

Step 1 (Market Segmentation) Worksheet

Market Segmentation Matrix Row Definitions:

1	Market Segment Name	<i>Carefully name the market segment so it appropriately captures precisely the group you want and no more; it is okay to be general at first but you will have to narrow this down in time to make real progress</i>
2	End User	<i>This is the person who is actually using the product not the economic buyer or the champion (more on this in step 12) – it is not a company or a general organization but real people</i>
3	Task	<i>What exactly is it that the end user does that you will significantly affect or allow her to do that she could not do before?</i>
4	Benefit	<i>What is the benefit that you believe the end user will get?</i>
5	Urgency of Need	<i>What is the level of urgency to solve the problem or capture the new opportunity for the end user?</i>
6	Example End Users	<i>Who are example users that you can, have or will talk to so as to validate to validate your perceptions on this market segment?</i>
7	Lead Customers	<i>Who are the influential customers (i.e., lighthouse customers) that if they buy, others will take note & likely follow?</i>
9	Willingness to Change	<i>How conservative is this market segment? How open are they to change? Is there something to force change (i.e., impending crisis)?</i>
10	Frequency of Buying	<i>How often do they buy new products? What is their buying cycle look like at a high level?</i>
11	Concentration of Buyers	<i>How many different buyers are there in this market segment? Is it a monopoly? Oligopoly (a small number of buyers)? Or many competitive buyers?</i>
12	Other relevant market considerations	<i>This allows for customization for your segment for relevant considerations such as “high employee turnover”, “very low margins/ commodity”, “high growth industry”, “high virality effect (i.e., WOM -Word of Mouth”, etc.</i>
13	Size of Market (# of end users)	<i>Estimation of the number of end users to a relevant range (10's, 100's, 1K's, 10K's, 100K's, 1M, etc.)</i>
14	Est. value of end user (\$1, \$10, \$100, \$1K, etc.)	<i>A first pass estimate of the value of each end user, again to a relevant order of magnitude so we can make some relative decisions now but then we will dive much deep into this and other numbers later</i>
15	Competition/ alternatives	<i>What will be your competition from the end users' perspective? Of course there is the “do nothing option” but who else would be competitors if they analyzed their options?</i>
16	Other components needed for a full solution	<i>Since most customers will only buy a full solution and not components, what are the other elements needed to construct a full solution to achieve the benefits above? These are the complementary assets that you do not currently have but would need to build or acquire to give the end user a total solution.</i>
17	Important partners	<i>Who are the partners or distributors you will have to work with to fit into the work flow (e.g., data must come out vendor A's system and then be picked up at the end by vendor B's system) or business processes (e.g., the end users gets all his product via distribution channel C)</i>
18	Other relevant personal considerations	<i>In many market segmentation analysis, there are additional important factors that should be considered. This could be things like where the market segment is geographically centered, values match to founding team, existing knowledge and contacts in market, etc.</i>

Market Segmentation Wire Frame Matrix:

Market Segment Name	Residential Homeowners (not limited to those with solar panels)	Blocks of Flats	Government Buildings	Industry and Factories	Commercial Properties
End User	Individual homeowners or families	Apartment tenants and building management	Facility managers and government property administrators	Facility managers, operational managers in manufacturing, processing plants, and industrial settings.	Shopping malls, restaurants, office buildings, hotels, retail stores, and entertainment venues.
Task	Manage and reduce energy consumption in their homes. Interest in integrating renewable energy sources. Identify optimal times for conducting energy-intensive activities to minimize costs.	Improve energy efficiency in shared living spaces Integrate community-wide sustainable energy sources.	Enhance energy efficiency and sustainability in public buildings to reduce costs and meet regulatory standards.	Optimize industrial energy consumption for cost reduction and sustainability; integrate renewable energy sources.	Reduce energy bills, improve operational efficiency, and demonstrating commitment to sustainability.
Benefit	reduction in energy bills increased home efficiency reduced environmental impact (carbon footprint)	Lowered collective energy bills improved energy efficiency across the block enhanced community sustainability.	Reduced taxpayer burden on energy costs; compliance with environmental standards; public leadership in sustainability.	Significant cost savings; improved operational efficiency; reduced industrial emissions and carbon footprint reduction.	Cost savings, improved operational efficiency, reduced environmental impact, and enhanced reputation for sustainability.
Urgency of Need	High, influenced by rising energy costs and increasing awareness of climate change and its impact.	High, influenced by rising energy costs and increasing awareness of climate change and its impact.	High, due to public and legislative pressure for efficiency and sustainability.	High, given industrial energy consumption levels and potential regulatory compliance requirements.	High, driven by rising energy costs, environmental concerns, and regulatory pressure.
Example End Users	Families in urban and suburban areas with or without solar panels	Apartment complexes in urban areas, eco-conscious residential communities.	Municipal offices, hospitals, courthouses, public schools and libraries.	Manufacturing plants, food processing facilities, warehouses with high energy demands (automotive, chemical etc).	Shopping malls, restaurants, office buildings, hotels, retail stores, entertainment venues.
Lead Customers	Eco-friendly community leaders Influential green lifestyle bloggers(Eco-conscious celebrities or public figures).	Property management companies with a strong focus on sustainability; green-certified residential buildings.	High-profile government complexes adopting sustainability practices as a model.	Industry leaders in sustainability; factories with high visibility and commitment to green practices.	Property management companies with a focus on sustainability, commercial real estate developers committed to green building practices.
Willingness to Change	Regulatory mandates (energy efficiency standards/carbon emission reductions). Economic factors (cost saving) May prefer traditional methods	High among residents, variable among management depending on cost and logistics.	Moderate; dependent on budget cycles and public procurement regulations.	Moderate to high, influenced by the potential for cost savings and regulatory compliance. Investments are often carefully evaluated for ROI.	Moderate to high, influenced by economic factors, regulatory requirements, and market trends.
Frequency of Buying	Homeowners upgrade energy solutions every 5 to 10 years based on appliance lifespan and research.	Investments happen every 5 to 7 years, considering budgets and consensus among management, tenants, and owners.	Upgrades occur every 7 to 10 years, following procurement processes, budgets, and governmental priorities.	Upgrades happen every 7 to 12 years, balancing ROI, technology, and regulations, varying by industry and funding.	Businesses review energy efficiency every 3 to 5 years to optimize operations, driven by economics and sustainability goals.

