Sales Performance Analytics & Business Intelligence Report

Global Consumer Electronics Hardware Company
Period Analyzed: 2019–2021

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1. Executive Summary

This project presents a comprehensive Business Intelligence analysis of multi-year sales performance (2019–2021) for a global consumer electronics hardware company specializing in keyboards, mice, and related accessories.

The company operates through multiple channels including retail stores, distributors, e-commerce platforms, and direct-to-consumer outlets.

The objective of this analysis was to:

- Evaluate historical sales performance
- Compare actual sales against targets
- Identify high-performing and underperforming markets
- Analyze product and division-level trends
- Detect revenue concentration risks
- Provide data-driven strategic recommendations

Using Power Query for ETL and Power Pivot for data modeling, a scalable analytical dashboard was developed to support executive decision-making.

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2. Business Context

The company operates in a competitive hardware accessories market with a multi-channel distribution model. While revenue has grown over recent years, leadership required deeper insights into:

- Market-level performance against revenue targets
- Customer-level contribution and growth
- Product portfolio efficiency
- Division-level profitability trends
- Effectiveness of new product launches

Without structured analytics, strategic decisions were largely reactive rather than data-driven.

This project aims to transform raw transactional sales data into actionable business intelligence.

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3. Problem Statement

Despite steady growth, management lacked visibility into:

- Which markets consistently exceed or miss targets
- Whether growth is driven by diversified demand or concentrated customers
- Which products generate sustainable revenue
- Whether certain divisions are stagnating
- How new products are performing post-launch

The organization required a centralized BI solution to enable proactive strategic planning.

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4. Data Overview

The dataset includes:

- Multi-year revenue data (2019–2021)
- Quantity sold
- Market/Country segmentation
- Customer segmentation
- Division categorization
- Product-level breakdown
- Target vs Actual performance data

All monetary values are recorded in USD.

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5. Data Engineering & Preparation

5.1 ETL Using Power Query

Power Query was used to:

- Import and combine multiple structured datasets
- Standardize data formats
- Clean inconsistent entries

- Remove redundancies
- Prepare analysis-ready tables

The ETL layer ensured reliable and structured input into the data model.

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6. Data Modeling Approach

A relational data model was created in Power Pivot using Diagram View.

Model Structure

The model consisted of:

- Fact Table: Sales Transactions
- Dimension Tables:
    - Customers
    - Markets / Countries
    - Divisions
    - Products

Relationships were established to enable:

- Cross-dimensional filtering
- Scalable performance analysis
- Dynamic KPI generation

DAX Measures Created

- Year-over-Year Growth Percentage
- Target Achievement Percentage
- Revenue Difference (Actual vs Target)
- Product Ranking Metrics

This structured modeling approach allows enterprise-level analysis within Excel.

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7. Analytical Findings

7.1 Revenue Growth Trend (2019–2021)

Sales revenue shows a consistent upward trajectory, with significant acceleration in 2021.

Implication:
The company is in a growth phase but requires strategic optimization to sustain momentum.

7.2 Customer Performance Analysis

- Revenue contribution is concentrated among a limited group of high-value customers.
- Some customers show declining YoY growth trends.

Risk Identified:
High dependency on a small customer base increases business vulnerability.

Recommendation:
Develop retention programs for top customers while diversifying the portfolio.

7.3 Market Performance vs Target

- Certain countries consistently exceed sales targets.
- Some markets underperform despite operational presence.

Implication:
Resource allocation may not be optimized.

Recommendation:
Reallocate marketing investment toward high-growth markets and conduct root cause analysis for underperforming regions.

7.4 Division Sales Performance

- Revenue growth varies significantly across divisions.
- Some divisions show stagnation or declining YoY performance.

Business Risk:
Over-reliance on specific divisions reduces diversification stability.

Recommendation:
Introduce innovation initiatives and promotional strategies in weaker divisions.

7.5 Product Portfolio Analysis

Top 10 Products (Revenue)

Revenue concentration is observed among a limited number of products, indicating a Pareto effect.

Opportunity:
Prioritize production planning and marketing efforts around high-margin, high-volume SKUs.

Bottom 5 Products (Quantity)

Low-performing products contribute minimal volume but may increase operational complexity.

Recommendation:
Consider SKU rationalization or bundling strategies to improve inventory efficiency.

7.6 New Product Performance

New product revenue contribution varies across SKUs.

Observation:
Not all launches generate sustainable traction.

Recommendation:
Implement structured product launch evaluation and post-launch monitoring frameworks.

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8. Strategic Recommendations

Based on the analysis, the following actions are recommended:

1. Reallocate marketing budget toward high-performing markets.
2. Strengthen retention strategies for top revenue customers.
3. Reduce operational overhead by rationalizing low-performing SKUs.
4. Improve target-setting processes using quarterly performance reviews.
5. Diversify revenue across divisions to mitigate concentration risk.
6. Standardize product launch evaluation metrics.

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9. Expected Business Impact (Simulated)

If implemented effectively, the strategy may result in:

- 8–12% improvement in revenue allocation efficiency
- 5–7% reduction in inventory inefficiencies
- Improved target achievement rates
- Enhanced strategic visibility for executive leadership

10. Conclusion

This project demonstrates the transformation of raw sales data into a structured Business Intelligence framework using Power Query and Power Pivot.

By applying data modeling principles, DAX measures, and multi-dimensional analysis, the organization gains:

- Improved performance transparency
- Better target tracking
- Clear identification of growth drivers
- Actionable insights for strategic planning

The BI solution provides a scalable foundation for future analytics expansion.