version History** captured in `design/CHANGELOG.md` summarising changes to colour palette, typography and layout guidelines.

## 6. Accessibility & Inclusivity

- Ensure text contrasts at least 4.5:1 against background.
- Provide alt text and descriptions for charts; summarise key insights below the visuals.
- Support keyboard navigation for all interactive components; manage focus order.
- Avoid relying solely on colour to convey meaning; use labels and patterns in charts.

By adhering to this design system, developers and designers can build a cohesive user experience that mirrors Mimica’s look and feel while extending it with powerful analytics features.