Concentration of Buyers	Many competitive buyers. Diverse range of homeowners. No dominance or small group controlling the market. Not a monopoly or oligopoly.	Fewer, larger buyers (property management companies); not a monopoly but often limited choices within specific geographic areas.	Oligopoly; centralized buying decisions at various levels of government.	Oligopoly; a smaller number of large players dominate the market, each with significant purchasing power and influence.	Diverse range of buyers with no dominant player in the market.
Other relevant market segment considerations	Regulatory landscape regarding energy efficiency standards and renewable energy incentives. Market trends towards smart home automation and IoT integration. Potential for partnerships with utility companies or government initiatives promoting energy efficiency. Potential challenges such as high initial costs and long payback periods.	Energy regulations for multi-dwelling units; potential for bulk purchasing discounts; challenges in retrofitting older buildings.	Compliance with strict procurement and regulatory standards; potential for large-scale implementation across multiple facilities.	Need for systems that can integrate with existing industrial processes, potential disruptions during implementation, and scalability for different production sizes.	Compliance with building codes and energy efficiency standards, potential for partnerships with utility companies or government incentives, challenges in retrofitting existing buildings.
Size of Market (# of end users)	Minimum of 10-20% of households worldwide (200-400 million households)	Tens to hundreds of thousands of blocks, depending on urban density.	Thousands of buildings across federal, state, and local levels.	Thousands of significant industrial sites worldwide, each potentially representing a large-scale deployment opportunity.	Thousands to millions of commercial properties worldwide.
Est. value of end user (\$1, \$10, \$100, \$1K, etc.)	\$250 to \$750 per year.	\$1,000 to \$3,500 per year per building, depending on size and efficiency measures implemented.	\$2,000 to \$6,500 per year per facility, depending on the size and scope of energy efficiency projects.	\$\$20,000 to \$50,000+ per year, depending on the size and complexity of the industrial operation and the extent of the solution implemented.	\$2,500 to \$7,000 per year per facility, depending on the commercial property.
Competition/alternatives	Traditional Energy Management Methods ("do nothing") Other Smart Home Energy Management Systems (smart thermostats, energy monitoring devices, and home automation systems from competitors such as Nest, Ecobee, and Sense.)	Independent energy solutions by tenants; traditional energy management services; less advanced smart building technologies.	Traditional HVAC systems; existing older energy management systems; manual adjustments.	Other industrial energy management systems, in-house developed solutions, manual adjustments, and non-AI driven technologies.	Traditional energy management methods, other smart building technologies, independent energy solutions.
Other components needed for a full solution	Smart Thermostats Energy Monitoring Devices Smart Plugs and Outlets Home Energy Storage Systems Smart Lighting Systems Connectivity Protocols (Wi-Fi, Zigbee, or Z-Wave) Cloud Infrastructure Mobile Applications	Building-wide smart metering systems; central energy management control systems; renewable energy installations for communal areas; efficient heating and cooling systems.	Energy-efficient lighting and HVAC systems; solar panels for on-site renewable energy; smart meters and energy management software.	Industrial-grade smart sensors, IoT devices for equipment monitoring, energy-efficient machinery, renewable energy systems, and robust data analytics platforms.	Building-wide energy management systems, efficient HVAC systems, renewable energy installations, smart meters, and data analytics platforms.
Important partners	Hardware Manufacturers Smart home technology providers Renewable energy companies Utility Companies(Electricity Authority of Cyprus (EAC) installation and maintenance services	Renewable energy providers; smart meter and smart device manufacturers; government and municipal energy	Energy service companies (ESCOs); renewable energy contractors; federal and state energy efficiency grant programs.	Equipment manufacturers, renewable energy providers, specialized energy management consultancies, and technology integration services.	Hardware manufacturers, energy service companies, renewable energy providers, technology integrators.

	Distributors	efficiency programs.			
Other relevant personal considerations	Geographic areas(with high demand or high solar potential or other renewable energy sources Homeowners with a tech-savvy mindset.	Urban areas with higher population densities and energy use; buildings with modern infrastructure more likely to adopt new technologies.	Buildings located in climates with extreme temperatures may have higher energy demands; historical buildings may have restrictions on modifications.	Industrial hubs with high energy demand, regions with strict environmental regulations, sectors with high energy consumption and potential for efficiency gains.	Location (urban vs. suburban), building age and infrastructure, tenant preferences and lease agreements.