

Finding	Recommendation
<p>Total Sales List :</p> <ol style="list-style-type: none"> Total sales for 2020: \$252,355.38 Total sales for 2021: \$199,286.90 <p>Sales in 2021 decreased by about 21% compared to 2020, with a decline of \$53,068.48. Overall, total sales over these two years reached \$1,754,750.57.</p>	<ol style="list-style-type: none"> Conduct comprehensive market analysis to identify shifts in customer preferences and emerging trends. Develop a robust customer retention strategy, including personalized offers and loyalty programs. Diversify product offerings to reduce reliance on specific categories and mitigate risks. Implement data-driven pricing strategies to optimize profit margins while remaining competitive.
<p>Drastic Decline at Year-End:</p> <p>In 2020, total sales sharply declined from October to December, peaking in November (\$4,126.67) and December (\$10,748.44). A similar pattern occurred in 2021, where sales continued to decrease, with November (\$3,958.55) and December (\$2,245.56) showing very low figures.</p>	<ol style="list-style-type: none"> Launch targeted year-end promotions to boost Q4 sales. Develop holiday-specific product bundles or limited-edition items to attract customers during slower periods. Implement seasonal inventory management strategies to avoid overstock during slower months. Consider expanding into markets with different seasonal patterns to balance annual sales.
<p>Peak Sales in Early Year:</p> <p>Sales were higher in the early months of the year, both in 2020 and 2021. For example, in January 2020 (\$27,745.05) and January 2021 (\$27,358.68). However, 2021 showed a decline compared to early 2020.</p>	<ol style="list-style-type: none"> Leverage the New Year momentum with a "New Year, New Technology" marketing campaign. Offer special packages or discounts for customers looking to upgrade their technology for the new year. Launch new product lines or updates in January to coincide with peak interest. Implement a referral program to encourage satisfied customers to spread the word during this high sales period.
<p>Increase in March and September:</p> <p>Both in 2020 and 2021, there were spikes in sales in March and September. For instance, in March 2020 (\$32,389.78) and March 2021 (\$30,384.18), and September 2020 (\$37,046.71) compared to September 2021 (\$14,060.30).</p>	<ol style="list-style-type: none"> Align marketing efforts and product launches with these peak months. Create back-to-school promotions for September to tap into the education market. Develop partnerships with educational institutions or businesses that may update their technology during these months.
<p>Significant Decline in 2021:</p> <p>Overall, sales in 2021 were lower than in 2020, especially in the second half of the year. This is clearly seen from July to December, where sales continued to decline. For instance, sales in December 2020 were \$10,748.44, while in</p>	<ol style="list-style-type: none"> Offer pre-order incentives for products launched in these months to extend the sales spike.

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<p>December 2021, it was only \$2,245.56.</p> <p>Q1 (2020 vs 2021): A decline of approximately ~8.39%. Sales in Q1 2021 were lower than in Q1 2020, consistent with the monthly trend where January to March 2021 experienced a decline.</p> <p>Q2 (2020 vs 2021): An increase of approximately ~15.6%. Sales in Q2 2021 were higher than in Q2 2020, in line with the monthly trend in May and June 2021 being better than the previous year.</p> <p>Q3 (2020 vs 2021): A decline of approximately ~48.3%. This quarter showed a drastic decline, consistent with the monthly analysis, especially due to the significant drop from July to September 2021.</p> <p>Q4 (2020 vs 2021): A decline of approximately ~48.6%. The last quarter of 2021 showed a sharp decline, consistent with the monthly trends for October to December 2021.</p> <p>Overall, quarterly and monthly analyses are consistent. There are no contradictions between the two analyses. The declines and increases at the quarterly level correspond to the patterns that emerged in the monthly analysis.</p>	
<ol style="list-style-type: none"> Robots lead with total sales of \$743,505, far exceeding other categories. Drones rank second with \$477,447, indicating a strong interest in aerial technology products. Robot Kits and Drone Kits recorded lower sales at \$216,437 and \$161,242.5, respectively. Training Videos and eBooks had smaller sales figures, at \$80,716.15 and \$58,968.41. Blueprints had the lowest sales at \$16,434.51. 	
<ol style="list-style-type: none"> eBooks had the highest total quantity sold with 3,123 units. Training Videos also showed good sales 	<ol style="list-style-type: none"> Increase investment in R&D for robot and drone technology to maintain market leadership. Develop complementary products or services that enhance the value of robots and drones. Create educational content and workshops to help customers maximize the use of these high-value products. Implement trade-in or upgrade programs for robot and drone customers to encourage repeat purchases. Develop premium eBook and video content with higher prices to increase revenue per unit. Create bundles that combine digital content with physical products to enhance average order value. Implement a subscription model for ongoing

