



SQL PROJECT

FINANCE AND SUPPLY CHAIN ANALYTICS ON ATLIQ HARDWARE

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1

About Atliq
Hardware

2

Business
Model

3

Problem
Statement

4

Project
Overview

5

Report

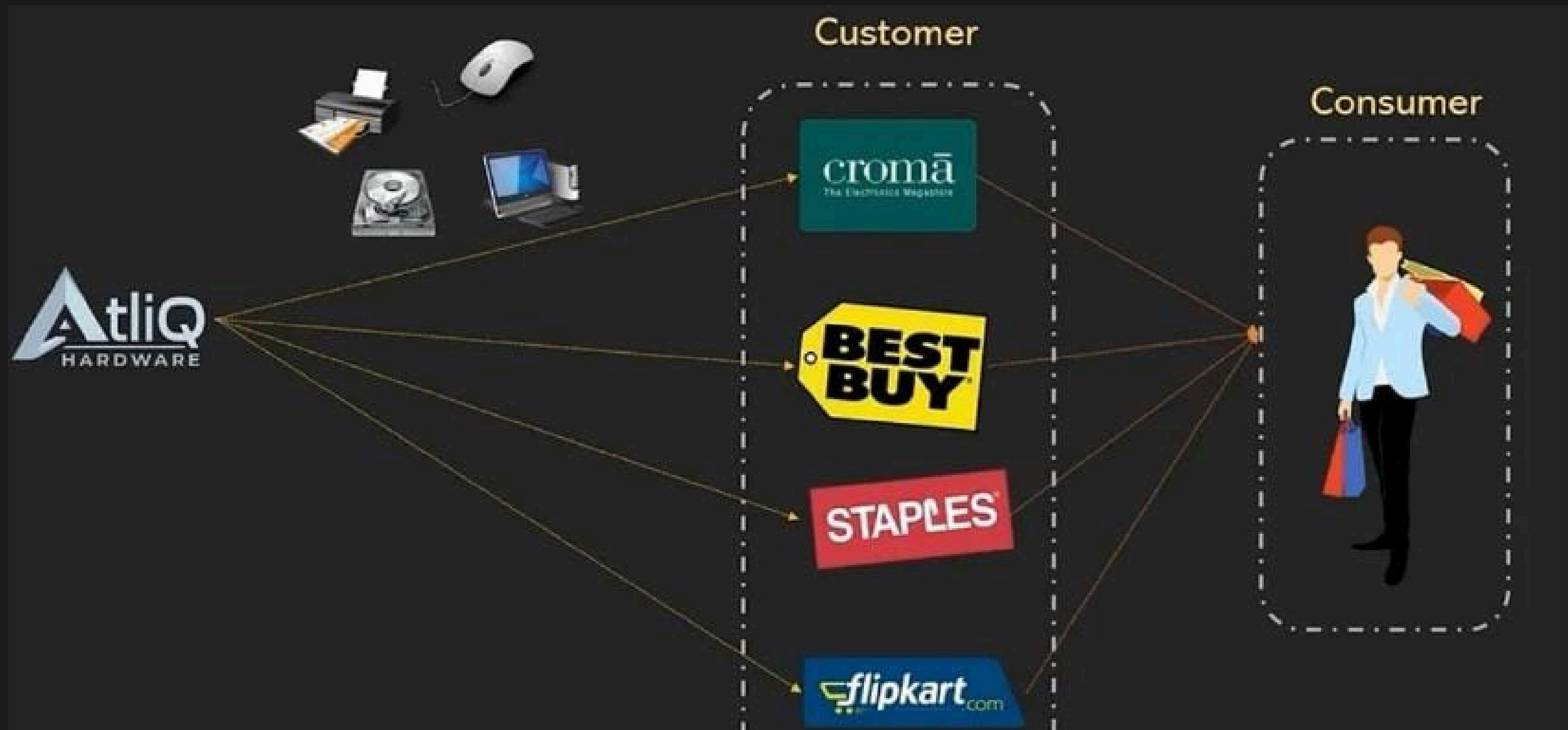
6

Key
Highlights

TABLE OF CONTENT



ABOUT ATLIQ HARDWARE AND BUSINESS MODEL



AtliQ Hardware stands as a premier global authority in electronics manufacturing, renowned for its exceptional quality and innovation. We excel in producing and distributing a wide array of superior hardware products, catering to the varied demands of our global customer base. Our extensive product lineup includes personal computers, printers, mice, and an assortment of computer peripherals, ensuring comprehensive solutions for all computing needs. AtliQ Hardware is dedicated to delivering excellence, reliability, and cutting-edge technology to our valued customers around the world.



PROBLEM STATEMENT

AtliQ Hardware is experiencing performance issues stemming from the growing size and complexity of its Excel files. In response, the company has established a specialized team of data analysts tasked with harnessing the power of MySQL. This initiative aims to uncover valuable insights and boost operational efficiency, ensuring AtliQ Hardware continues to thrive in its data-driven decision-making processes.



