

SHEET 1 - IDEAS AND BRAIN STORM

AUSTRALIAN LABOUR MARKET VISUAL DASHBOARD

IDEAS:

Choropleth: Employment Rate by state

→ opening of

Bubble Map:

JOB VACANCIES PER STATE



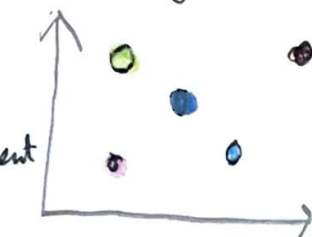
Note:

Regional Employment Patterns

story telling



Scatter Plot: - Employment vs wage index



Note Shows Correlation

Wage growth by state



Bar Chart

Note: Size = Vacancies Average, Above,



Donut Chart

Sector X Year Employment



Heatmap



Line Chart

wage trend over years

Focus: Combine regional and economical pov for storytelling.

Filter:

Chart

Keep? Reason

Choropleth	✓	Core regional overview
Bubble map	✓	Adds spatial depth
Scatter	✓	Shows correlation
Donut	✓	Industry categories
Bar	✓	Simple comparison
Line	✗	Overlap trends
Heatmap	✗	Dataset not suitable

CATEGORISE:

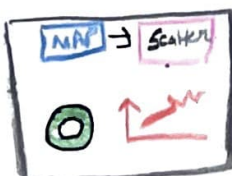
Group visuals by communication purpose

1. Trend Charts: + → Show changes over time
2. Comparison Charts: + → Compare b/w states and industries
3. Spatial Distribution: + → Show spread and regional patterns.

TOGETHER = COMPLETE NARRATIVE OF LABOUR MARKET.

COMBINE AND REFINE:

Test how chosen visuals fit into Dashboard layout:



LAYOUT A

Vacancy size vs growth



LAYOUT B

Vacancy size vs growth, spatial pattern, correlation and comparison

PREFERRED LAYOUT B - "Balanced storytelling"

SUMMARIZE AND QUESTION

- ✓ shows employment differences b/w states
- ✓ Links wage perform. with emp. state
- ✓ Includes industry breakdown
- Improve legend
- Yes - layout B satisfies ✓

SHEET 2: INITIAL DESIGN A-EG

STATE OVERVIEW DASHBOARD

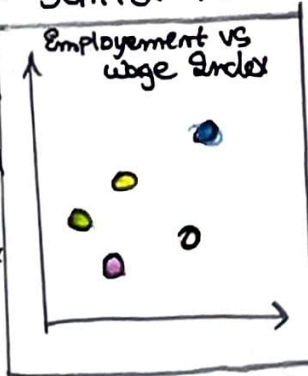
LAYOUT:

Concept 1: State Overview Dashboard

CHOROPLETH MAP - Employment Rate by Region



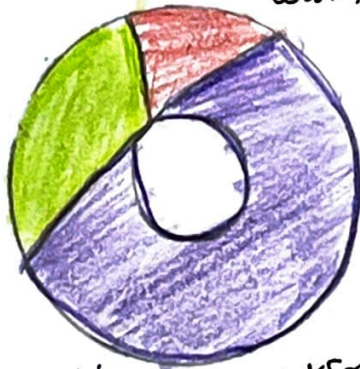
Visualises regional employment patterns.



Visualises regional and shows correlation b/w wage and employment index.

Drill down to workforce distribution

DONOT:
Employment By Industry



Proportion of Workforce Distribution

Goal: Combine regional and wage in one view

PARTI/FOCUS:

Focus = Spatial Storytelling.
The design guides the viewer from national map → economic scatter → workforce distribution donut. Each visual supports understanding of how emp and wages interrelate by region. Understand the AU labour force market

PROS AND CONS

PROS

- ✓ Clear regional composition through map
- ✓ Interactive and story driven
- ✓ Simple layout = easy to interpret

CONS

- ✗ Need consistent colour legend
- ✗ Scatter overlaps may need transparency
- ✗ Donut can hide small industries

SHEET 2.

