

# DATA SCIENCE SOLUTION FOR MRS ORGANIZATION

Reporting how the business intelligence tools and technologies are important in business decision making of MRS organization



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## **Abstract**

As a junior analyst of MRS co. Lit, this report is intended to contribute to the MRS's ongoing plan of enhancing operational efficiency and customer satisfaction. This report clarifies how tools and technologies contribute to effective decision making in business process for the Myanmar retail Solutions (MRS) and designing & implementing Data science solution for MRS organization.

## Data Science

### What is Data Science?



It's the process of extracting insightful information from a big chunk of data. It needs to combine these skills which are domain knowledge, machine learning, statistics, coding skill, mathematic, and deep learning to get the desired result that can be used to meet our organization needs and improve informed decision-making process. (Priya Pedamkar, 2019)

Data science has key aspects that add value to an organization. They are:

1. Data Collection
2. Data Processing
3. Data management
4. Data analysis
5. Data Communication

### How Data science beneficial for MRS organization

MRS can gain significant benefits by adopting data science solutions in enhancing operational efficiency and customer satisfaction. Data can offer tangible evidences and facts to make right decisions rather than rely on gut feelings.

MRS will be able to manage their inventory more effectively by predicting future demands for specific products using the predictive features of data science. (Chandra Gogineni, 17 oct) It analyzes historical sales data, seasonal trends, market trends to give insight into which product should be fully stock or reduce stock. MRS can optimize inventory level efficiently, reduce stockouts or overstocking, prepare stock for seasonal rushes (Chandra Gogineni, 17 oct), and avoid lost sales. It will enhance customer satisfaction by stocking the right products in the right amounts.

MRS can identify buying patterns and segment customers by analyzing purchase history data (maybe from POS system or website analytic), customer feedback, interaction and preferences. This identification allows MRS to understand their target customers and their behavior better. So, they can plan for targeted promotions and marketing campaigns rather than all-in-one fit ones. (Editorial Team, 2024) Those personalization approaches will bring the right offers to the right customers at the right time. It will lead to sale increasing and attaching customers to MRS. Beside personalized stuffs, MRS can optimize store layout, product placement, address customer pain points, and offer personalized shopping experiences if they really know their target audience.

MRS will be able to develop dynamic pricing algorithms, which can adjust prices based on the analyzation of demand elasticity, competitor pricing, and customer demographic facts, with the help of data science. (Fred Heller, 2022) This will bring revenue increase and profits to MRS regarding pricing.

Better supply chain optimization is another benefit MRS gain from using data science to analyze supplier data, delivery routes, and historical lead times, which can help MRS to identify delays and bottlenecks. (Fred Heller, 2022) By doing so, MRS will have a chance to improve delivery schedules, perform predictive analytics that predict disruptions, and plan proactive supply chain management to ensure the timely or faster delivery of goods to MRS stores.

MRS can develop algorithms that can detect unusual patterns in transactions using data science. This will help MRS to identify suspicious transactions and prevent payment fraud or inventory theft. (Editorial Team, 2024) This solution will protect MRS's financial losses and its reputation.

In summary, MRS can level up its processes in enhancing operational efficiency and customer satisfaction by implementing data science solutions. MRS will be able to ultimately drive business growth in the competitive Myanmar's retail market.

## **Business Intelligence Tools and Technologies**

### **What is Business Intelligence?**

Business intelligence is one of the important parts of data science. It is mainly applying multiple tools and technologies to transform raw data into meaningful and actionable information. (Andy Morris, 2023).

### **What are Business Intelligence tools and technologies?**

Business intelligence tools and technologies are a wide range of software applications and techniques to collect, integrate, analyze, visualize and contextualize business data from multiple data sources to help us understand trends, identify patterns in the mountains of data our business builds, and make tactical and data-driven decisions. (Erin Gilliam Haije, 2022).

Example business intelligence tools for MRS are

- Microsoft Power BI
- Tableau
- Domo

This is the comparison tables of comparing benefits and drawbacks of Power BI, Tableau, and Domo BI tools.

Factor	Power BI	Tableau	Domo
Main Benefits	Power BI offer an affordable pricing options compared to other BI tools. For organizations which already using Microsoft products, adopting Power BI is easier than adopting other tools. And it allows seamless integrates with other Microsoft products like Excel. It has easy to use interface. It has strong data visualization capabilities and has reporting tool that can be viewd on both desktop and mobile phone. This tools allow users to share and collaborate with other users via email, social media, website. Power BI is very widely adopted so it owns strong and large community that can support users related with Power BI. (geeksforgEEKS.org, 2023)	Tableau is very famous for giiving users a highly customizable and flexible visualizations more than Power BI. It can handle large datasets effeciently because it has powerful data blending capabilities. It has intuitive drag-and-drop interface. Like Power BI, Tableau also has large suuportive community. (TheKnowledgeAcademy, 2023)	With domo, user can combine data integration, BI, and analytics in one platform. It gives users a real-time data updates and collaboration. Like Power BI and Tableau, it also has user-friendly inteface. It is entirely cloud-based platform together with strong mobile support. It has over 1000 pre-built connectors and libraries to integrate various data sources seamlessly. (Krishna Kumar, 2019)
Main Drawbacks	Power BI has issue in performance lagging when it processes large datasets. Some useful advanced features might require expensive licenses. In data visualization, Power BI offer less customization compared to Tableau. It also restricts on the data volumn that can be fed into the system and the available amount is determined based on the license type. Power BI cannot handle very complex data models. Not all data sources and other applications won't work well with Power BI. (geeksforgEEKS.org, 2023)	Tableau is generally more expensive more than Power BI, particularly for enterprise-level deployments. When users work on complex datasets and unconventional data representation, it lacks some essential design and editing features. Although Tableau has extensive customization on data visualization, it doesn't have data preparation tools and techniques. If user need to perform data cleaning, transformation, aggregation, they need to work on other tools. Tableau lacks version control which is important to tracking the changes made and managing those changes. It has less comprehensive cloud support compared to some other BI tools. (TheKnowledgeAcademy, 2023)	Domo also expensive for small to mid-sized businesses. It has limited visualization views such as bar, pie, and a variety of other charts. Domo lacks statistical computation capabilities and has a restricted number of options. Domo is complex to setup and maintain so business need technical expertise. Domo's ETL's scoring procedures is inefficient so user have to rely on convention naming. (OnlineITGuru, 2022)
Impact	Power BI is specifically popular in businesses already using Microsoft services and leads to more smooth processes.	Tableau allows user to get deep data insghts and visualization that can lead to more informed decision-making. It gives the gold standard in data visualization so this makes it a preferred choice for analysts.	Domo supports real-time decision-making with its strong real-time data integration capabilities. This suits in organizations needing comprehensive and all-in-one solutions.

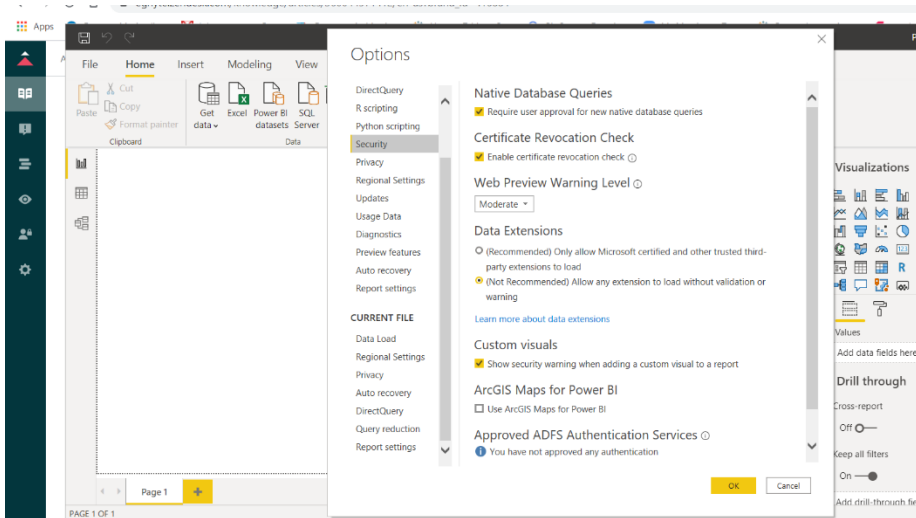
## How Business intelligence tools support effective decision making of MRS organization

### Microsoft Power BI

Microsoft Power BI, one of the most popular BI tools, allow MRS to integrate with other Microsoft application such as Excel. It also



