PDBUILDER AI Based Product development tool (Simplest Starter Model)

Who is it for?

1) First time startup founder who has never developed a new product
2) Non-technical founders who are concerned about the risks of creating a new product

What problem does it solve for them?

Allows them to go through a step by step process of developing the requirements for their MVP. MVP is what the investors want to see to invest.

STEPS

1) What problem do you want to solve? - Ask the user

2) Market Research - Ask user or data or approval to search online

3) Find the root cause(s) of the problem

4) Find existing solutions if available

5) Create an ideal customer profile (ICP)

6) Create the use case of how the customer would solve the problem

7) Create the product requirements for the product that the customer will use to solve the problem

8) Use RICE/ICE/MoSCoW technique to create the MVP product configuration/requirements that solve the rootcause of the problem.

9) Create a downloadable MVP configuration sheet

10) As the user for feedback
      a) How did the tool help them?
      b) What can be improved? etc….

Step-by-Step Flow for AI Agent (with Instructions for Replit Agent Implementation)

1. What problem do you want to solve?
User Input Required
- **Prompt Design:** Ask the user to describe a problem they've observed or experienced.

- **AI Function:** Summarize the user's input into a 1–2 sentence clear problem statement using NLP and clarity checks.

- **Validation Option:** Offer AI suggestions to clarify or sharpen vague or overly broad problems.

2. Market Research
User Input Required (or give permission to search)
- **AI Capability:** If approved, use APIs (e.g., SerpAPI or web scraping tools) to search Google, Reddit, or forums to find:

  - Market size

  - Similar existing products

  - Trends or complaints around the problem

- **Fallback:** Ask user if they have any existing market data or competitors in mind.

- **Output:** Short summary of findings + confidence level indicator.

3. Find the root cause(s) of the problem
User Input + AI Analysis
- **Prompt Design:** Ask "Why does this problem happen? What breaks or is missing?"

- **AI Agent Task:** Use iterative "5 Whys" questioning to dig deeper into the root cause.

- **Output:** Structured list of root causes (with the primary one flagged).

4. Find existing solutions (if available)
AI–Led or User-Guided
- **Options:**

  - Search online for existing solutions (web scraping or API-enabled).

  - Or allow the user to describe known solutions.

- **AI Output:** Comparative table listing existing solutions, pros/cons, pricing, target audience.

- **Optional:** Include a gap analysis: What's missing in those solutions?

5. Create an Ideal Customer Profile (ICP)
User Input + AI Suggestions
- **Prompt User:** Who experiences this problem the most?

    - Ask age, job role, income, goals, frustrations.

- **AI Capability:** Suggest 2–3 ICP profiles from similar product databases or templates.

- **Output:** Visual persona card + downloadable version.

6. Create the use case of how the customer would solve the problem
User Input or Select from Template
- **Prompt Design:** "Describe the day-in-the-life or journey of your ICP using the product."

- **AI Enhancement:** Fill in steps based on best practices (e.g., Jobs-To-Be-Done format).

- **Output:** Use case narrative + optional flowchart.

7. Create the product requirements
AI Draft with Optional User Edits
- **AI Agent Task:** Convert use case into:

    - Features

    - Functions

    - Constraints

- **Format:** Automatically structure into a basic PRD (Product Requirements Document).

- **Optional:** Add user-defined priority tags (e.g., must-have, nice-to-have).

8. Use RICE / ICE / MoSCoW technique to prioritize MVP features
User Input + AI Score Calculator
- **Prompt User:** Define values for Reach, Impact, Confidence, Effort (RICE) or choose ICE/MoSCoW.

- **AI Function:** Auto-calculate scores and produce a sortable priority list.

- **Output:** Final prioritized MVP feature list.

9. Create a downloadable MVP configuration sheet
 Auto-Generated
   - **AI Output:** Create a visually appealing MVP Configuration PDF or DOCX that includes:

       - Problem

       - Root cause

       - ICP

       - Use case

       - Prioritized product requirements

   - **Download Button:** Provide export option.

10. Ask the user for feedback
User Input Required
   - **Prompt:** "How useful was this tool? What could be improved?"

   - **AI Function:** Summarize and categorize feedback for future versions.

   - **Optional:** Trigger survey or Net Promoter Score question (1–10 scale).

Implementation Notes for Replit Agent
   - Use Replit's **multimodal tools** to:

       - Collect structured responses (forms, sliders, toggles)

       - Generate formatted documents (e.g., using Python libraries like `reportlab`, `docx`)

       - Store session data for continuity

   - Add **checkpoint saving** and **editable cards** for users to revise earlier steps without restarting

   - Consider embedding **educational tips/tooltips** along the way to support non-technical users