NAME: TRISHA BHAGAT

DATE: 15 OCT 2025

TITLE: STATE OVERVIEW DASHBOARD

DESCRIPTION: Shows how emp. state and wage index vary by state, plus industry breakdown

COMPONENTS / OPERATIONS

Data Source:

LABS Labour Force

Wage Index (Kaggle)

Q3 2025

Visual Elements:

Choropleth map State

Emp & Wage

Scatter Plot: Emp vs Wage Index.

Donut Chart → Workforce Distribution.

USER INTERACTIONS

Click a state on map → updates scatter chart

Hover: show tooltips with details

Filters: State/Workforce

Tools:

VegaLite

OUTPUT: INTERACTIVE DASHBOARD FOCUSED ON STATE-LEVEL LABOUR

SHEET 3: INITIAL DESIGN 2

PERFORMANCE INSIGHT DASHBOARD

SHEET 3

LAYOUT

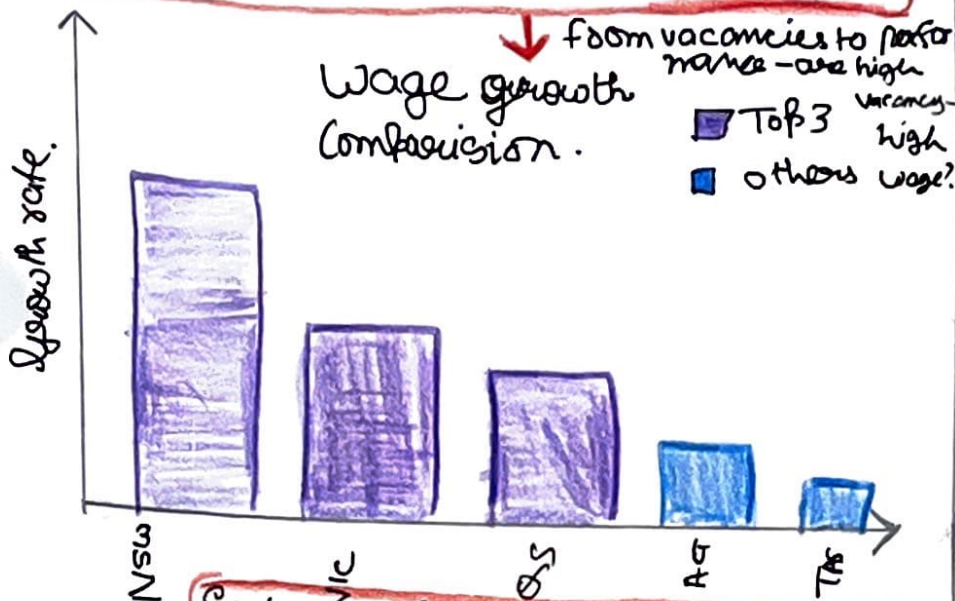
Concept 2 - Performance Insights Dashboard
(Competitive focus)

BUBBLE MAP - JOB VACANCIES BY STATE

Bubble Size
No. of Job Vacancies
Colour: Wage growth %



Quickly shows which states are rising the most



Goal: Which state is performing strongest in both job creation and wage growth

PART 1 | FOCUS

~~BOTTOM LINE~~

Focus: Comparative Economic Storytelling
Visuals emphasise competition b/w states - who has higher vacancy and wage growth.
Encourages users to explore which states balances opportunity and reward.

Vacancies ↑
Wages ↑

NAME: TRISHA BHAGAT
DATE: 15-OCT-2025
TITLE: PERFORMANCE INSIGHTS DASHBOARD.
DESCRIPTION: Highlights job vacancies and wage growth performance for each Australian state to show economic competitiveness.

COMPONENTS / OPERATIONS

Datasources

- ABS Job Vacancies 2025
- Kaggle Wage Index Q3 2025

Visual Elements

- Bubble chart
- Bar chart

User Interactions

- Hover Bubble → Tooltip shows State, Vacancies, Wage Growth
- Click bubble → Highlights matching bar.
- Dropdown filter: Choose sector (eg: moderate, High growth)

Tools: Vegalite.

Shows economic strength and opportunity balance across states.