# Power BI

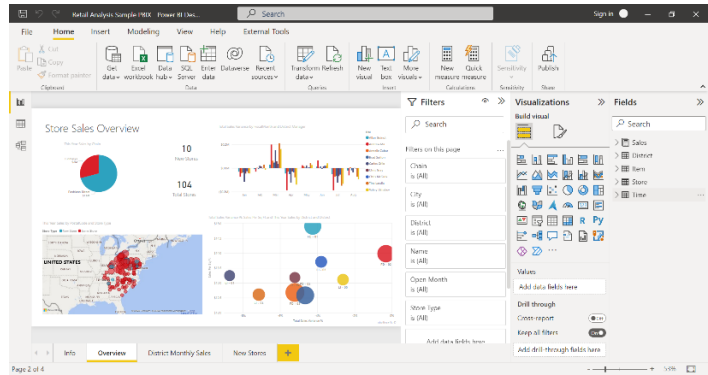


Data connector of Power BI 1

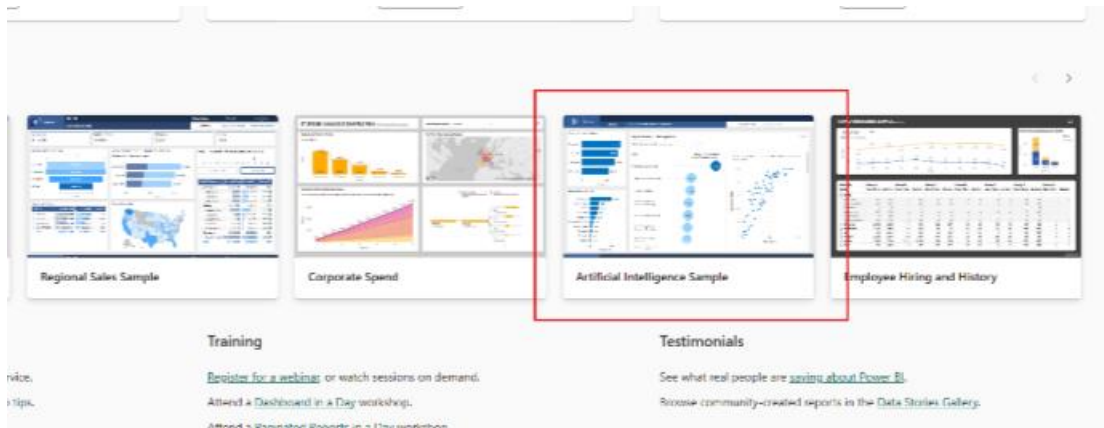
has user-friendly interface (like drag-and-drop report builder) and extensive data connectors where MRS can gather data from multiple sources. This feature helps MRS to be able to gather data within their retail operations such as sales transactions, inventory levels, customer feedback

system, or even market trends. They can integrate those data to get a comprehensive view and it leads to better decision making. (Joleen Bothma, 2023)

Also, its powerful visualization tools (like graphs, charts, maps) help MRS in transforming raw data into visually appealing and insightful dashboards and reports. By doing so, decision maker can quickly understand complex data trends and patterns at one sight and they can make strategic actions to improve operational efficiency, optimize inventory and enhance customer satisfaction. This visualization results can be shared to the stakeholders across the organization via website thanks to the Power BI's web-based nature.



Data visualization tools of Power BI 1



AI predictive modelling of Power BI 1

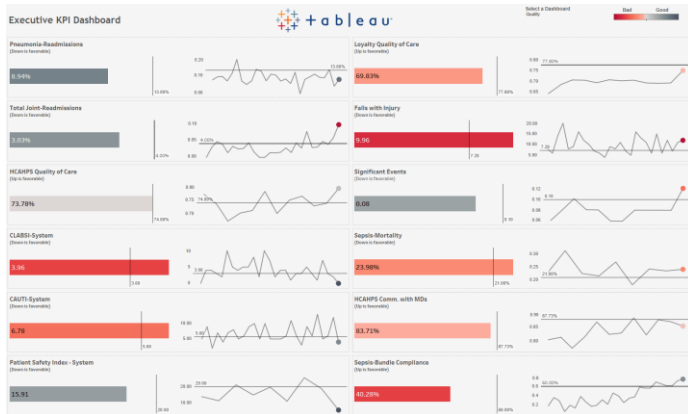
Moreover, MRS can predict demands, optimize pricing and make proactive decisions to meet customer demands and maximizing revenue by using historical data and Power BI's predictive modelling and AI-based features (advanced analytics). (Joleen Bothma, 2023)

## Tableau

With Tableau, both technical and non-technical staff can explore and interpret data effectively



because of the ease of use. Like Power BI, Tableau owns a wide range of data connectors and it helps MRS with a seamless integration with diverse data source to



KPI in Tableau 1

access and analyze diverse datasets. Beside data connectors, Tableau can give real-time data integration so MRS can monitor KPIs (Key Performance indicators) and make correct decisions timely to response changing market trends and customer demand changes. (SHERIDAN GAENGER, 2023)

Moreover, Tableau provide dynamic and interactive dashboards and visualization tools (Erin Gilliam Haije, 2022) which help MRS in dynamic data exploration and empower decision makers to drill down into specific metrics and gain actionable insights in real-time. Additionally, an accessible platform provided by Tableau public can improve MRS's

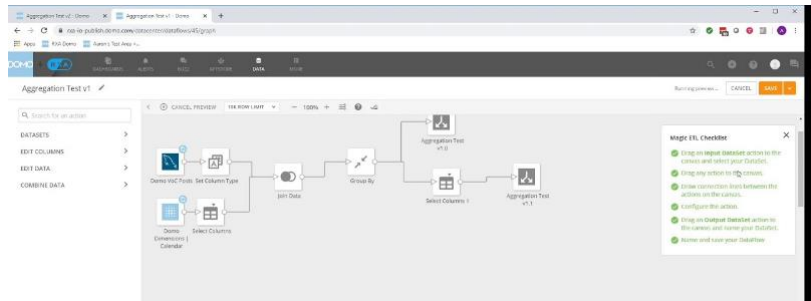


Dashboard of Tableau 1

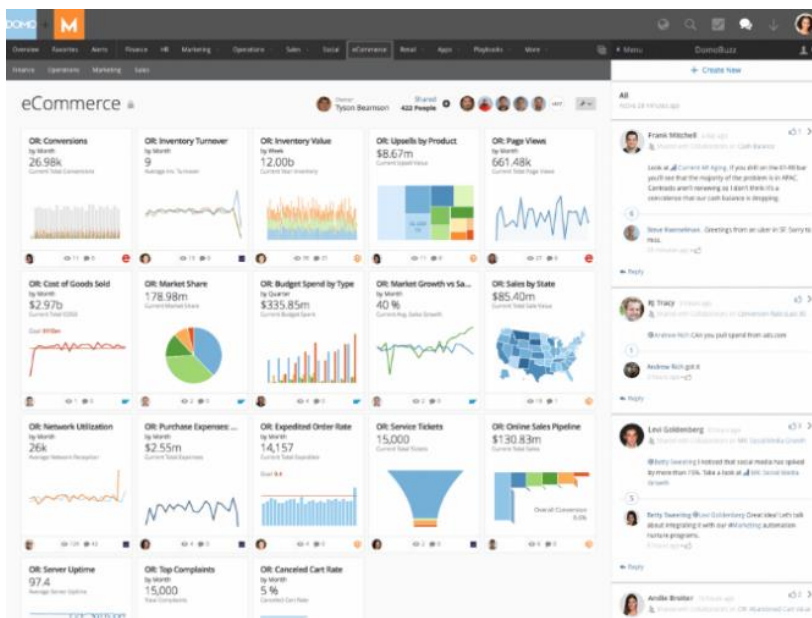
employee's analytical and BI skills and it will contribute to the MRS's data-driven culture. (Joleen Bothma, 2023)

# Domo

Domo is fully cloud-based BI platform (Joleen Bothma, 2023) so it offers MRS a smooth and scalable solution for data visualization and reporting from anywhere internet connection is connected. Domo make data



ETL of Domo 1



Dashboard of Domo 1

integration across MRS's retail operations simpler with its intuitive interface and over 1000 pre-built connectors. (Joleen Bothma, 2023) This feature helps MRS to make decision efficiently at every level of MRS. Domo also has magic ETL feature that can streamline data transformation and cleaning processes. This ETL empowers MRS to derive accurate and reliable insights from their data with less effort. (Joleen Bothma, 2023)



Advanced Embedded analytic of Domo 1

Additionally, MRS can extend their data-driven insights beyond internal stakeholders by using Domo's advanced embedded analytics capabilities. (Joleen Bothma, 2023) This extensibility can promote MRS's collaboration with external partners and suppliers to optimize supply chain

management. This can contribute to the enhancement of overall business performance.

## **How Business intelligence technologies support effective decision making of MRS organization**

### **Data mining**

Data mining is the process of sorting large datasets of MRS's retail operation to uncover hidden patterns, relationships and insights. They can identify trends in customer behavior, sales patterns, and product preferences. (Ana Misiuro, 2022).

Through data mining, MRS can segment their customers based on their characteristics, can identify patterns contributing to customer churn and can uncover associations between products and anticipate customer's next moves. (T-ROC staff, 2023) Those capabilities support MRS to make effective decision making in product placement, marketing strategies, product offering, pricing tactics, and so on.



