BUSINESS INTELLEGINT

Power BI

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Introduction

As a Junior Business Analyst at Mega Ace Software Solution Company, our primary tasks (mini cinema project) will revolve around educating business leaders on the value of data and information and developing tailored solutions to meet their needs. We will be responsible for presenting presentations to business owners to explain how application software may help with decision-making and to emphasize the importance of BI tools and technologies. In addition, when needed, we will be entrusted with designing BI solutions for small enterprises. We act as a bridge between cutting-edge technology and educated decision making in all of these roles, contributing to the progress and success of both our firm and our clients.

The legal issues involved in the secure exploitation of business intelligence tools

The secure use of business intelligence (BI) solutions is critical for protecting sensitive data and adhering to regulatory requirements. The usage of BI tools raises a number of legal concerns, notably in terms of data protection, security, and compliance. Here are a few important legal considerations: The secure use of business intelligence (BI) solutions necessitates consideration of several legal issues. me: Because BI systems frequently process personal and sensitive data, compliance with data privacy legislation such as GDPR in the EU or CCPA in the US is required. This includes gaining appropriate consent, performing data anonymization as necessary, and protecting persons' data rights. Data Security: Because corporations handle a large amount of sensitive data, they are legally required to have effective security measures to prevent breaches, illegal access, and cyber threats. Failure to do so may result in legal ramifications, financial

penalties, and reputational loss. Intellectual Property Rights: Because BI systems commonly use data from a variety of sources, compliance with intellectual property rights, including as licenses and copyrights, is required to avoid unlawful data usage and associated legal problems. Transparency and accountability: To comply with legal obligations and inform individuals about their data processing rights, organizations must provide transparent data processing, including explicit explanations regarding data collection, utilization, and analysis. Cross-Border Data Transfer: If BI technologies entail cross-border data transfers, compliance with the rules governing such transfers is critical to ensuring compliance with varied data protection requirements between jurisdictions (RoseIndia.Net 2022, 2022).

Sale Record

Figure:1.1: Sales Record

A slicer, a map visualization, and two more visualizations - a bar chart and a donut chart - will be included in this report. We also want to include the slicer.

Here's a step-by-step guide to making this Power BI dashboard:

First, ensuring that we have our sales data in an appropriate format, such as an Excel spreadsheet or a database table. This information should include details regarding sales transactions, such as dates, ticket kinds, locations, and sales amounts.

- Launch Power BI Desktop: Power BI Desktop, a free program for producing and sharing interactive reports and dashboards, should be launched.
- Data Import: Import our sales data into Power BI by choosing "Get Data" and selecting the appropriate data source. Follow the on-screen instructions to import our data into Power BI.

Create a Slicer: In the Visualizations pane, click on the "Slicer" visualization to create a slicer. Drag a relevant field from our data into the slicer display area (for example, "Date" or "Location"). Users will be able to filter data using this slicer by selecting several settings.

- Include a Map Visualization: Select "Map" from the Visualizations pane to generate a map visualization. Drag and drag a location-related field (for example, cinema location) into the map visual's "Location" field well. This will generate a map with sales data shown geographically.
- Visualization of a Bar Chart: In the Visualizations window, pick "Bar chart" to generate a bar chart. Select an x-axis field (for example, sales date or movie titles) and the y-axis sales amount. Depending on our preference, this will generate a bar chart displaying sales data over time or by movie.
- Donut Chart Visualization: In the Visualizations window, pick "Donut chart" to generate a donut chart. To indicate the sales distribution, use a suitable field in the "Values" section (e.g., ticket kinds or genres). This will display the percentage of sales for each category in a donut chart.
- List the Slicer: To list the slicer, select it, go to the Format pane, and alter the text size, color, and alignment settings to make it visually appealing.
- Customize and Format: To make our dashboard aesthetically beautiful and easy to comprehend, we may customize the design of our visualizations, add titles, legends, and alter colors.
- Make certain that the slicer interacts with the other visuals. To do so, pick the slicer, navigate to the "Format" tab, and check the "Edit Interactions"

box. Then, indicate how the slicer should affect the other visualizations (for example, filter, highlight, or do nothing).

Publish and Distribute: When we're through creating our Power BI dashboard, we publish it to the Power BI Service or export it as a report to share with the rest of our team.

We developed a sales record dashboard in Power BI for our little cinema company by following these steps, which include the desired slicer, map, bar chart, and donut chart visualizations.

