

Exercise 1

Part I: Use this Product Concept development checklist

Product Concept Development Checklist	
Recommended Entry	Considerations
Market Problem or Opportunity	<ul style="list-style-type: none"> ● Market problem or opportunity clearly defined ● Considerations include reduced consumer costs, improved features and functionality, or satisfying a gap or niche as applicable
Market Segments	<ul style="list-style-type: none"> ● Market segments defined ● Multiple segments prioritized
Key Financials	<ul style="list-style-type: none"> ● Cost and benefits defined ● Key financial metrics (ROI, IRR, NPV) calculated
Market Window	<ul style="list-style-type: none"> ● Launch and delivery milestones outlined ● Urgency considerations defined
Competitive Landscape	<ul style="list-style-type: none"> ● A list of top competitors is provided ● Competitor advantages and disadvantages documented ● Competition strategy defined
Main Features and Functionality	<ul style="list-style-type: none"> ● MVP concept defined ● Version feature schedule documented
Key Differentiators	<ul style="list-style-type: none"> ● Company strengths and leverage plan documented ● Company weaknesses and mitigation plan documented
Go to Market Logistics	<ul style="list-style-type: none"> ● Delivery options defined ● Delivery logistics outlined
Business Success Measurements	<ul style="list-style-type: none"> ● Key Performance Indicators (KPI) listed ● Measurement Plan provided

Part II: Complete for your product

Product Concept Document Product:	
Recommended Entry	Considerations
Market Problem or Opportunity	<ul style="list-style-type: none">• The market problem Perfect Purifiers LLC aims to address with their new HEPA air purifier line lies in existing product limitations. Current HEPA purifiers fall short in eliminating volatile organic compounds (VOCs), viruses, and odors, and some produce harmful ozone. Maintenance demands, high replacement costs, noise, and limited coverage further discourage buyers.• This presents an opportunity to create an air purifier that reduces these issues, thereby meeting unmet consumer needs and expanding market potential. By offering a product that improves air quality and is safer, cost-effective, and efficient, PP LLC can capture a growing market focused on health-conscious solutions.
Market Segments	<ul style="list-style-type: none">• PP LLC's new HEPA air purifiers primarily targets <i>health-conscious households</i> above 35, who prioritize air quality and safety in their homes, given the demand for products that can remove VOCs, viruses, and odors without emitting ozone. Within this segment, <i>multi-adult households</i> are a priority as they demonstrate higher air purifier ownership rates (46%) compared to single-parent households.• The secondary segment focuses on <i>commercial and industrial spaces</i> needing enhanced filtration and cost-efficiency due to high purification needs and maintenance challenges.
Key Financials	<p>The <i>key financials</i> for PP LLC's new HEPA purifier line include:</p> <ul style="list-style-type: none">• Costs: An estimated initial investment of \$80,000 to develop three prototypes with five distinct features. Initial funding includes \$30,000 for the planning phases.

	<ul style="list-style-type: none"> ● Benefits: Projected annual returns of over \$200,000 for the first two years due to expected market expansion and reduced product returns. ● Financial Metrics: <ul style="list-style-type: none"> ○ ROI (Return on Investment): Expected to exceed 250%. ○ IRR (Internal Rate of Return): Over 200%. ○ NPV (Net Present Value): Positive, with a strong cash flow projection due to anticipated increases in revenue (up by 25%) and market reach (expanded by 10%).
Market Window	<p>The <i>market window</i> for PP LLC's new HEPA purifier line targets a six-month launch timeline to capture demand during the summer season, when air quality concerns peak. Key milestones include:</p> <ul style="list-style-type: none"> ● Design Phase Completion: January and February ● Development Phase Completion: March through May ● Beta Testing and Final Preparations: June <p>Urgency Considerations: Given the increasing consumer focus on air quality and health, and the summer season's potential rise in demand, it is crucial to launch within this window to capitalize on market readiness and urgency.</p>
Competitive Landscape	<p>Top Competitors: Key players include Donaldson Company Inc., Hengst, MANN+HUMMEL, Honeywell International Inc., and Daikin Industries Ltd.</p> <p>Advantages and Disadvantages:</p> <ul style="list-style-type: none"> ● Advantages: These brands are well-established with strong market shares, known for reliable HEPA technology and distribution networks. ● Disadvantages: Most competitors fail to address major consumer concerns—such as VOC removal, odor elimination, low noise, minimal ozone emissions, and affordable maintenance. <p>Competitive Strategy: PP LLC will capitalize on unmet consumer needs by delivering advanced air purifiers with VOC and odor</p>

	elimination, reduced maintenance, and noise, creating a niche product that addresses current market gaps for a healthier, efficient home solution.
Main Features and Functionality	<p>MVP Concept: The MVP will focus on a dual HEPA purifier with noise reduction (50% lower), air freshener capabilities, VOC and odor removal, and minimal maintenance requirements. This MVP aligns with customer demand for a quiet, low-maintenance air purifier that covers a broader area and tackles pollutants not addressed by traditional HEPA filters.</p> <p>Version Feature Schedule:</p> <ul style="list-style-type: none"> ● Phase 1 (Design in Jan, Develop in Mar): Launch the MVP with noise reduction and air freshener features. ● Phase 2 (Design in Feb, Develop in Apr): Enhance HEPA filter with easier replacement, extended lifespan, and improved motor for wider coverage. ● Phase 3 (Design in Feb, Develop in May): Minimize ozone emissions and finalize three models (Basic, Better, and Ultimate) with tiered features and pricing.
Key Differentiators	<ul style="list-style-type: none"> ● Strengths: Perfect Purifiers LLC has brand trust and extensive air purification experience, enabling it to leverage existing consumer insights to meet specific market needs like VOC/odor removal and low maintenance. ● Weaknesses and Mitigation: Cost and supply chain risks are mitigated by phased feature development and Sarah Newton's risk management to minimize potential delays and overruns.
Go to Market Logistics	<ul style="list-style-type: none"> ● Delivery Options Defined: Perfect Purifiers LLC will utilize a multi-channel distribution strategy, including wholesale partnerships, retail outlets, and direct online sales. ● Delivery Logistics Outlined: The logistics will leverage existing distribution networks, focusing on efficient inventory management and supply chain coordination.
Business Success Measurements	<p>Key Performance Indicators (KPI):</p> <ol style="list-style-type: none"> 1. Market Share Growth 2. Revenue Growth

	<div>3. Customer Satisfaction</div> <div>4. Return on Investment (ROI)</div> <div>5. Product Return Rate</div> <div>Measurement Plan: Quarterly reviews of sales data and customer feedback, alongside tracking ROI and market positioning, to ensure strategic objectives are met.</div>
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