## Data visualization

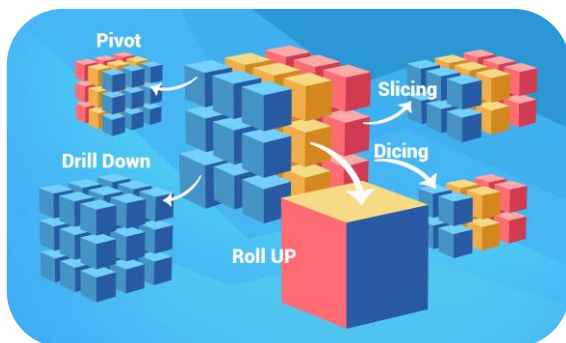
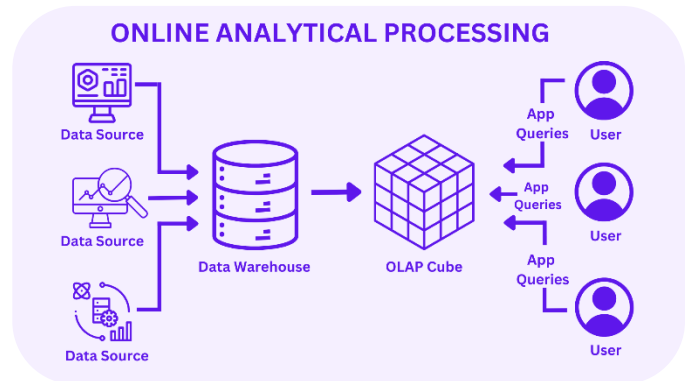
Visualizing data in the form of charts, graphs, or dashboards give clear representation of complex data. (Ana Misiuro, 2022) That helps MRS’s decision makers to quickly and easily understand complex data trends and figure out the actionable insights. Visualizations also help in monitoring Key performance indicators to analyze related one’s performance, analyzing sales trends, and accessing inventory levels. (Ana Misiuro, 2022) Insights derived from them facilitates right decisions to optimize operations and enhance customer satisfaction.



the

## Online Analytical Processing (OLAP)

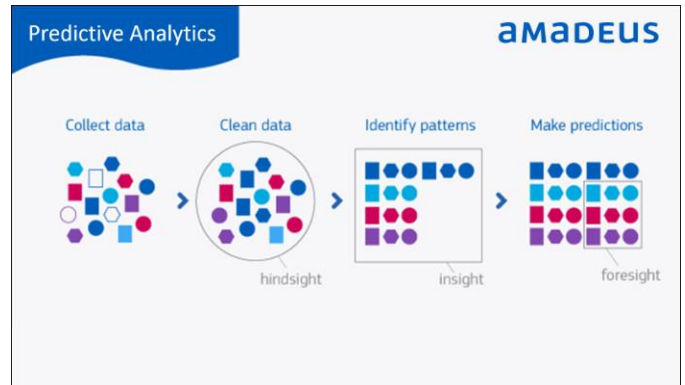
MRS can analyze multidimensional data from multiple perspectives and access to various views of information quickly and interactively by using OLAP (Online Analytical Processing). (Amazon, 2023) OLAP can help MRS to be able to analyze data from



different perspectives like product sales, customer demographics, and geographic regions. This feature can give MRS deeper insights into market trends, customer behavior, and operational performance. Based on that information, MRS can make informed decisions timely, optimize resource allocation, find out opportunities, and can response promptly to changing market dynamics.

## Predictive Analytics

Through predictive analytics that use historical data and statistical models, MRS can predict future outcomes like demand trends, stock levels, and customer demand changes. (Ana Misiuro, 2022) Since they predict those facts, MRS can make proactive decisions to adjust

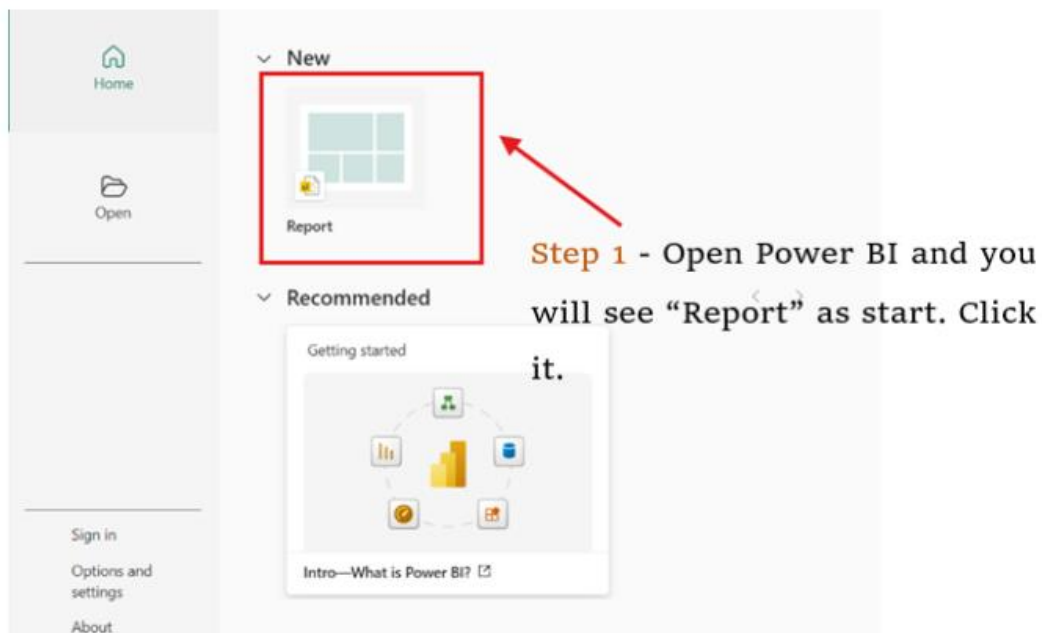


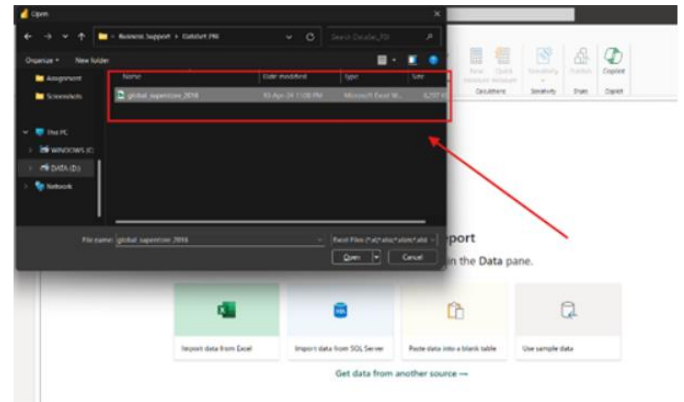
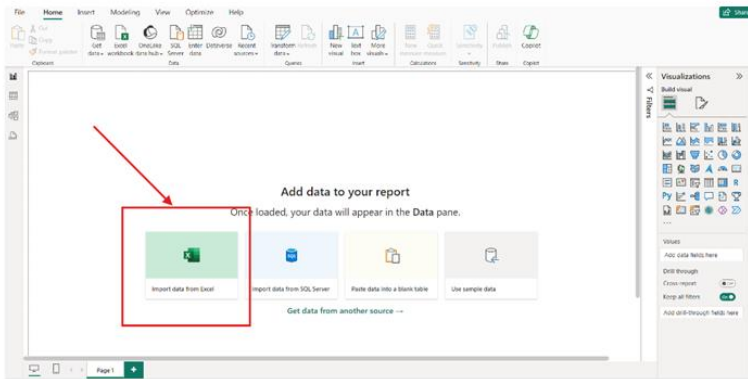
inventory levels, marketing campaigns, and pricing strategies. Those decisions can make sure efficient operations and meeting customer demands effectively.

## Design and implement a data science solution for the Myanmar Retail Solutions with Power BI

### Design data set with Power BI

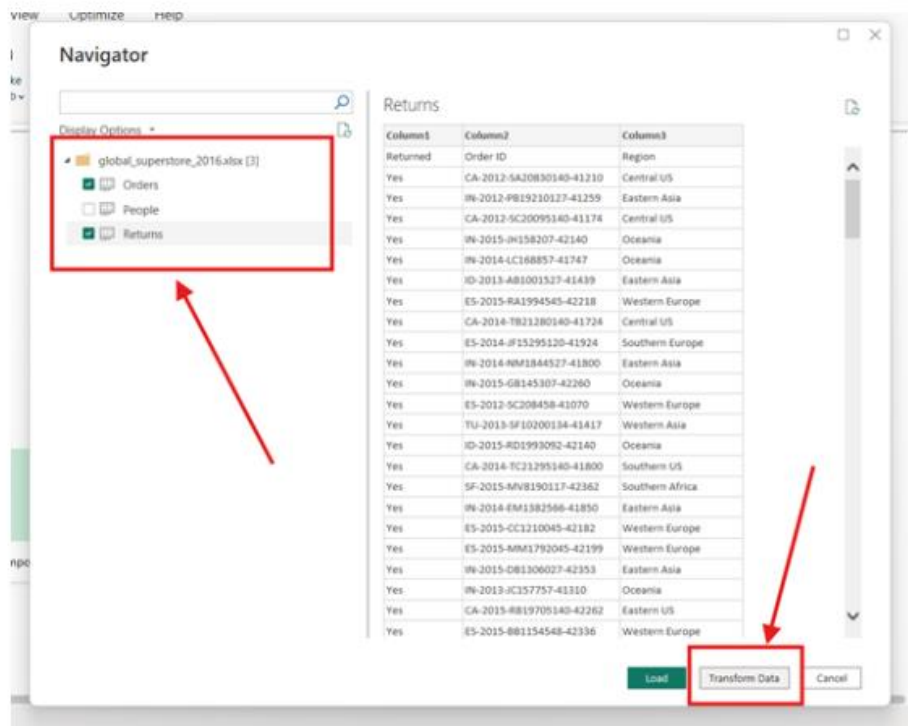
We will use “Global Superstore 2016” dataset in Power BI.





**Step 2** - Choose "Import data from Excel" as we will use Excel dataset. Otherwise, you can choose other options based on your needs.

And Open "Global Superstore 2016" excel file. You can chose any excel file that you store.