PRO AND CONS

PROS

✓ Easy to compare states visually

✓ Clear link b/w vacancy and growth

✓ Compact layout, fast interpretation

CONS

✗ Bubble chart can clutter small states

✗ Colour scale might confuse users.

✗ Lacks time trend context

SHEET 4 DESIGN IDEA 3

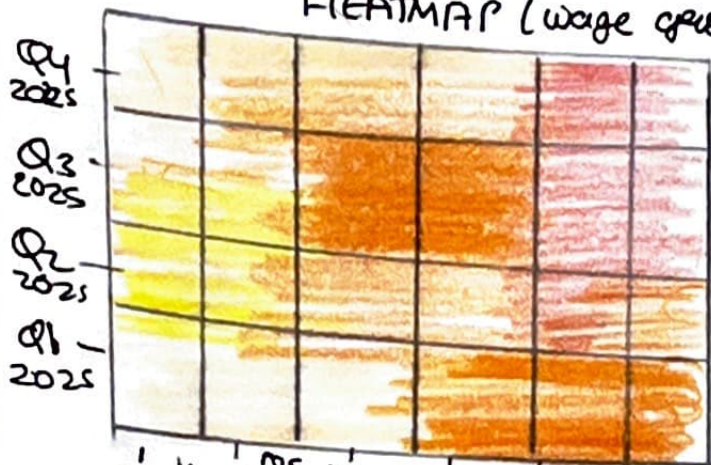
(Interactive Trends & Comparison Dashboard)

SHEET-4:

Name: TRISHA BHAGAT
Date: 17-OCT-2025
Title: Interactive trends and Comparison Dashboard
Description: Combines time-series and performance comparison visuals - includes heatmap and lollipop chart for state-level performance analysis.

LAYOUT: Concept 3: Interactive Trends and Comparison Dashboard (Trend + Precise Focus).

HEATMAP (Wage growth Intensity)

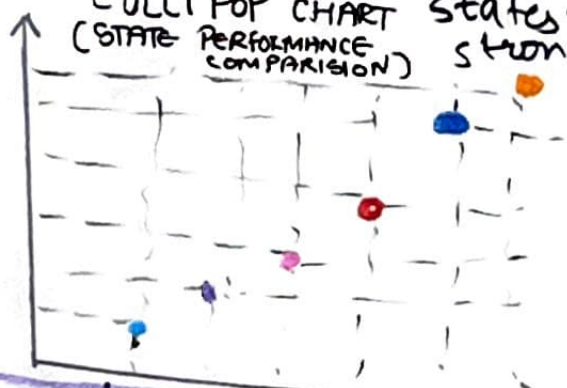


Wage growth by state/year

Heatmap adding intensity context

Identify which states maintained strong trends.

LOLLIPOP CHART (STATE PERFORMANCE COMPARISON)



QUICKLY COMPARES OVERALL ECONOMIC PERFORMANCE BETWEEN STATES

PART 1 | focus

focus = integrating temporal and comparative storytelling.
↳ Combines year-by-year evolution with final performance ranking

HEATMAP → LOLLIPOP

Shows both how and who in Australia's labour efficiency

COMPONENTS / OPERATIONS

- Data Sources
ABS Labour Force, Wage Price Index, Job Vacancies 2025.
- Visual elements.
• Heatmap → Wage growth over time
• Lollipop chart → Overall labour efficiency ranking
- Interactive Controls → filter and animate
- User Interactions:
• Hover over line → Tooltip: State
• Hover cell → exact wage growth value.
• Click state in lollipop → Highlight across all charts.
- Tools: Vega lite.
- Output: Interactive visual tools connecting trends and performance for better policy insights

PROS AND CONS

PROS

- ✓ Clear link b/w time and outcome
- ✓ Creative mix (heatmap + lollipop)
- ✓ High interactivity
- ✓ Fresh visual approach

CONS

- ✗ Dense visuals - must space carefully
- ✗ Harder to interpret.
- ✗ May need legend simplification
- ✗ Slightly more coding effort

