

P0 Problem (From Phase 2)

Users experience **repetitive and irrelevant search results**, especially when using natural language queries (e.g., “black formal shoes under 600”), leading to:

- Scroll fatigue
- Frequent re-querying
- Drop-off without product click
- Exit to competitor apps

Goal:

Increase Search → Product Click conversion by 15% in 8 weeks.

(Assuming this to be 15% improvement in 8 weeks, in real world I will have data supporting how much was missed conversion due to the reason of search issue, and other parameters which will help)

STEP 1 — Brainstorm Solutions

Below are 15 structured ideas categorized into High Confidence, Low Confidence, and Moonshot.

High Confidence

1. Result De-duplication (cluster identical listings)
2. Intent-based query parsing (detect color, price, category)
3. Smart refine chips auto-generated from query
4. Improved “Best Match” ranking logic
5. “Why am I seeing this?” transparency tooltip
6. Search rescue suggestions after no-click scroll
7. Diversity enforcement in ranking (avoid same-looking items)
8. Top 3 visual quality signals on search cards (rating, return tag, review-photo count)

Low Confidence

9. Query rewrite suggestions
10. Dynamic filter shortcuts based on behavior
11. Review summary highlights (pros/cons auto extracted)
12. Personalized ranking based on browsing history

Moonshots

13. Conversational search assistant

14. Image-based search

15. AI-based trust score per seller

STEP 2 — Prioritization (RICE Model)

Scale: 1–3

$RICE = (Reach \times Impact \times Confidence) \div Effort$

Idea	R	I	C	E	Score
De-duplication	3	3	3	2	13.5
Intent Parsing	3	3	2	2	9
Smart Refine Chips	3	2	3	1	18
Search Rescue	2	2	2	1	8
Diversity Enforcement	2	2	2	2	4

Top 3 Selected Solutions

Based on RICE Scoring, below are the top three ideas

1. Smart Refine Chips (Quick win, low effort)
2. Result De-duplication (Direct pain fix)
3. Intent-based Ranking (Longer term but high impact)

STEP 3 — Wireframe Flows

<https://replit.com/@snehalbajaj9/Product-Catalog>

Flow 1: Smart Refine Chips

Screen 1: User searches

“black formal shoes under 600”

Screen 2: Chips auto-generated

Shoes | Black | Formal | Under ₹600

Screen 3: Results ranked based on chips

Value:

- Reduces manual filtering
- Improves relevance quickly
- Reduces frustration

Flow 2: De-duplicated Results

Screen 1: Search results show cluster card
“Black Formal Shoes – +12 similar options”

Screen 2: Expand cluster
Shows sellers + price variations

Value:

- Reduces scroll fatigue
- Preserves variety
- Improves perception of catalog quality

Flow 3: Search Rescue

Trigger:
User scrolls 20 items without clicking

Inline suggestion appears:
“Not finding it? Try these”

- Black shoes under 600
- Formal shoes for office
- Budget formal shoes

Value:

- Prevents abandonment
- Reduces exit-to-competitor behaviour

STEP 4 — Success Metrics

Type	Metric	Why
Key	Search → Product Click Conversion	Direct goal metric
Secondary	Time to first click	Measures friction
Secondary	Re-query rate	Indicates incorrect result/ not satisfying result
Secondary	CTR on top 10	Ranking effectiveness
Secondary	Bounce rate after search	Ensure exits after search are not increasing
Secondary	Add-to-cart rate	Ensure quality clicks

STEP 5 — Risks & Mitigation

Assumption	Risk	Impact	Mitigation	Detection
Chips improve relevance	Wrong extraction hurts ranking	High	Allow chip removal	Spike in re-query
De-dup improves UX	Users feel fewer options	Medium	Allow expand view	CTR drop
Ranking works correctly	Misclassified attributes	High	Use soft boosts, not hard filters	Drop in conversion
Rescue works	Users ignore suggestions	Low	A/B experiments	Interaction rate