**Step 3** - Choose Data sheet you want to import and click "Transform Data"

Row ID	Order ID	Order Date	Ship Date	Ship Mode	Customer ID	
1	40098	CA-2014-AB10015140-41954	22-Nov-14	13-Nov-14	First Class	AB-10015140
2	26341	IN-2014-JR162107-41675	05-Feb-14	07-Feb-14	Second Class	JR-162107
3	25330	IN-2014-CR127307-41929	17-Oct-14	18-Oct-14	First Class	CR-127307
4	13524	ES-2014-KM1637548-41667	28-Jan-14	30-Jan-14	First Class	KM-1637548
5	47221	SG-2014-RH9495111-41948	05-Nov-14	06-Nov-14	Same Day	RH-9495111
6	22782	IN-2014-JM156557-41818	28-Jun-14	01-Jul-14	Second Class	JM-156557
7	30570	IN-2012-TS2134092-41219	08-Nov-12	08-Nov-12	First Class	TS-2134092
8	31192	IN-2013-MB1808592-41378	14-Apr-13	18-Apr-13	Standard Class	MB-1808592
9	40099	CA-2014-AB10015140-41954	22-Nov-14	13-Nov-14	First Class	AB-10015140
10	36258	CA-2012-AB10015140-40974	06-Mar-12	07-Mar-12	First Class	AB-10015140
11	36259	CA-2012-AB10015140-40974	06-Mar-12	07-Mar-12	First Class	AB-10015140
12	28879	ID-2013-AJ107801-41383	19-Apr-13	22-Apr-13	First Class	AJ-107801
13	45794	SA-2012-MM7260110-41269	26-Dec-12	28-Dec-12	Second Class	MM-7260110
14	4132	MX-2013-VF2171518-41591	13-Nov-13	13-Nov-13	Same Day	VF-2171518
15	27704	IN-2014-PF1912027-41796	06-Jun-14	08-Jun-14	Second Class	PF-1912027
16	18779	ES-2015-RP1118545-42216	31-Jul-15	03-Aug-15	Second Class	RP-1118545
17	39519	CA-2012-AB10015140-40958	19-Feb-12	25-Feb-12	Standard Class	AB-10015140
18	12069	ES-2015-PJ1883564-42255	08-Sep-15	14-Sep-15	Standard Class	PJ-1883564
19	22096	IN-2015-JS156857-42085	31-Jan-15	01-Feb-15	First Class	JS-156857
20	49463	TZ-2015-RH9555129-42343	05-Dec-15	07-Dec-15	Second Class	RH-9555129
21	46630	PL-2013-AB600103-41494	08-Aug-13	10-Aug-13	First Class	AB-600103

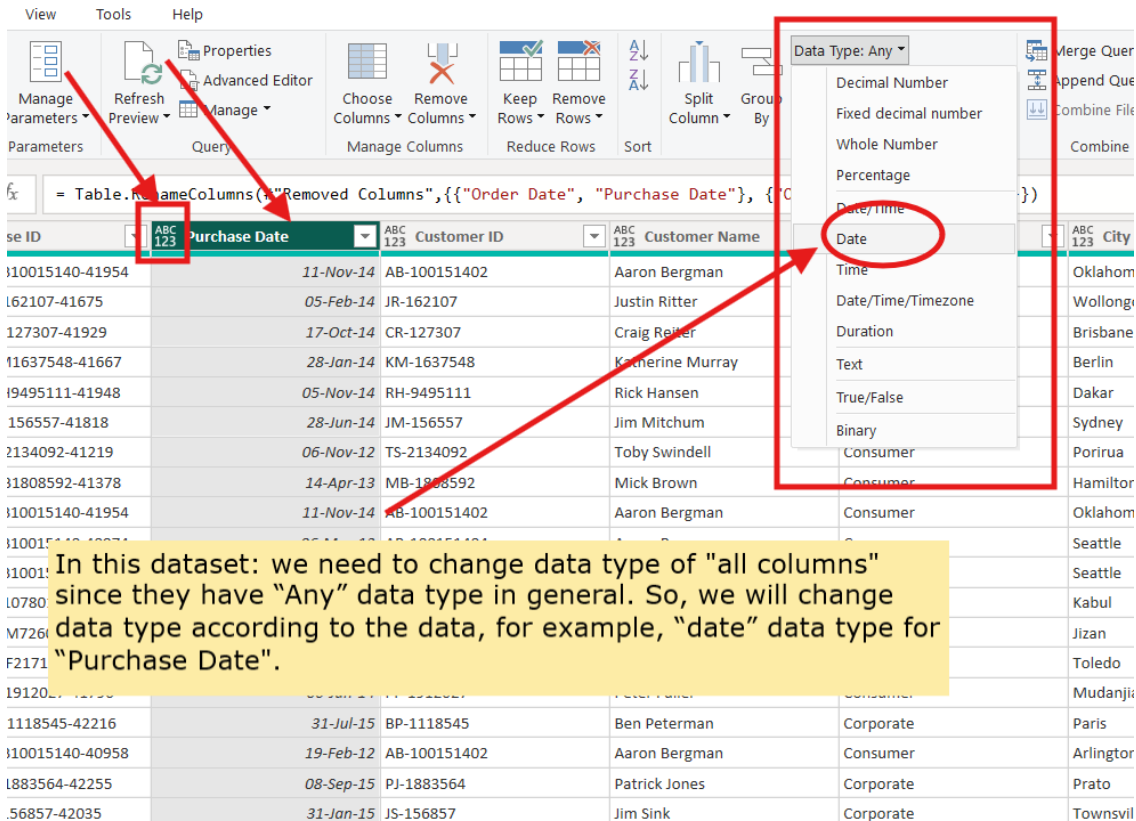
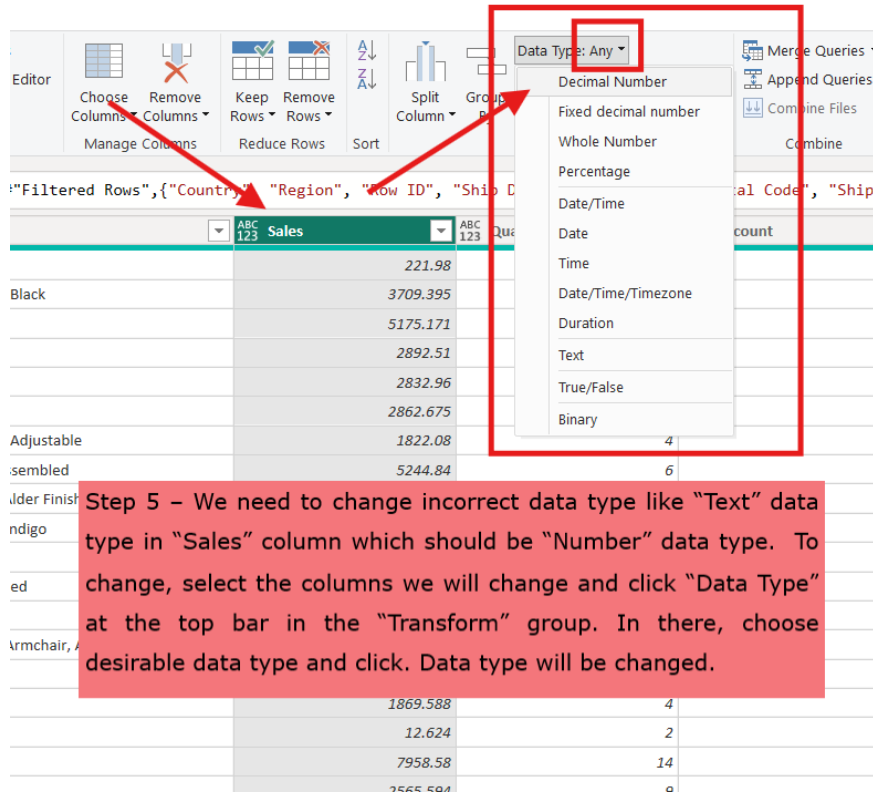
You will get this transformed data query sheets.