SHEET 5 - REALISATION DESIGN

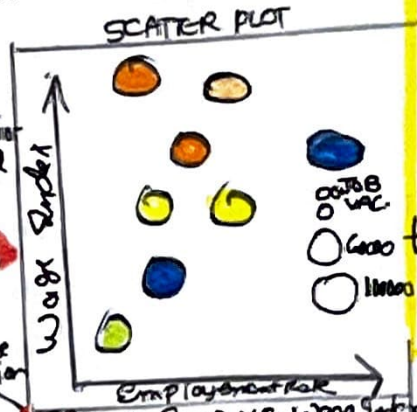
AUSTRALIAN LABOUR MARKET ANALYSIS DASHBOARD

LAYOUT.

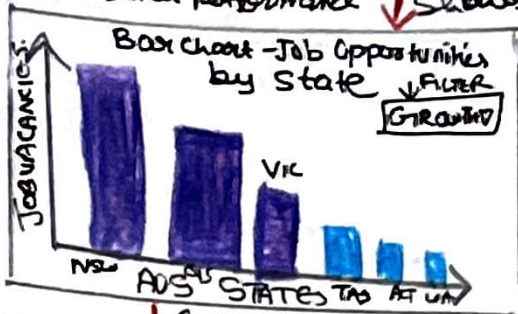
Final Integration - Integrated Labour Market Insights Dashboard.



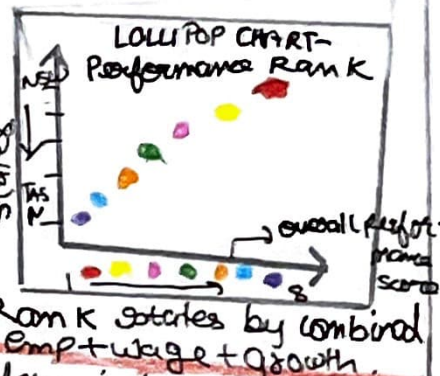
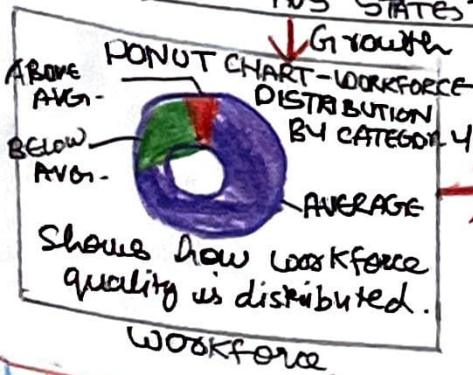
Shows regional performance



Shows Emp vs. Wage Index
CHIEF WAGE often aligns with higher employment



Highlights which are leading growth.



Rank states by combined Emp + Wage + Growth.

Goal: Build a complete, interactive story from regional context to performance ranking - integrating all analysis in one dashboard

PART I / FOCUS

Focus = holistic labour-market storytelling
Flow moves from geography (map) → correlation (scatter) → composition (growth bar) → ranking (lollipop)
The design unifies all key insights in a logical sequence

DETAILS:

Refinement Notes:

- Unified colour scheme for clarity
- Responsive layout for web page
- Added legends and tooltips for every chart

SHEET 5

Name: Trisha Bhagat

Date: 20-Oct-2025

Title: Final Integrated Dashboard

Description: Combines regional, comparative, and trend-based insights into one interactive story of Australia's labour market.

COMPONENTS / OPERATIONS

- Data Source
 - ABS Labour Force
 - Kaggle Wage Index (Q3)
- Visual Elements:
 - Choropleth Map → Employment Rate
 - Scatter Plot → Employment vs Wage Index
 - Bar Chart → State growth Categories
 - Donut Chart → Workforce Distribution
 - Lollipop chart → Performance Ranking
- USER INTERACTIONS:
 - Click state on map → Updates scatter + bar + lollipop
 - Hover, Dropdown, Legend toggle
 - Tools: Vega Lite

Output: FULLY INTERACTIVE, MULTI-VIEW DASHBOARD UNITING SPATIAL, ECONOMIC, AND CATEGORICAL RESEARCH

Reflection:

The final integrates five visual pov to deliver a clear narrative of labour market.