

## Internal and External Assessment

Objective: Determine internal and external assessment criteria that will impact development of Product Concept Document and Product Vision.

External Assessment Considerations	My Assessment
<b>Market View:</b> Define the current market. Analyze whether the market is static, emerging, or changing. Determine demographic, geographic, behavioral, and even psychographic trends that may impact your product concept. In essence, are current, emerging, and future markets complimentary to your product concept is the key question to be addressed. For example, technology-based products that make life easier for customers are on an upswing. Manual products that require effort on the part of a customer are losing popularity.	The market is dynamic and rapidly growing, not static. The scenario projects it will more than double from <b>USD 3.7 billion in 2022 to USD 7.71 billion by 2032 (8.50% CAGR)</b> . This growth is driven by rising energy costs, government mandates against emissions, and strong consumer preference for renewable solutions. These market trends are highly complimentary to our product concept, which directly addresses the demand for energy efficiency, cost savings, and environmental friendliness.
<b>Competitor View:</b> Determine the competitive landscape. Define current or new competitors you will compete against. Understand the relative strengths and weaknesses of your competitors and how you compare. In the end, determine if you can compete. Will you be able to become a cost leader, differentiate the quality of your product to your advantage, or be able to find a niche that makes your product unique are questions to be addressed. If you are competing against a competitor who has strong brand recognition, high market share, and is well established, barriers for you to overcome may be too steep.	The competitive landscape is intense, with high rivalry from established players like <b>General Electric, Rheem, and Bosch</b> . We will not compete on cost leadership alone. Our strategy is <b>differentiation</b> , leveraging our "ground breaking technology," user-friendly management app, and superior aesthetics. While competitors are well-established, our innovative features and a goal of providing <b>10% savings</b> will allow us to compete effectively and achieve our objective of a <b>20% market share increase</b> .
<b>Technology View:</b> Determine what technological advantages you possess compared to the competition. Then define where you lag behind. Technology is a product enabler that requires extensive investment. Ensure that the costs to upgrade technology to support the end-to-end product needs does not exceed revenue and profit potential. Your firm should have technology to support your product. In addition, your product should have a high-level of technical sophistication to satisfy a growing technologically savvy customer base.	Technology is our primary competitive advantage. The scenario states SRU possesses "ground breaking technology that exceeds anything the competition can offer," including high-efficiency cells, bifacial panels, and a user-friendly app for system management. The projected <b>40% ROI in Year 1</b> confirms that the significant investment in this technology is financially sound and will meet the demands of a technologically savvy customer base.

<p><b>Partner View:</b> Examine supply chain requirements necessary to support your product. Determine inputs are you dependent upon and where they will come from. A healthy supply chain can enhance effective product development and launch. Supply chain limitations can place effective product development and launch in jeopardy and reduce overall profit potential. If supply chain options are limited, suppliers possess a high-level of power they can use to their advantage and your disadvantage.</p>	<p>The supply chain is a critical risk. We are dependent on suppliers for key components (panels, tanks, copper tubing), and the scenario explicitly states that "suppliers possess a high-level of power they can use to their advantage." This high bargaining power directly threatens our cost structure, profit margins, and our ability to meet the goal of reducing installation wait times by <b>50%</b>. A robust supply chain management strategy is essential to mitigate this vulnerability.</p>
<p><b>Environmental View:</b> Ensure you understand how current environmental laws, regulations, and customer perceptions either support or detract from your product. Today's customers are more and more environmentally focused. For example, new products that increase the carbon footprint of the organization may not be viewed favorably.</p>	<p>The environmental landscape provides a powerful tailwind for our product. Growing customer concern for the environment and government regulations restricting emissions are key market drivers. Our product is perfectly positioned to meet this demand, offering a significant reduction in a consumer's carbon footprint. We can market a specific, compelling metric: the system's annual CO2 reduction corresponds to <b>100 planted trees</b>, making this a core part of our value proposition.</p>

Internal Assessment Considerations	Your Assessment
<p><b>Competitiveness View:</b> This analysis looks at strengths and weaknesses that can lead to how much market coverage and market share your product can attain. In addition, your product's brand strength, and the diversity and completeness of your product offerings are critical to understand. From a customer standpoint, you need to understand how both brand and product loyalty impact your product along with the ease of difficulty of a customer to switch from a competitor's product to yours. Some things such as everyday use products and consumables are easy to switch. Other products, however, may be dependent upon related factors and product or service dependencies that makes switching costly and time consuming.</p>	<p>As an "established" company, SRU's primary competitive strength is our technological superiority and focus on innovation. Our product's brand strength will be built on differentiators like the user-friendly app, higher efficiency, and "virtually maintenance free" design. While switching water heating systems involves significant cost and effort for a customer, our compelling value proposition of <b>50-80% long-term savings</b> is designed to win customers at key purchase decisions (e.g., system failure, new construction), enabling us to reach our <b>20% market share</b> goal.</p> <p>Export to Sheets</p>
<p><b>Product View:</b> You need to evaluate your product capabilities and compare them with like products already on the market. In addition, you need to determine if your product pricing and quality allow you to be competitive. Finally, analyze gaps in both your competitor's products and your product. If you possess features and functionality competitors cannot offer, this is a strength. If the competitor has features and functionality you can't offer, this is a weakness.</p>	<p>Our product's primary strength is its feature superiority over competitors. We offer "ground breaking technology," a user-friendly management app, and a "virtually maintenance free" design with fewer components—features the competition cannot easily replicate. While the scenario does not identify any feature gaps on our side, our pricing is positioned to be highly competitive, aiming for <b>10% savings</b> over rivals. This combination of superior quality and competitive pricing creates a powerful value proposition.</p>
<p><b>Competencies View:</b> This view is critical. Your internal analysis should consider strengths and weaknesses related to your organization's processes and efficiency. In addition, corporate knowledge, skills, leadership excellence and resource capacity are critical factors that can lead to opportunities or pose threats. Finally, intellectual property you possess or need impacts product success.</p>	<p>Our core competency is in R&amp;D and technological innovation, which provides us with significant intellectual property and a key market advantage. The organization is also focused on improving process efficiency, as shown by the goal to "reduce customer installation waiting time by at least <b>50%.</b>" Our established cross-functional teams (development, manufacturing, marketing, etc.) provide a strong foundation of skills, though we must enhance our supply chain management competency to mitigate the threat of high supplier power.</p>

<p><b>Resources View:</b> Resources include people, capital, assets, financing ability, materials, and supplies. An organization that has ample resources is likely positioned to take advantage of opportunities. A resource poor organization faces threats to product success.</p>	<p>As an established company developing advanced technology, SRU appears to be well-resourced in terms of capital, financing ability, and people. We have a full complement of internal teams to support this launch. The primary resource threat is the dependency on the availability and cost of materials and supplies (panels, tanks, copper), as the constrained supply chain poses a significant risk to production and profitability.</p>
<p><b>Partner View:</b> The level of dependence on external sources for supplies, expertise, and resources impacts success potential. Each external dependency is a potential weakness that can lead to product development and delivery threats. Every product is dependent upon inputs to create. The more you control these inputs, the stronger chances for product success become.</p>	<p>From an internal perspective, our dependence on external partners is high, which represents a potential weakness. We are dependent in two critical areas: 1) the supply chain for essential product components where suppliers have high power, and 2) major retail partners (<b>Amazon, Home Depot, Lowes</b>) for our primary distribution channel. A disruption in either of these areas poses a direct threat to our ability to build and sell our product, making partner relationship management a critical priority.</p>