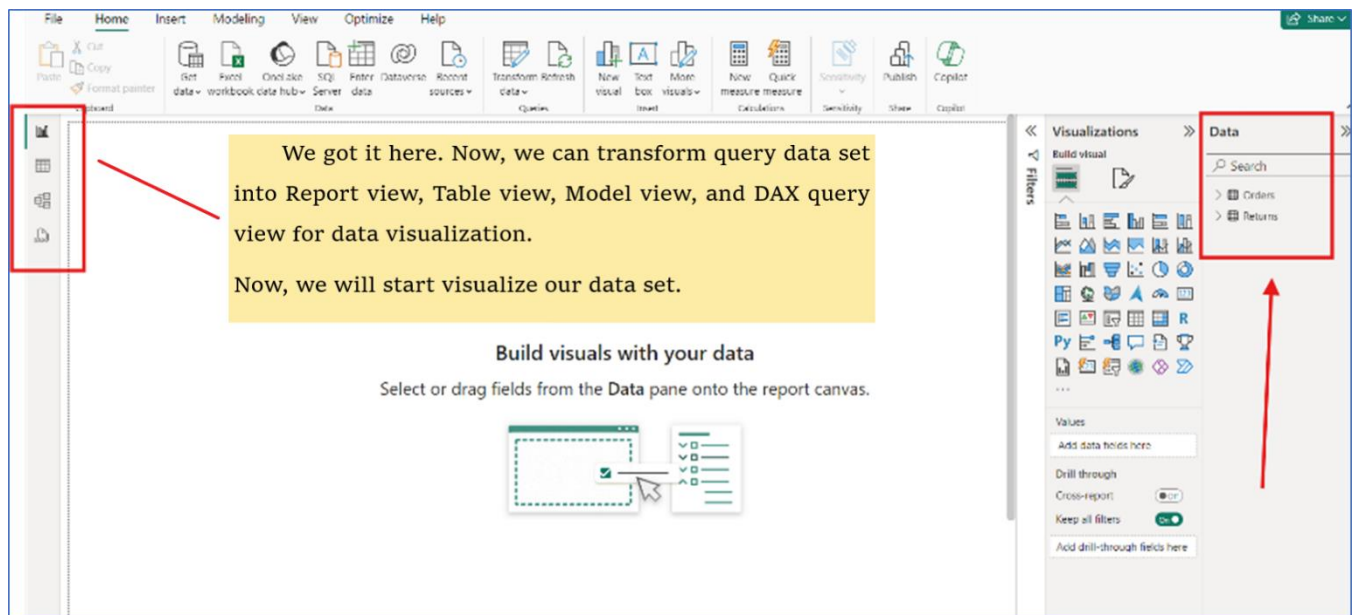
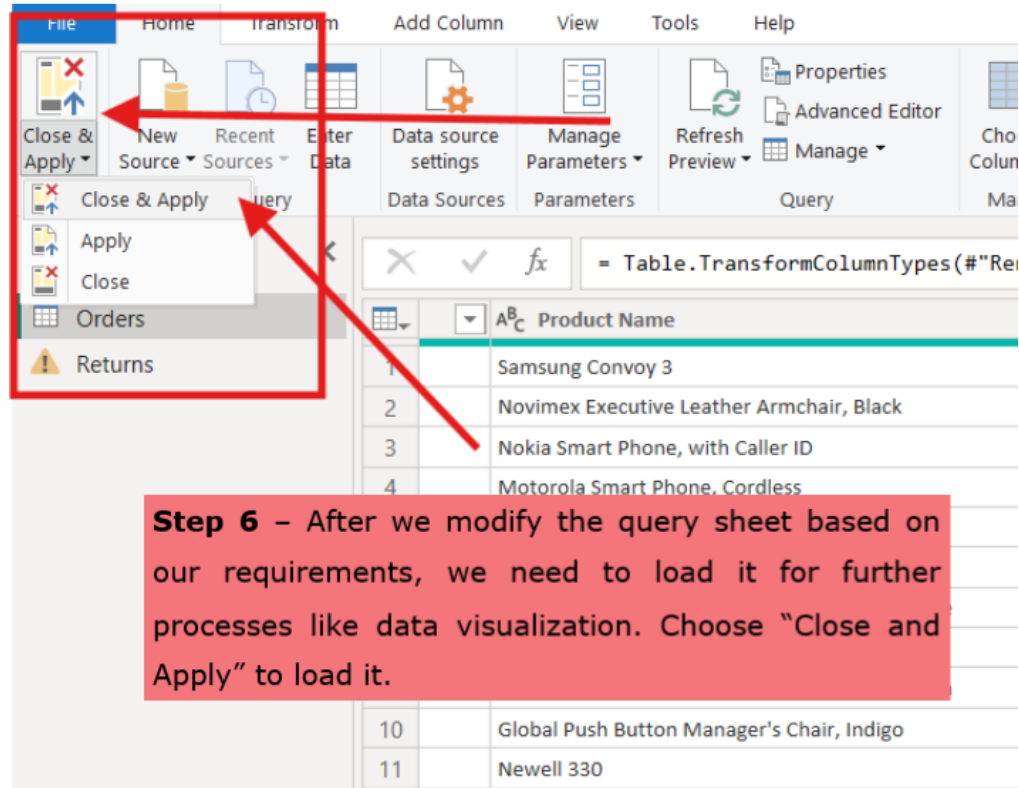
**Step 4 - We will remove rows and columns which are not useful, contain error or null value.**

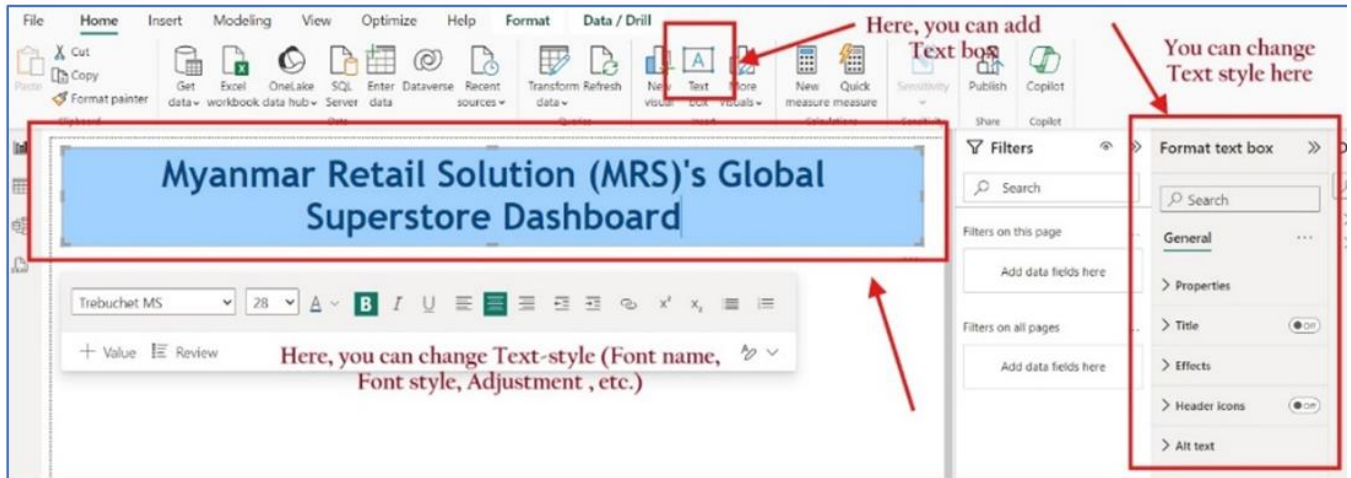
In this dataset: Row ID (not useful), Ship Date (not useful), Ship mode (not useful), Postal Code (include Null value), shipping cost (not useful), Order Priority (Not useful). Maybe these columns helpful later, but not now since we will extract insight about our sales and profit according to the product segment mainly.

You can choose desire remove options based on your needs. Now, I will choose "Remove column" as I desire to remove the whole column from the table.

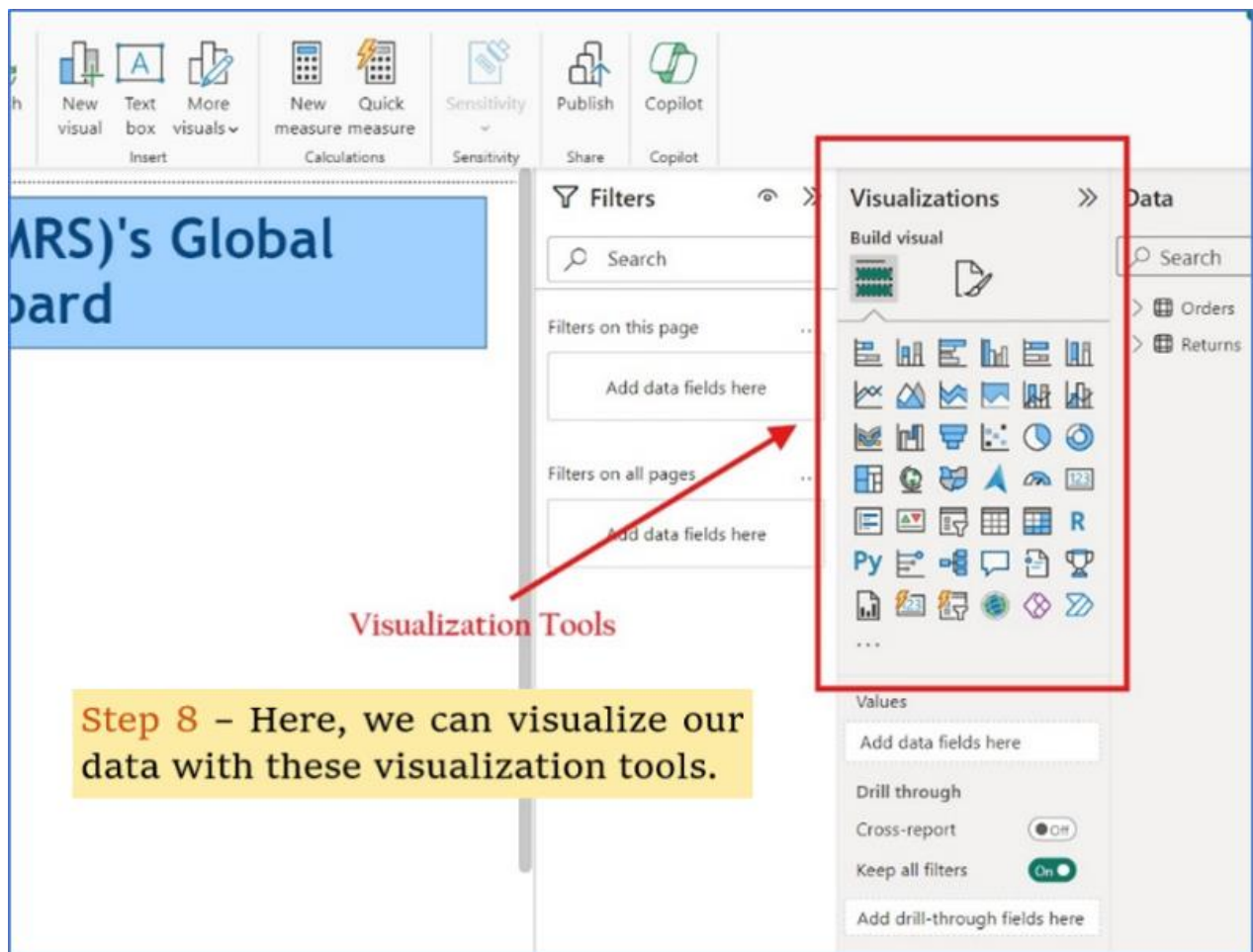
Row ID	Order ID	Order Date	Ship Date
1	40098 CA-2014-AB10015140-41954	11-Nov-14	
2	26341 IN-2014-JR162107-41675	05-Feb-14	
3	25330 IN-2014-CR127307-41929	17-Oct-14	
4	13524 ES-2014-KM1637548-41667	28-Jan-14	
5	47221 SG-2014-RH9495111-41948	05-Nov-14	
6	22732 IN-2014-IM156557-41818	28-Jun-14	
14	4132 MX-2013-VF2171518-41591	13-Nov-13	
19	22096 IN-2015-JS156857-42035	31-Jan-15	
20	49463 TZ-2015-RH9555129-42343	05-Dec-15	
21	46630 PL-2013-AB600103-41494	08-Aug-13	
22	36260 CA-2012-AB10015140-40974	06-Mar-12	