Revenue Record

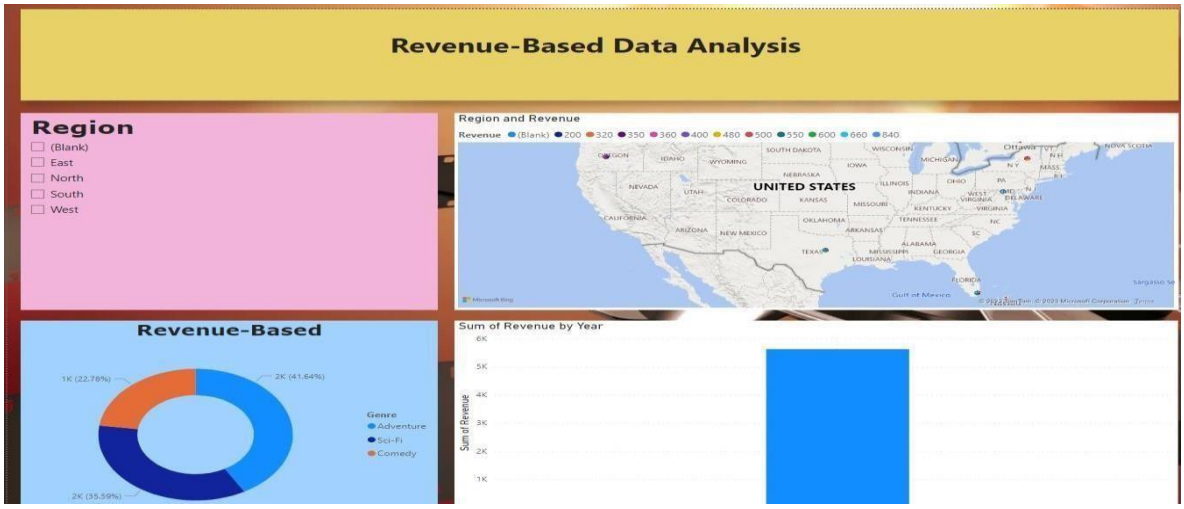

Figure 1.2: Revenue Records

We created the next page so we don’t need to import data so we import visualizations as below:

- Create a Slicer: In the Visualizations pane, click on the "Slicer" visualization to create a slicer. Drag a relevant field from our data into the slicer display area (for example, "Date" or "Location"). Users will be able to filter data

using this slicer by selecting several settings. We made the slicer more aesthetically attractive by selecting it, going to the Format pane, and modifying the font size, color, and alignment settings.

Include a Map Visualization: Select "Map" from the Visualizations pane to generate a map visualization. Drag and drag a location-related field (for example, cinema location) into the map visual's "Location" field well. This will generate a map with revenue data shown geographically.

- Column Chart Visualization: In the Visualizations window, pick "Column chart" to create a column chart. Choose an x-axis field (for example, revenue date or movie titles) and a y-axis revenue amount. Depending on our preference, this will generate a column chart displaying income data over time or by movie.
- Donut Chart Visualization: In the Visualizations window, pick "Donut chart" to generate a donut chart. To depict income distribution, use an appropriate field in the "Values" section (e.g., ticket categories or genres). This will display the percentage of revenue for each category in a donut chart.

Same as sales record we customized the record and format it before we publish and save. We develop a revenue record dashboard in Power BI for our little cinema company by following these steps, which include the desired slicer, map, column chart, and donut chart visualizations.

Evaluate how organizations could use business intelligence to extend their target audience and make them more competitive within the market, taking security legislation into consideration.

Using business intelligence (BI) successfully may considerably assist a Mega Ace Software Solution Company Mini Cinema project in terms of extending its target audience and increasing competitiveness while maintaining compliance with

security requirements. Here's an assessment on how BI may be used in this context:

I. Audience Segmentation: Business intelligence technologies can assist in analyzing customer data to determine trends and preferences. The Mini Cinema project may customize its services to certain consumer groups by segmenting the audience based on demographics, watching patterns, and other pertinent characteristics. This tailored strategy has the potential to reach a larger audience.

II. Material Recommendation: BI algorithms may be used to recommend movies or material to users based on their watching history. This not only improves the user experience, but it also encourages subscribers to investigate a broader range of products, thus drawing additional viewers.

III. Marketing and promotion: Business intelligence may help track the efficacy of marketing activities. The cinema project may fine-tune its marketing efforts to attract a wider and more responsive audience by examining statistics on ad clicks, social media engagement, and conversion rates.

IV. Security Compliance: Because data security is so important, BI systems should be developed to comply with appropriate security regulations, such as GDPR or HIPAA, depending on the area and sort of data gathered. This guarantees that client data is handled carefully and in accordance with the law.

V. Data Encryption and Access Control: To safeguard sensitive customer information, use robust data encryption and access control techniques. To

control data access, BI systems should restrict access to authorized people and provide audit logs.

The Mini Cinema project may expand its target audience and remain competitive in the market by efficiently leveraging BI to adapt offers, improve marketing, streamline operations, and assure data security and compliance. Furthermore, adherence to security regulations not only protects consumer data but also increases the cinema's image for dependability and accountability.

Why use Power Bi for our project

Using Power BI for your project, such as Mega Ace Software Solution Company's Mini Cinema project, may provide various advantages, particularly in the context of business intelligence and data analytics. Here are some of the main reasons why Power BI can help your project:

- Data Visualization: With Power BI, you can turn complicated data into interactive and aesthetically attractive reports and dashboards. This helps stakeholders comprehend and obtain insights from your project's data (2023 Microsoft, n.d.).
- Power BI can connect to a broad variety of data sources, both on-premises and in the cloud. This means you may combine data from several systems and sources into a cohesive perspective, which is critical for decisionmaking (2023 Microsoft, n.d.).
- Power BI provides real-time data analytics, allowing you to monitor project performance and critical indicators as they occur. This is especially useful

for a Mini Cinema project that wants to measure movie attendance, income, and consumer behavior in real time (2023 Microsoft, n.d.).

- Power BI blends AI and machine learning capabilities, allowing you to include predictive analytics, anomaly detection, and data-driven insights into any project. For example, using previous data, you may forecast movie attendance (2023 Microsoft, n.d.).
- Data Security: Power BI has strong security features including as data encryption, role-based access control, and compliance with data protection laws. This preserves the confidentiality and integrity of the data in your project (2023 Microsoft, n.d.).

In conclusion, utilizing Power BI for your Mini Cinema project may assist you in harnessing the power of data to make educated decisions, optimize operations, and improve the client experience. Its adaptability, scalability, and userfriendliness make it an invaluable resource for firms seeking to harness business data and analytics for development and success.