ALY6080

Integrated Experiential Learning

Module 7 Assignment

XN Project: Project Scope Document

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Harnessing Data to Drive Growth: An Analysis of Locally Inspired's Sales

1.Project Purpose:

❖ **Revenue Analysis:**

Dive deep into the overall revenue landscape of Locally Inspired. This involves a meticulous trend analysis of sales data over the past years to pinpoint any significant rises or dips and attempt to discern potential causes. By understanding the revenue streams, we aim to highlight areas of strength and potential growth opportunities.

❖ **Customer Retention:**

Analyze the ratio of repeat customers versus new patrons. By studying customer purchasing patterns, we will identify which products or services are most popular and analyze factors that might entice customers to return. Retaining a loyal customer base is pivotal for sustainable growth, and understanding their behavior can lead to more targeted and effective marketing strategies.

❖ **Effectiveness of Marketing:**

Investigate the proportion of customers who have opted for marketing content and gauge their contribution to overall sales. By analyzing which marketing strategies resonate most with our audience, we can refine our approach, ensuring that our marketing efforts are both efficient and impactful.

2. Project Background:

2.1 Introduction:

Locally Inspired, nestled in the heart of Port Washington, Wisconsin, stands as a beacon of retail innovation. With a fervent emphasis on peddling locally handcrafted, premium quality products, it has carved a niche for itself in the retail landscape (Locally Inspired, 2023). But it's not just a retail outlet; it's a melting pot of culture and community. It's a place where residents and visitors converge, exchanging stories, experiences, and learning about

the local artisans who pour their heart and soul into their creations. In an era where data-driven decisions propel businesses forward, harnessing this power becomes paramount, especially for a unique establishment like 'Locally Inspired'. Analyzing this data will not only drive growth but also further solidify its standing in the community.

2.2 Product Offering:

The store boasts a diverse product palette, ranging from unique handmade gifts to personal accessories, each meticulously curated from the crème de la crème of Wisconsin's artisan community. Every purchase at Locally Inspired is more than just a transaction; it's a statement. A statement that supports local artisans, champions craftsmanship, and bolsters a local economic ecosystem that thrives on community support and collaboration. However, maintaining such a vast and artisanal product range presents its own set of challenges, from inventory management to predicting customer preferences. This makes data analytics not just beneficial but vital, ensuring the offerings remain in tune with customer desires and market trends, thus maintaining the store's uniqueness and relevance.

3. Identify the Project Needs:

3.1 Data Cleaning:

Ensuring the accuracy and reliability of our data forms the foundation of our analysis.

- **Orders Inclusion Criteria**:

Only include transactions that are fully paid for and have reached completion.

- **Orders Exclusion Criteria:**

Orders that solely cover shipping fees or those that have been returned or canceled will be filtered out.

- **Data Consistency Check:**

Ensure uniformity in data formats, missing data treatment, and outlier management.

3.2 Summary Statistics:

Gaining a fundamental understanding of our data distribution aids in deeper, more targeted

analyses.

- **Subtotal Insights**:

Most products are priced below the average order value of $35.21, with a median value of $25.46.

- **Shipping Costs**:

An analysis of the high standard deviation in the shipping column to understand the vast differences in shipping costs.

3.3 Revenue Analysis:

Examining revenue trends provides insights into business performance and areas of opportunity.

- **Historical Trend Analysis**:

Understand monthly, quarterly, and yearly revenue trends.

- **Seasonal Strategy**:

Leverage insights from high sales during peak seasons, like holidays, to strategize around promotions, discounts, and product stocking.

3.4 Customer Retention:

Understanding customer behaviors and preferences is crucial for tailoring our offerings and maximizing retention.

- **Segmentation**:

Categorize customers based on purchase frequency, value, and recency.

- **Engagement Programs**:

Propose and design targeted campaigns for different customer segments to enhance loyalty.

3.5 Effectiveness of Marketing:

Evaluating the impact of marketing strategies allows for optimization of outreach efforts.

- **Opt-In Analysis**:

Determine patterns among customers who have opted for marketing content.

- **Sales Contribution Study**:

Gauge the revenue contribution from customers engaged through marketing efforts.