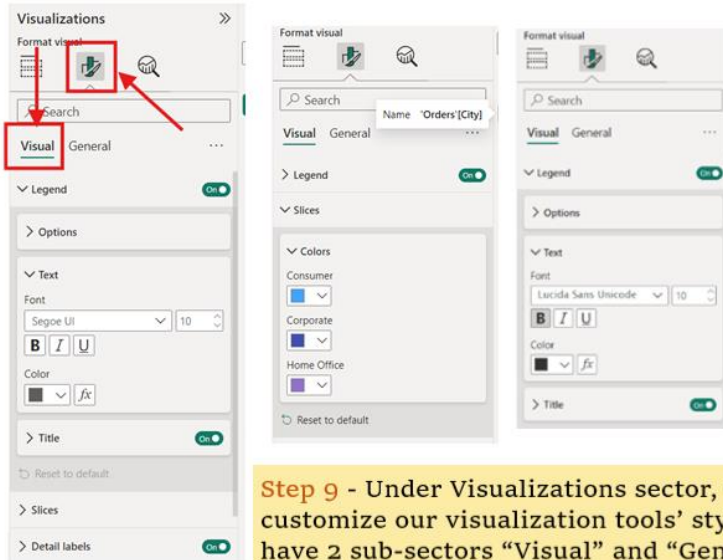






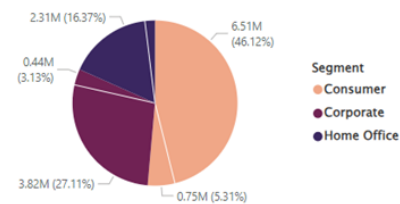
**Step 7 – Add Main title for the dashboard.**



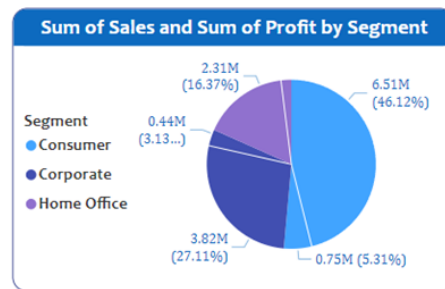
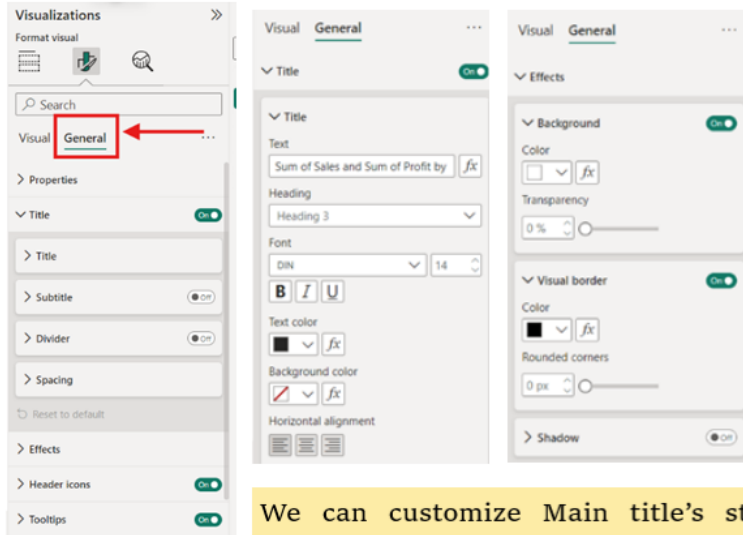


**Step 9** - Under Visualizations sector, we can customize our visualization tools' styles. We have 2 sub-sectors "Visual" and "General". For example, in Pie chart, we can change slices colors, label text style and other needed settings in the "Visual" sector