PROJECT OVERVIEW

This project involves an in-depth analysis of AtliQ Hardware's dataset to uncover actionable insights. The main goals are to assess sales performance, understand market dynamics, analyze customer behavior, and forecast supply chain trends. These insights will help AtliQ Hardware make informed decisions to drive growth and improve efficiency.



TASK 1

Croma India product wise sales report for fiscal year 2021

Attach Add a child issue Link issue

Description

Normal text B I ... A ...

As a product owner, I want to generate a report of individual product sales (aggregated on a monthly basis at the product code level) for Croma India customer for FY=2021 so that I can track individual product sales and run further product analytics on it in excel.

The report should have the following fields,

1. Month
2. Product Name
3. Variant
4. Sold Quantity
5. Gross Price Per Item
6. Gross Price Total

SOLUTION

```
1 -- a. Perform joins to pull product information
2 SELECT s.date, s.product_code, p.product, p.variant, s.sold_quantity
3 FROM fact_sales_monthly s
4 JOIN dim_product p
5     ON s.product_code=p.product_code
6 WHERE
7     customer_code=90002002 AND
8     get_fiscal_year(date)=2021
9 LIMIT 1000000;
10 -- b. Performing join with 'fact_gross_price' table with the above query and generating required fields
11 SELECT
12     s.date,
13     s.product_code,
14     p.product,
15     p.variant,
16     s.sold_quantity,
17     g.gross_price,
18     ROUND(s.sold_quantity*g.gross_price,2) as gross_price_total
19 FROM fact_sales_monthly s
20 JOIN dim_product p
21     ON s.product_code=p.product_code
22 JOIN fact_gross_price g
23     ON g.fiscal_year=get_fiscal_year(s.date)
24     AND g.product_code=s.product_code
25 WHERE
26     customer_code=90002002 AND
27     get_fiscal_year(s.date)=2021
28 LIMIT 1000000;
29
```

	date	product_code	product	variant	sold_quantity	gross_price	gross_price_total
▶	2020-09-01	A0118150101	AQ Dracula HDD – 3.5 Inch SATA 6 Gb/s 5400 R...	Standard	202	19.0573	3849.57
	2020-09-01	A0118150102	AQ Dracula HDD – 3.5 Inch SATA 6 Gb/s 5400 R...	Plus	162	21.4565	3475.95
	2020-09-01	A0118150103	AQ Dracula HDD – 3.5 Inch SATA 6 Gb/s 5400 R...	Premium	193	21.7795	4203.44
	2020-09-01	A0118150104	AQ Dracula HDD – 3.5 Inch SATA 6 Gb/s 5400 R...	Premium Plus	146	22.9729	3354.04
	2020-09-01	A0219150201	AQ WereWolf NAS Internal Hard Drive HDD – 8....	Standard	149	23.6987	3531.11
	2020-09-01	A0219150202	AQ WereWolf NAS Internal Hard Drive HDD – 8....	Plus	107	24.7312	2646.24
	2020-09-01	A0220150203	AQ WereWolf NAS Internal Hard Drive HDD – 8....	Premium	123	23.6154	2904.69
	2020-09-01	A0320150301	AQ Zion Saga	Standard	146	23.7223	3463.46
	2020-09-01	A0321150302	AQ Zion Saga	Plus	236	27.1027	6396.24
	2020-09-01	A0321150303	AQ Zion Saga	Premium	137	28.0059	3836.81
	2020-09-01	A0418150103	AQ Mforce Gen X	Standard 3	23	19.5235	449.04



TASK 2

AFA-1 / AFA-6

Gross monthly total sales report for Croma

Attach

Add a child issue

Link issue

...

Description

As a product owner, I need an aggregate monthly gross sales report for Croma India customer so that I can track how much sales this particular customer is generating for AtliQ and manage our relationships accordingly.

The report should have the following fields,

- Month
- Total gross sales to Amazon India in this month

SOLUTION

1 • SELECT

2 s.date,

3 SUM(ROUND(s.sold_quantity*g.gross_price,2)) as monthly_sales

4 FROM fact_sales_monthly s

5 JOIN fact_gross_price g

6 ON g.fiscal_year=get_fiscal_year(s.date) AND g.product_code=s.product_code

7 WHERE

8 customer_code=90002002

9 GROUP BY date;

Result Grid

Filter Rows:

Exports

Wrap Cell Contents

date	monthly_sales
2017-09-01	122407.57
2017-10-01	162687.56
2017-12-01	245673.84
2018-01-01	127574.73
2018-02-01	144799.54
2018-04-01	130643.92
2018-05-01	139165.06
2018-06-01	125735.36
2018-08-01	125409.90
2018-09-01	343337.14
2018-10-01	440562.10
2018-12-01	653944.72
2019-01-01	359025.06
2019-02-01	356607.19
2019-04-01	379549.74
2019-05-01	340152.29
2019-06-01	343792.08

Result 2 x

Read Only



TASK 3

SOLUTION

Add epic / ☒ AFA-18

Stored proc for market badge

Attach Add a child issue Link issue ...