4. Confirm the Objectives and Goals:

- **Specific**:

Deep dive into sales, customer, and inventory data to inform decisions related to revenue growth, customer retention, and marketing effectiveness, as outlined in the Project Purpose.

- **Measurable**:

Set benchmarks based on historical data to evaluate revenue streams, customer retention rates, and marketing strategy impact. This directly ties to our aims of revenue analysis, understanding customer behaviors, and gauging marketing effectiveness.

- **Achievable**:

Utilize advanced tools like R-studio and Tableau for comprehensive data processing, modeling, and visualization, enabling us to meet the detailed analysis requirements stated in the Project Purpose.

- **Realistic**:

Conduct periodic reviews to refine our approach based on preliminary findings and stakeholder feedback, ensuring that we remain on track to fulfill our project's primary objectives.

- **Time Frame**:

Segment the project into distinct phases with dedicated milestones, ensuring that each aspect of the Project Purpose, from revenue analysis to marketing evaluation, is covered within the set timeline.

5. Project Scope Description:

- **Data Extraction & Pre-processing**:

Ensure that data from various sources is cleaned, consistent, and prepared for in-depth analysis.

- **Modeling & Analysis**:

Develop predictive models to forecast revenue, segment customers for retention purposes, and assess marketing effectiveness.

Deliverables:

- **3 predictive models**:

One for revenue forecasting, one for customer segmentation, and one for marketing strategy assessment.

- **2 interactive dashboards using Tableau**:

A high-level dashboard showing overall business health metrics and a detailed dashboard for granular insights into sales, customer behaviors, and marketing strategy performance.

- **Visualization**:

Design interactive dashboards using Tableau to provide insights both at a macro and micro level.

6. Expectations and Acceptance:

- **Customers**:

A more personalized shopping experience, improved product availability, and better post-purchase services.

- **Internal Team**:

Efficient inventory management, improved marketing ROI, and actionable customer insights for retention strategies.

7. Identify Constraints:

- **Data Quality**:

Potential inconsistencies or inaccuracies in data sources.

- **External Factors**:

Unpredictable market shifts, competitor actions, or economic changes that may affect sales.

8. Identify Necessary Changes:

- **Feedback Mechanism**:

Establish a mechanism to capture regular feedback from stakeholders. Key stakeholders include the internal marketing team, the store's management, and select loyal customers.

- **Change Management**:

Clearly define processes for proposing, evaluating, and implementing changes to the project scope or approach.

9. Risk Management:

- **Assessment**:

Regularly assess potential risks and their impact. Each risk will be ranked based on its likelihood of occurrence and potential impact on the project.

10. Documentation & Training:

- **User Manuals**:

For all dashboards and tools developed, provide comprehensive user guides.

- **Training Sessions**:

Organize training sessions for internal teams on new tools, dashboards, and strategies proposed.

Conclusion:

In the rapidly evolving retail landscape, data-driven decision-making stands as a cornerstone for sustainable growth and success. Our project, "Harnessing Data to Drive Growth: An Analysis of Locally Inspired's Sales," seeks to empower Locally Inspired with actionable insights derived from a comprehensive analysis of their sales, customer behavior, and marketing effectiveness. By delving deep into the nuances of revenue streams, customer retention patterns, and marketing strategies, we aim to provide a roadmap for Locally Inspired to bolster its unique business model and further solidify its position in the heart of Port Washington, Wisconsin. The strategies and methodologies outlined in this project not

only aim to enhance the immediate operational efficiency of the store but also to ensure its long-term viability and growth. As we conclude, it's imperative to understand that the true essence of this project lies not just in numbers and data but in the stories, experiences, and communities that Locally Inspired represents. Through our collaborative efforts, we hope to see Locally Inspired continue to thrive, champion local artisans, and remain a beacon of retail innovation and community spirit.

Reference:

Y. Kaneko and K. Yada, "A Deep Learning Approach for the Prediction of Retail Store Sales," 2016 IEEE 16th International Conference on Data Mining Workshops (ICDMW), Barcelona, Spain, 2016, pp. 531-537, doi: 10.1109/ICDMW.2016.0082.

Locally inspired. Locally Inspired WI. (n.d.-a). https://locallyinspiredwi.com/