Sum of Sales and Sum of Profit by Segment



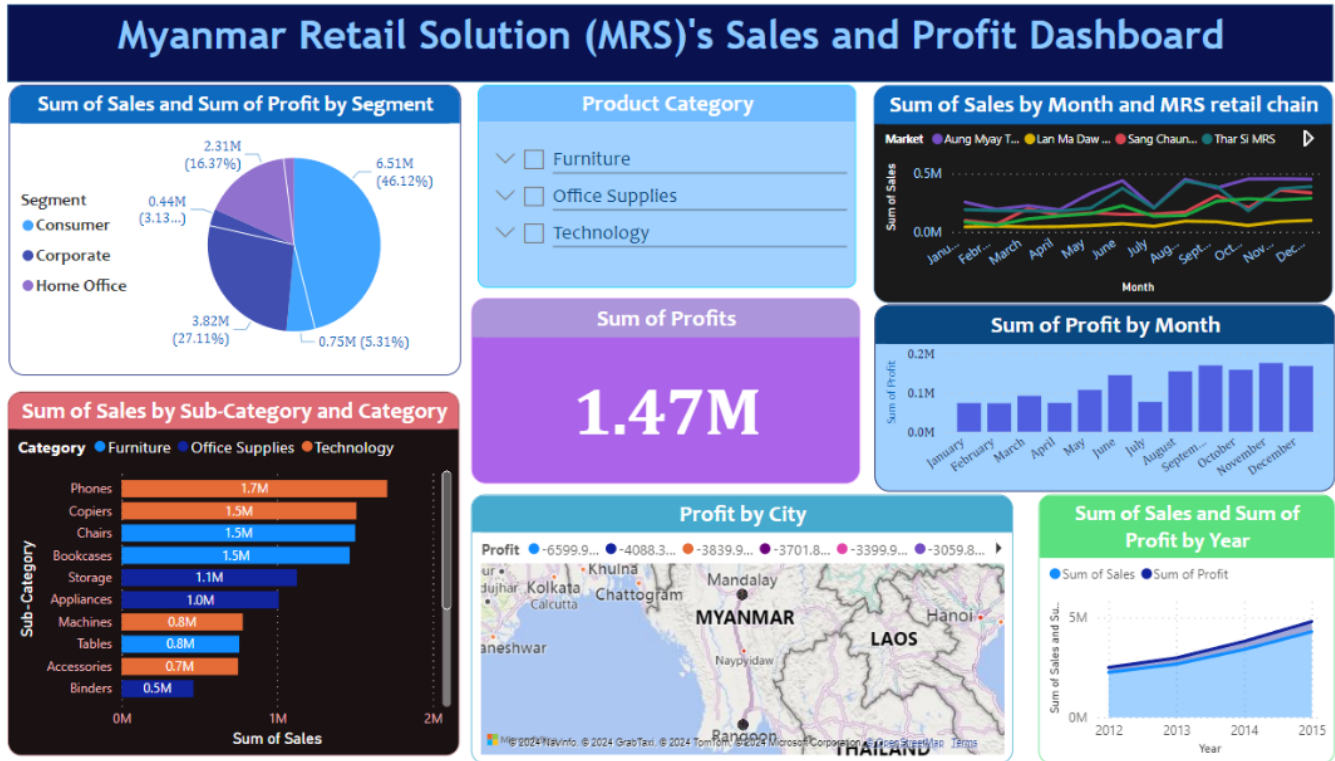
This is Before customizing



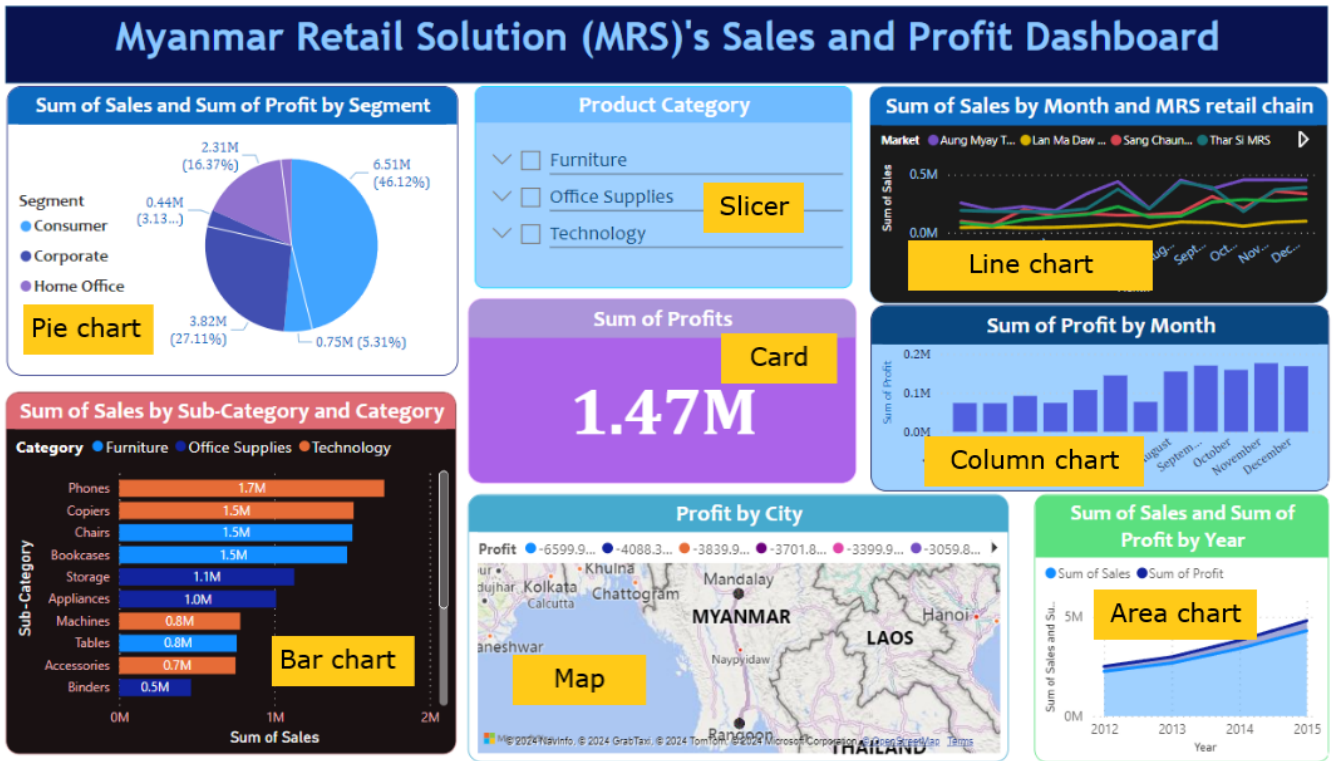
This is After customizing

We can customize Main title's style, add background color, border, shadow, and other additional settings for the whole pie chart under "General" Sector.

For the other tools, we can customize their style like this as well. So, we can get appealing dashboards.



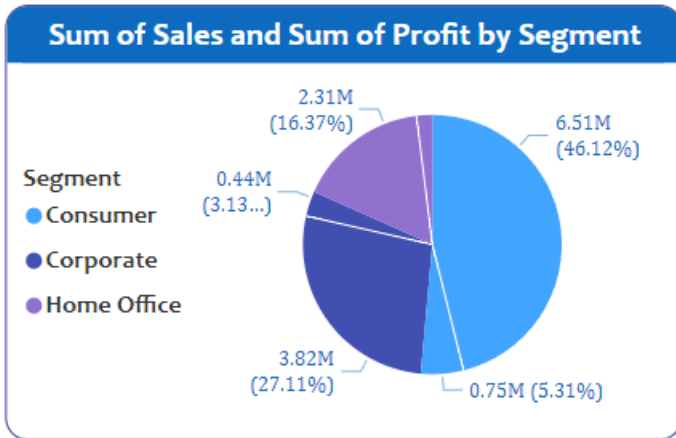
This is final dashboard design after raw data were customized and visualized



These are visualization tools that applied in the MRS's sales and profit dashboard

This is how we design raw dataset with Power BI tool to generate valuable insight for decision making to improve operational efficiency and customer satisfaction.

### Implementation and recommendations for decision making for operational efficiency in MRS



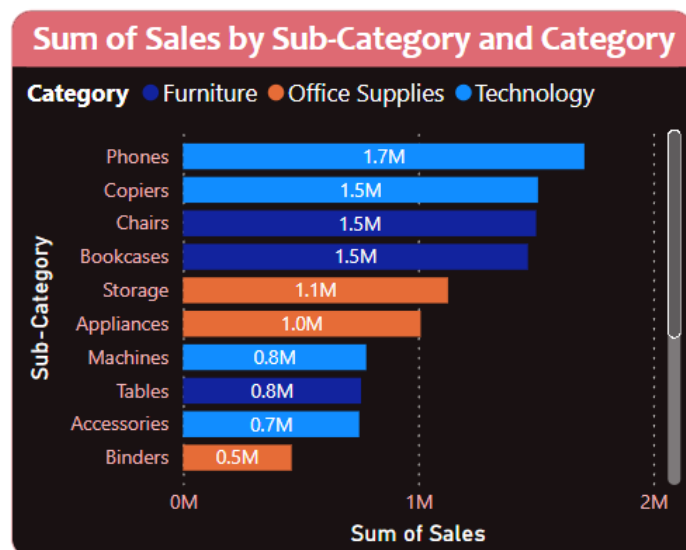
From this pie chart, MRS can get insight which is the largest segment that has sales and profits is "Consumer", followed by "Corporate" and "Home office".

➤ According to this insight, MRS should invest more resources like targeted promotions for 'Consumer'

goods, adjust product placement such as giving more shelf space to consumer goods and plan to improve customer service for consumers segment in stores. This can lead to more increase sales and profits in future.

➤ MRS can trace and analyze the root cause of less increase in "Corporate" and "Home office" segment than in "Consumer". They can figure out the solutions such as giving discounts.

This bar chart give valuable insight of which products are most purchased and which are least by customer. According to this, MRS can know that Technology category has the highest sales and phones and copiers sub-categories are top sellers among Technology category.



- Based on this insight, MRS can manage their stocks on phones and copiers to make sure they have sufficient stock on hand. MRS can adjust their placement like placing them in a busy location on the shop floor and put these high-demanded items in the same spot.
- Overall, MRS can manage stock levels of specific sub-categories, their shelf placement, and plan for promotions or more effort to boost sales. All these decisions derive from this single bar chart.



This card reveals the overall sum of profit of all categories. This single card can help MRS to get a clear insight to overall profit at a glance without needing to analyze.

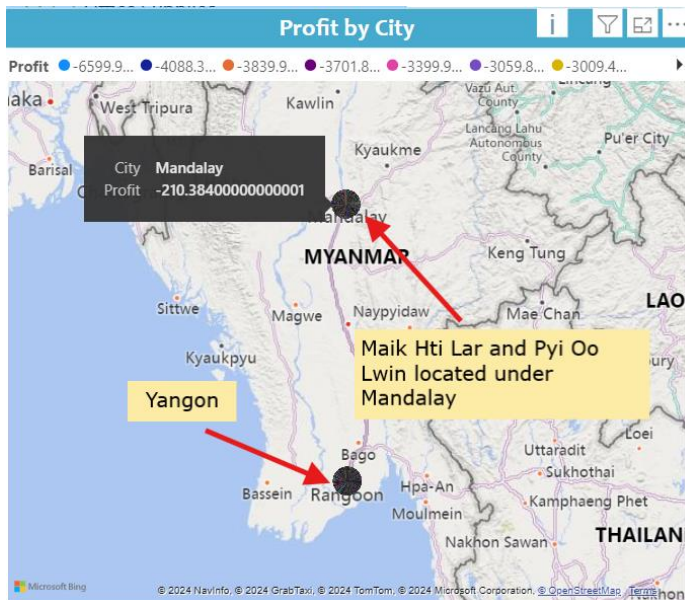
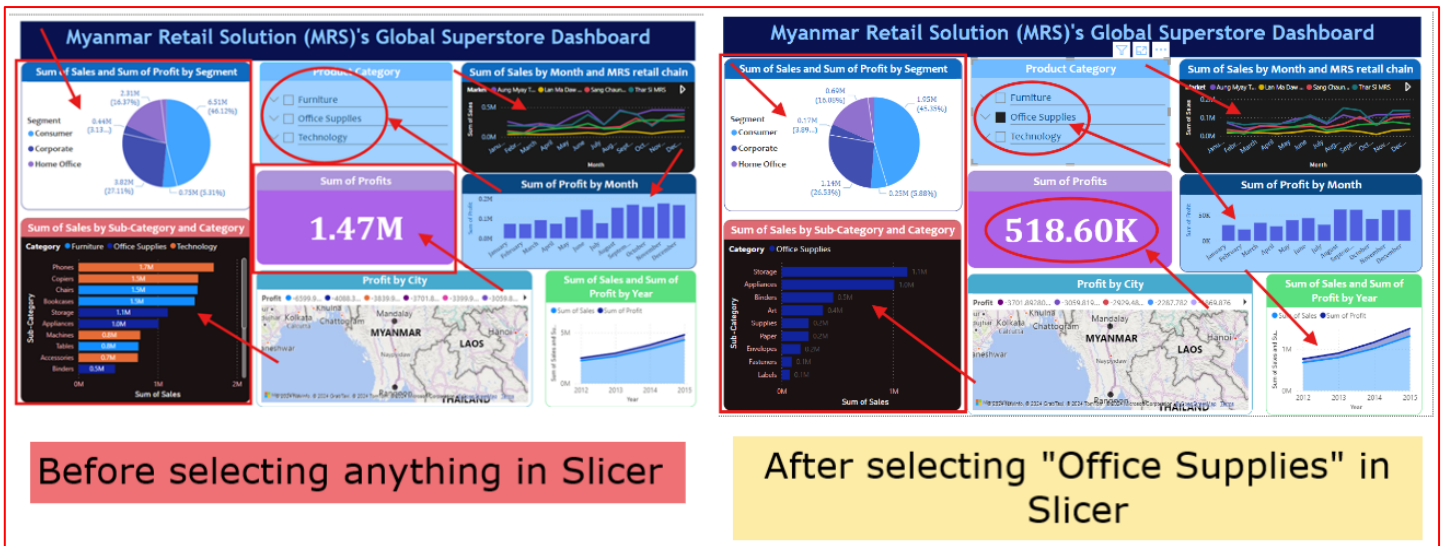
When MRS transform those sales data of each category and sub-category into insightful information, they need to focus on each category and sub-category for more precise view and focused analysis. This is where slicer benefits.