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<p>with 2,081 units..</p> <ol style="list-style-type: none"> 3. Blueprints sold 1,618 units. 4. Drone Kits sold 1,515. 5. Drones had sales of 1,227 units. 6. Robots and Robot Kits sold 1,053 and 1,037 units, respectively. 	<p>access to updated content.</p> <ol style="list-style-type: none"> 8. Use these high-volume products (eBooks & Training Videos) as lead magnets to sell higher-priced products to customers.
<p>Robots have the highest average price at \$718.83, consistent with previous total sales results, where robots had the highest sales. This indicates that the high price significantly contributes to the total sales of these products.</p> <p>Robot Kits rank second with an average price of \$208.50. Despite the relatively high price, total sales for this category are lower than those for Robots, possibly due to differences in popularity or the number of units sold.</p> <p>Drones have an average price of \$385.43. This product category has high total sales and a reasonably high price, contributing to its overall sales.</p> <p>Drone Kits have an average price of \$106.21. This price is quite competitive, and this product ranks mid-level in terms of total sales and the number of units sold.</p> <p>Training Videos have an average price of \$38.10. This product may be more affordable compared to others, and the high number of units sold indicates good demand.</p> <p>eBooks have an average price of \$18.87. Despite a relatively low average price, eBooks show the highest number of units sold, indicating that this low-priced product is in high demand.</p> <p>Blueprints have a very low average price of \$9.99. Although this category has the cheapest price, the number of units sold is quite large; however, this does not correspond to the low total sales, indicating that the low price is the primary factor for sales, not total value.</p>	

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<p>California and Texas dominate sales with totals of \$237,295.59 and \$196,228.76, respectively, and have the highest number of cities, 51 and 34. This suggests that more cities tend to increase the chances of product sales.</p> <p>Other states like Florida and New York also show significant sales with \$121,018.31 and \$93,019.19. Florida has 36 cities and New York has 16 cities, indicating that location diversity also contributes to sales.</p> <p>On the other hand, Pennsylvania, Virginia, and Ohio show lower sales despite having a fair number of cities. For instance, Pennsylvania with 12 cities reached \$61,034.69.</p> <p>The District of Columbia, despite having only one city, still shows high sales, reflecting strong purchasing power in that area. Meanwhile, Illinois and Colorado have sales below \$60,000, but Illinois has the same number of cities as Ohio, indicating that factors like purchasing power and population also significantly influence total sales.</p>	<ol style="list-style-type: none"> 1. Intensify marketing efforts in these states to better leverage their strong markets. 2. Analyze the success factors in these states and apply the lessons learned to other regions. 3. Develop region-specific product packages or promotions tailored to customer preferences in California and Texas. 4. Build strategic partnerships with local retailers or technology communities in these states to enhance brand presence. 5. Conduct in-depth market research in D.C. to understand the factors driving high sales. 6. Develop targeted marketing campaigns for high-income urban areas similar to D.C. in other regions. 7. Consider opening a flagship store or experience center in D.C. to further enhance sales and brand visibility. 8. Create product lines or services that meet the specific needs of government or policy-related customers.
<p>Washington leads with total sales of \$55,381.94 and 308 orders, indicating a strong market in both sales value and transaction volume.</p> <p>Houston (Texas State = Top 2) and Sacramento have nearly identical sales around \$33,000, but Houston has more orders (249 vs 153), indicating a lower average price in Houston.</p> <p>Albany (New York State = Top 4) and Springfield (Illinois State = Top 9) have total sales close to \$25,000, with Springfield recording a higher number of orders, indicating differences in price per order.</p> <p>Phoenix and Philadelphia are at the bottom of the list, with sales around \$24,000 and similar order quantities, indicating market stability in both cities.</p>	<ol style="list-style-type: none"> 1. Implement city-specific inventory management to ensure popular products are always available. 2. Develop targeted marketing campaigns highlighting popular products in each city. 3. Offer city-specific bundles or promotions based on local preferences. 4. Train sales staff on regional preferences for better product recommendations.

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<p>Dominance of eBooks:</p> <p>Cities like Washington and Houston show significant sales figures for eBooks. For instance, Washington recorded 109 units sold, which is the highest among other categories, indicating that this product may have strong appeal in these cities.</p> <p>Sales Variation:</p> <p>The categories of products sold vary by city. For example, Drone Kits and Drones seem to be more popular in Houston and Philadelphia, while Robots have strong sales in Washington and Sacramento. This indicates that product preferences can differ based on location.</p> <p>Correlation Between Price and Sales Quantity:</p> <p>Although eBooks have the highest sales in terms of unit quantity, other product categories like Robots and Drone Kits may have higher prices. This suggests that cities with high sales for expensive products may also reflect greater sales value, as seen in Washington.</p> <p>Cities with Mid-Performance:</p> <p>Cities like Albany and Miami exhibit more balanced sales across several categories but do not reach the highest sales figures. This could be due to variations in product offerings or perhaps a lack of access to more expensive products.</p>	