

## ***Predictive Insights Executive Memo***

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In this memo I will summarize the predictive enhancements added to the previous week's portfolio. Week 10 updates the existing Executive Dashboard with customer clustering and customer classification to provide a forward looking insight that helps executives understand the customer risk, opportunities for growth, and where the business' revenue is concentrated.

### **Clustering Summary**

The Predictive Insight page provides a chart that uses the clustering feature of Power BI to group customers based on Total Sales and Total Orders. Both measures were used as it captures purchasing behavior and revenue contribution of customers. The clusters are into three groupings.

1. Low Value – Low spending and low order customers.
2. Mid Value – Reliable, loyal purchasing customers with moderate spend.
3. High Value – Highest sales and strongest order frequency, main revenue driving force.

What these clusters reveal to executives is where the customer engagement lies, where the demand is whether it's weak, moderate, or strong. The page also provides an on page annotation to ensure the legends can be understood by anyone reading the chart.

## Classification Summary

The Customer Value Classification page groups customers to:

1. At Risk – Largest segment with low engagement signals.
2. Standard – Moderate and steady purchasing behavior.
3. High Value – Smallest group but highest total sales impact.

The classification is used for quick assessment of the growth effort or retention of customers.

## Strategic Value and Recommendations

Protect High Value Customers - These are the customers that are driving the main revenue of the business. It is important to focus on customer service, outreach, and retention. Customer happiness means the customer keeps spending money.

Engage At Risk Customers - Largest group out of the three, that means with minimal improvements to engagement it can make a big impact on revenue

Grow Mid/Standard Customers - Most loyal customers, vulnerable to up sell and cross sell for overall value.

## Conclusion

The dashboard has been updated with the future vision and prediction in mind. By combining clustering and classification with executive-friendly labels and annotations, the dashboard becomes a valuable tool that helps executives make big decisions for the company.