Description

Create a stored proc that can determine the market badge based on the following logic.

If **total sold quantity > 5 million** that market is considered **Gold** else it is **Silver**

My input will be,

- market
- fiscal year

Output

- market badge

Name: get_market_badge

The name of the routine is parsed automatically from the DDL statement. The DDL is parsed automatically while you type.

DOL:

```
1 CREATE DEFINER='root'@'localhost' PROCEDURE `get_market_badge`(  
2     IN in_market VARCHAR(45),  
3     IN in_fiscal_year YEAR,  
4     OUT out_level VARCHAR(45)  
5 )  
6 BEGIN  
7     DECLARE qty INT DEFAULT 0;  
8     # Default market is India  
9     IF in_market = "" THEN  
10         SET in_market="India";  
11     END IF;  
12     # Retrieve total sold quantity for a given market in a given year  
13     SELECT  
14         SUM(s.sold_quantity) INTO qty  
15     FROM fact_sales_monthly s  
16     JOIN dim_customer c  
17     ON s.customer_code=c.customer_code  
18     WHERE  
19         get_fiscal_year(s.date)=in_fiscal_year AND  
20         c.market=in_market;  
21     # Determine Gold vs Silver status  
22     IF qty > 5000000 THEN  
23         SET out_level = 'Gold';  
24     ELSE  
25         SET out_level = 'Silver';  
26     END IF;  
27 END
```

```
1 • set @out_level = '0';  
2 • call gdb0041.get_market_badge('India', 2021, @out_level);  
3 • select @out_level;
```

Result Grid | Filter Rows: | Exports: | Wrap Cell Contents: |

@out_level
Gold



TASK 4

SOLUTION

2. Report for top products,

Rank	Product	Net Sales
1	AQ BZ Allin1	33.75
2	AQ Qwerty	27.84

```
Name: get_top_n_products_by_net_sales
DDL:
1 CREATE DEFINER='root'@'localhost' PROCEDURE `get_top_n_products_by_net_sales` (
2     in_fiscal_year INT,
3     in_top_n INT
4 )
5 BEGIN
6     SELECT
7         product,
8         ROUND(total_net_sales / 1000000, 2) AS net_sales_mln
9     FROM (
10        SELECT
11            product,
12            SUM(net_sales) AS total_net_sales
13        FROM gdb0041.net_sales
14        WHERE fiscal_year = in_fiscal_year
15        GROUP BY product
16    ) AS sales_summary
17    ORDER BY total_net_sales DESC
18    LIMIT in_top_n;
19 END
```

```
1 • call gdb0041.get_top_n_products_by_net_sales(2021, 5);
2
```

product	net_sales_mln
AQ BZ Allin1	33.75
AQ Qwerty	27.84
AQ Trigger	26.95
AQ Gen Y	23.58
AQ Maxima	22.32



TASK 5

SOLUTION

3. Report for top customers

Rank	Customer	Net Sales
1	Amazon	109.03
2	AtliQ Exclusive	79.92

Name: top_n_customer_by_net_sales

The name of the routine is parsed automatically from the statement. The DDL is parsed automatically while you type.

DOL:

```
1 CREATE DEFINER='root'@'localhost' PROCEDURE `top_n_customer_by_net_sales`(  
2     IN in_fiscal_year INT,  
3     IN in_top_n INT  
4 )  
5 BEGIN  
6     SELECT  
7         c.customer, ROUND(SUM(net_sales) / 1000000, 2) AS net_sales_min  
8     FROM  
9         net_sales s  
10        JOIN dim_customer c  
11        ON s.customer_code=c.customer_code  
12    WHERE  
13        fiscal_year = in_fiscal_year  
14    GROUP BY customer  
15    ORDER BY net_sales_min DESC  
16    LIMIT in_top_n;  
17 END
```

```
1 • call gdb0041.top_n_markets_by_net_sales(2021, 5);  
2
```

Result Grid | Filter Rows: | Exports: | Wrap Cell Content: |

market	net_sales_min
India	210.67
USA	132.05
South Korea	64.01
Canada	45.89
United Kingdom	44.73



KEY HIGHLIGHTS

- AtliQ Hardware achieved notable sales figures in 2022.
- India led the market in 2021 with \$210.67 million in sales.
- Amazon was the top sales channel in 2021 with \$109.03 million in net sales.40
- India led the market in 2021 with \$210.67 million in sales.

These insights highlight the strong market presence and successful product performance of AtliQ Hardware, guiding strategic decisions for future growth.



THANK YOU