- In the provide slicer, MRS can filter specific categories, sub-categories, and even individual products to analyze their sales trends, profitability, and inventory levels in detail.



- This focused analysis allows MRS to identify top-seller products and underperforming ones, plan marketing on specific product lines based on their

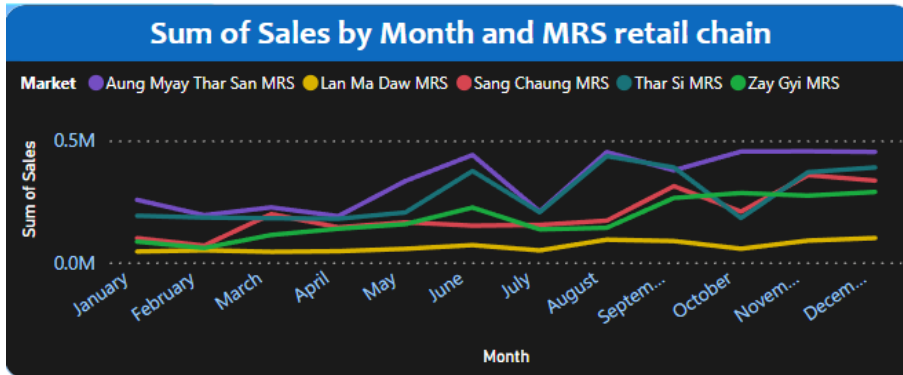
sales data analysis, prioritize inventory management to fast-moving products and make some adjustments to slow-moving ones.



If MRS want to analyze profit based on the city scale, they can use Map. In this map, it shows profit of all categories by Yangon and Mandalay.

- Through this map, MRS can know which city generates the most profit and which are underperformed.
- Using this insight, MRS should focus on allocating resources like marketing on those retail chains located in the city

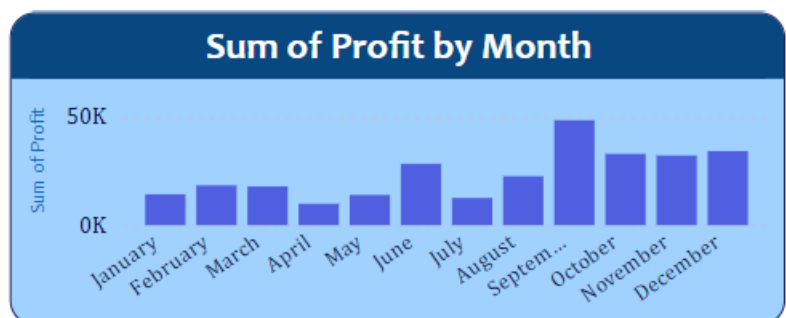
with lower profit. Moreover, this map reveals cities with lower profit but high sales. So, MRS should consider to adjust pricing of the products or other potential strategic decisions.



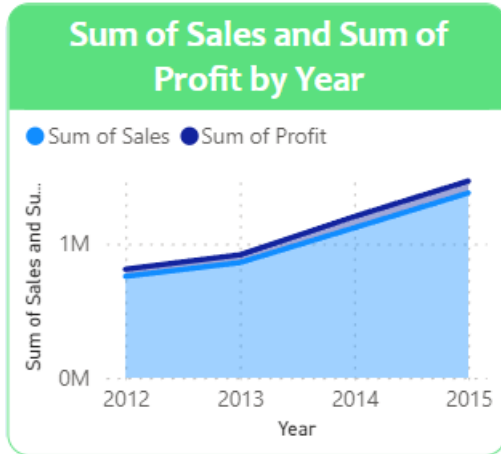
Through this line chart, MRS can gain insight of monthly sale rates of its retail chains. MRS will be able to figure out the overall seasonal highs and lows sales.

- Based on this insight, MRS could consider to plan inventory, staffing, and marketing efforts accordingly. MRS can decide which retail chains they need to further invest more and need to improve by comparing monthly sales across different retail chains and identifying high-performing and low-performing ones.
- By analyzing monthly sales of different retail chains, MRS can prepare promotions or marketing plans to boost the sales, especially during slow periods or in underperforming ones.
- Briefly, this line chart helps MRS to be able to make right decisions to boost sales over time across its retail chains.

Little similar to line chart, this column chart reveals the overall profit sum of all categories by month.



- Via this, MRS can capture the overall profit trends for each month and they can do research to know the root cause for profit drop-down. So, they should implement particular strategies to boost the profit for lower-profit months.
- MRS also should plan for marketing or promotions to capitalize on the peak periods of high-profit months.



From this area chart that shows sum of sale and profit trends by year, MRS can gain insight of how their plans intended to boost the sales and profit going year after year.

➤ They can know if there is correlation between sales and profit trends and also profit and sales growth over time.

➤ MRS could consider for setting long-term goals, future promotions or marketing plan, strategies to expand the market, and so on to empower the business growth based on this yearly sales and profits pattern.

In conclusion, all these insights from those charts and graphs help MRS to make informed decisions on resource allocation, product placement and targeted promotions. By analyzing sales data and profit, MRS can figure out trends and underperforming sectors so they can make strategic decisions and plans to streamline processes, reduce cost and maximize profitability. This all contribute to the overall enhancement of operational efficiency of MRS.

## **How global organizations have used data and information to extend their target audience and be more competitive within the market**

In this competitive retail industry, to meet the customer demands and being stay ahead of the market cannot be achieved through using only traditional methods as a MRS.

Netflix use algorithms to analyze users' viewing habits and preferences based on user data like what this user normally watch and they apply machine learning models and recommendations methods such as collaborative filtering or content-based filtering. (Digicrome, 2023) From these efforts, Netflix able to give

personalized movie recommendations to each subscriber. Netflix started this personalize way very first in the streaming industry. This feature attracts new users and foster old user's viewing experience so we can say that Netflix could extend their target audience and more competitive. Also, Facebook use DeepText tool to analyze users' posts, comments, and chat messages in order to understand what Facebook users demand currently (Bernard Marr, 2017) This effort intended for giving targeted advertisements to each user match with their current desire.

By example those, MRS should implement personalized recommendations to each customer according their buying habits via SMS. This system is not widely adopted in Myanmar retail industry and MRS would be the first. MRS can collect customer buying data through both in-store and website by tracking:

- Which products they often buy
- How many they buy
- What they search for or add to cart
- Which particular age group prefer to buy which kind of product

And segment customer groups based on their similar buying habits. MRS need to use appropriate recommendation algorithms to send personalized recommendations to customers via SMS and integrate this to website to display personalize recommendations at the top of the pages. (Prasanna Chitanand, 2023) By doing so, customer feel valued and interest in seeing recommendations of the products they often buy. This will give them a unique and enjoyable shopping experience. They would choose MRS over other retail solutions and this helps MRS to extend target audience, being stay ahead of the market, and meet its business requirement of enhancing customer satisfaction.

Walmart utilize IMS (Inventory Management System) to manage their inventory and improve collaboration with suppliers. Walmart integrate inventory management software:

- To track and monitor their inventory (in real-time)

- To access stock levels of each product line
- To access locations across multiple channels (eMarspro, 2023)

This system also allows Walmart to easily manage incoming orders, tracking states, generating shipping labels for managing ordering process. (eMarspro, 2023)

Walmart can make detailed product lists and manage them effortlessly. Then, they can generate reports on sales trends, stock movement, etc. and this give useful insights into inventory performance. (eMarspro, 2023)

Through this system, Walmart can make correct decisions to optimize their inventory and make management strategies. This contribute to the enhancement of their operational efficiency.

By example this evidence, MRS also should consider transforming their traditional inventory management system (in which staff manually check stock level of each product in stores) into data-driven inventory management system like Walmart. Human works are generally time-consuming and make mistakes in counting or recording stocks which can lead to overstock or stockout cases. It can have impact on operational efficiency.

MRS can use specific inventory management software that has features like barcode scanning, reporting tools, multi-store functionality. They need to connect their existing POS system with this IMS software and enter inventory data like product names, descriptions, stock keeping units to determine the stock level. Then, IMS software need to be connected with barcode scanner or RFID devices. By doing so, MRS will be able to update the stock level every time a product is sold out because IMS software can automatically reduce the stock level of the product that scan with POS system. When the staff scanned the tags attached to the product using barcode scanner or RFID machines, they automatically updated the stock level in the IMS system. (Prasanna M Sridhara, 2023) By this feature, MRS will be able to get the inventory level data in real-time and check inventory quickly and effortlessly. MRS can also view that real-time stock data through dashboards and

reporting tools. (Prasanna M Sridhara, 2023) They will know which products sell out of the inventory quickly and which ones are not or the types of products that are likely to be stockout so MRS can make proactive decisions on inventory. This data-driven solution can help MRS to enhance operational efficiency by optimizing inventory effectively.

## **Conclusion**

In summary, plenty of strong evidence in the various markets are described to showcase how adopting data-science techniques can benefit organizations to meet their business needs and recommend the data science solutions for MRS. So, as MRS, using data science techniques will empower MRS to response to evolving customer demands, enhance operational efficiency, extend its target audience, stay ahead in the competitive Myanmar retail industry.

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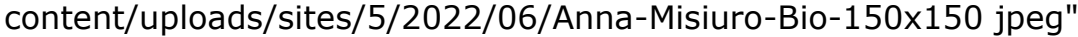
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