**Overall market research**

**1.** Using the knowledge acquired by reading today's independent study day material, conduct simple market research by answering the following questions:

• What image classifier product/product feature could make customers' lives easier?​

The waste sorting model using computer vision could make customers' lives easier by automating the waste sorting process and reducing the time and effort required for manual sorting. An image classifier product that is accurate, fast, and user-friendly would be most desirable for customers.

• How can I improve my customers' experience?

To improve customers' experience, we can focus on enhancing the accuracy and speed of the waste sorting model, ensuring that it can handle a wide range of waste materials, and providing a user-friendly interface for easy integration with existing waste management systems.

• What problem can I alleviate for my customers?

Customers may experience difficulties in finding the information they need or comprehending the information that is accessible to them. Providing resources such as FAQs, guides, or customer support can assist customers in obtaining the information they require.

• What are the unmet needs of my customers?

The unmet needs of customers in waste management include the need for accurate and efficient waste sorting, ease of integration with existing systems, and cost-effectiveness.

• Are current products on the market meeting customers' expectations? If not, what is lacking?

Current waste sorting products on the market may not be meeting customers' expectations due to their low accuracy and efficiency, high cost, and lack of integration with existing waste management systems. There is a need for more advanced waste sorting solutions that can better meet the requirements of customers in terms of accuracy, efficiency, and cost-effectiveness.

# Target Audience Analysis

Define the overall market: Identify the total market for the new product, including all potential customers.

1. Identify segments: There are several ways that the overall market for a waste sorting model could be segmented. Here are some possibilities:
   1. Demographics: The market could be segmented by age, income, or education level. For example, younger, more educated, and higher-income consumers might be more likely to be interested in a waste sorting model.
   2. Psychographics: The market could be segmented by values or lifestyle. Consumers who are environmentally conscious and interested in sustainable living might be more likely to be interested in a waste sorting model.
   3. Behavior: The market could be segmented by purchasing or recycling behavior. Consumers who frequently recycle or who purchase eco-friendly products might be more likely to be interested in a waste sorting model.
2. Evaluate segments: Once the market has been segmented, each segment should be analyzed to determine its size, growth potential, and overall attractiveness as a target market for the new product. Some factors to consider might include:
   1. Size: How many consumers are in each segment? Is the segment large enough to justify the cost of marketing and producing the product?
   2. Growth potential: Is the segment growing or shrinking? Is there potential for the segment to grow in the future?
   3. Attractiveness: Is the segment likely to be profitable? Are there any barriers to entry that would make it difficult to compete in this segment?
3. Select target segments:
   1. Urban consumers living in apartments or small spaces
   2. Affluent consumers who prioritize environmental sustainability
   3. Families with children who want to teach them about sustainability
   4. Small businesses or offices that generate a lot of waste

# Project Proposal

Based on the market research I conducted, I propose to develop a waste sorting model using computer vision to automate the waste sorting process. The product will be an image classifier that accurately and efficiently sorts waste and integrates it with existing waste management systems. The model will have a user-friendly interface to improve the customer experience.

To meet the needs of customers in waste management, the product will focus on accuracy, efficiency, and cost-effectiveness. I aim to provide a solution that is faster and more accurate than existing waste sorting products on the market.

The target audience for this product includes urban consumers living in apartments or small spaces, young people, affluent consumers who prioritize environmental sustainability, families with children who want to teach them about sustainability, and small businesses or offices that generate a lot of waste. I will also add environmental articles and tips to promote sustainable living.

**Sources**

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