ChatGPT

Tree-of-Thought Map for Mimica Analytics Platform and New Analytics Feature

This tree-of-thought (ToT) outlines the relationships between the core elements of the Mimica platform, the synthetic data, and the planned MVP feature for process standardisation. Entities are grouped hierarchically and emphasise connections between personas, tasks, data, UI components and analytics.

1. Mimica Platform (Existing)

- **Modules**
- *Miner*: Collects desktop interactions (clicks, keystrokes) and screens.
- *Mapper*: Generates end-to-end process maps from recorded data, with decision points and variant branches. Provides metrics like time saved, ease of deployment, actions vs. inputs vs. decisions counts and application usage breakdown.
- *Measure*: Benchmarks process performance and conformance over time (not shown in screenshots but implied by analytics focus).
- **Key UI Pages**
- *Process List (Mapper)* – left panel with search/filter, showing projects with columns for Ease, Automatability and Time Spent. Clicking a process opens its summary.
- *Process Summary* – right panel summarising a selected process with metadata (created date, recorded SMEs, frequency), **Time Saved** metric, **Automatability** rating, actions/semi-structured inputs/decisions counts, counts of applications, websites and decision paths, and **applications** & **websites** usage charts.
- *Process Map* – flowchart view with steps (rectangles) and decision points (diamonds); right panel shows details for a selected step (name, ID, execution time, automatability %, screenshot preview). Toolbar supports zooming and toggling transactions.

2. Personas & Use Cases

- **Process Analyst / Continuous Improvement Manager** – primary user; investigates process variation across regions, identifies inefficiencies and defines best practices. Uses process list to select processes, summary metrics to prioritise, and process map to study sequences.
- **Operations Manager / Transformation Lead** – secondary; ensures standard process adoption, monitors performance, and coordinates training. Uses summary metrics and high-level dashboards.
- **Subject Matter Experts (SMEs)** – data contributors; provide recordings and feedback. May review variations and training materials.
- **Compliance Officer** – ensures regulations are met; checks deviations and decision paths.

3. Data & Metrics

- **Raw Step Data** – sequences of actions per transaction with timestamps, durations, applications, decision outcomes, variants and user context (region, user ID, role).

- **Aggregated Metrics** – computed per transaction, region and variant: total duration, step count, average duration per step, bottleneck ranking, frequency of variants, step type counts (actions, semi-structured inputs, decisions, virtualised actions) and application usage distribution.
- **Derived Insights** – time saved per SME/day, ease of deployment score, automatability rating (e.g., Very High), number of applications and websites used, number of decision paths. These are high-level metrics not fully supported by the synthetic data and require assumptions or additional data (e.g., baseline vs. improved process durations for time saved).

4. UI Components & Interactions (Existing Platform)

- **Search Bar & List Controls** – filter processes by name and sort by metrics (Ease, Automatability, Time Spent).
- **Metric Badges** – show qualitative labels (Medium, High, Very High) for ease and automatability.
- **Time Saved Widget** – displays total hours saved per year; includes per SME/day submetric and number of SMEs recorded. Needs baseline and automation assumptions.
- **Ease of Deployment Gauge** – semi-circular gauge visualising complexity across four categories: actions, semi-structured inputs, virtualised actions, structured inputs. Might show distribution of step types.
- **Counts Panel** – lists number of actions, semi-structured inputs, decisions, applications, websites, decision paths.
- **Application & Website Charts** – donut or pie charts showing usage percentages of top applications and websites.
- **Process Map & Legend** – interactive flowchart with zoom and pan; nodes coloured by automata bility; legend explains colours for step types and regions.
- **Step Details Card** – right panel in process map view showing step name, ID, duration, automata score, application used and screenshot snapshot.

5. Desired MVP Feature (Process Standardisation Analytics)

- **Cross-Region Comparison** – dashboard comparing metrics across regions (cycle time, step counts, variant distributions, bottlenecks, application usage).
- **Variant Analysis** – cluster transactions by sequence to identify variants; visualise frequencies and durations by region; suggest best practice flows.
- **Bottleneck Detection** – identify slow or high-variance steps; highlight them on the process map and summarise them in a table.
- **Process Map Overlay** – overlay multiple regional maps to see where flows diverge; use colour coding for different regions/variants.
- **Gap Analysis & Standard Recommendation** – compare actual flows against a defined standard; measure conformance and recommend changes.

6. Data Flow & Transformation

1. **Capture** – Collect raw step data via the Mimica Recorder (actions, timestamps, screens). For the synthetic dataset, generate steps and variants programmatically.
2. **Pre-Processing** – Clean and classify steps (actions vs. inputs vs. decisions), compute durations and automata scores; assign variants per transaction.

3. **Aggregation** – Summarise transactions by region and variant; compute metrics (avg duration, median, max/min, bottleneck counts). Derive step type counts and application usage.
4. **Analysis** – Identify variants via sequence clustering, compute bottleneck ranking, and derive insights (time saved, ease of deployment) using domain assumptions.
5. **Visualisation** – Provide dashboards, charts and flowcharts that allow filtering by region and variant; update counts and gauges dynamically when users interact.

7. Gaps & Extensions

- **Missing High-Level Metrics** – Our synthetic data lacks explicit fields for *time saved*, *automatability rating* and *ease of deployment*. These need to be derived from baseline vs. improved process durations and heuristics for complexity.
- **Screenshot Data** – Real Mimica shows screenshots of each step; our synthetic dataset omits screen content and cannot replicate this part. For the MVP, we can display placeholder thumbnails or skip the screenshot feature.
- **Decision Paths** – Real platform counts decision paths; our dataset includes decision outcomes but not aggregated path counts. We must compute them by grouping by variant and branch.
- **Applications & Websites** – The dataset includes application names but no website domains. To match the website chart, we can treat certain applications (e.g., SharePoint) as websites or augment the dataset with a `website` field.
- **User Metrics** – Real platform shows SMEs count and per-SME/day metrics; our dataset has user IDs but not working days or baseline durations. Additional assumptions are required to compute per-SME/day time saved.

This ToT serves as the foundation for the subsequent research synthesis, specification documents, and technical plans to build a close replica of Mimica's platform and extend it with a process-standardisation analytics feature.
