

VENKAT JAYANARASIMHAN - INDIVIDUAL ASSIGNMENT BUSINESS REPORTING TOOLS

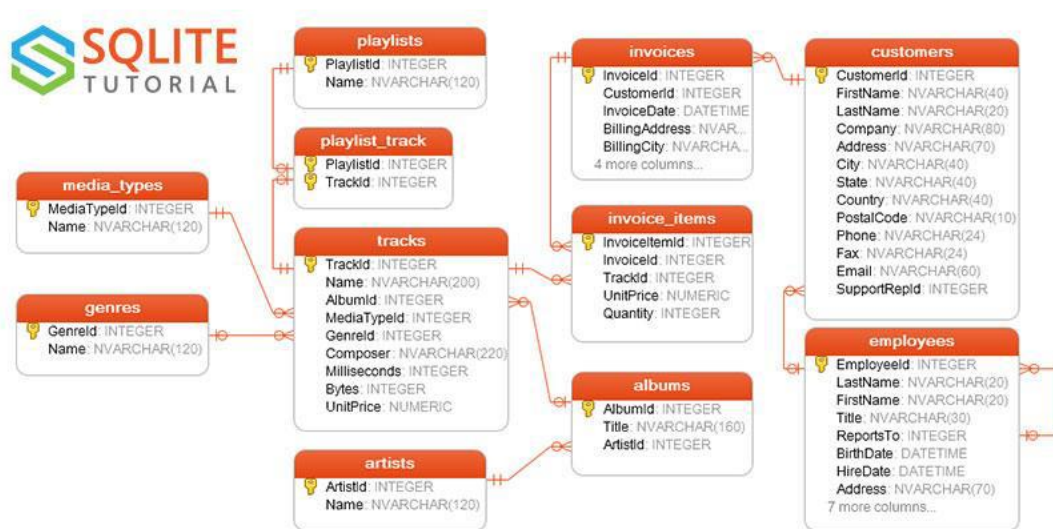
CHINOOK BUSINESS ANALYSIS & BUSINESS REPORT

Data Model:

The Chinook data model represents a digital media store, including tables for artists, albums, media tracks, invoices and customers. The Chinook sample database includes:

- 11 tables
- A variety of indexes, primary and foreign key constraints
- Over 15,000 rows of data

For details, here is the entity relationship diagram of the Chinook data model.



Company Strategy:

The CHINOOK company strategy has its strong roots in the vision and mission to reach the ambitious targets. To execute the strategy the firm relies on the Kaplan & Norton Strategy Map as shown below,



The firm is interested to dig deeper into the Four elements of the balanced scorecard to discover its strong and weak points.

A. FINANCIAL ASPECTS:

- Company's revenue increased in the first two years followed by a setback. In 2012, the revenue attained its second high and then dropped the following year.

Year	Sales
2009	449.46
2010	481.45
2011	469.58
2012	477.53
2013	450.58

- Company's Month wise revenue analysis, indicates that the last year (2013) has only One Month which over-performed whereas in 2012 most of the months significantly over-performed.

Year	Month	Sales	Year	Month	Sales	Year	Month	Sales	Year	Month	Sales	Year	Month	Sales
2009	1	35.64	2010	1	52.62	2011	1	37.62	2012	1	37.62	2013	1	37.62
2009	2	37.62	2010	2	46.62	2011	2	37.62	2012	2	37.62	2013	2	27.72
2009	3	37.62	2010	3	44.62	2011	3	37.62	2012	3	37.62	2013	3	37.62
2009	4	37.62	2010	4	37.62	2011	4	51.62	2012	4	37.62	2013	4	33.66
2009	5	37.62	2010	5	37.62	2011	5	42.62	2012	5	37.62	2013	5	37.62
2009	6	37.62	2010	6	37.62	2011	6	50.62	2012	6	37.62	2013	6	37.62
2009	7	37.62	2010	7	37.62	2011	7	37.62	2012	7	39.62	2013	7	37.62
2009	8	37.62	2010	8	37.62	2011	8	37.62	2012	8	47.62	2013	8	37.62
2009	9	37.62	2010	9	36.63	2011	9	37.62	2012	9	46.71	2013	9	37.62
2009	10	37.62	2010	10	37.62	2011	10	37.62	2012	10	42.62	2013	10	37.62
2009	11	37.62	2010	11	37.62	2011	11	23.76	2012	11	37.62	2013	11	49.62
2009	12	37.62	2010	12	37.62	2011	12	37.62	2012	12	37.62	2013	12	38.62

- Invoice & the Total sales for the Year 2009 & 2011 (Low-Performing Years) are as follows,

Year	No_Of_Invoice	Total_Sales
2009	83	449.46
2011	83	469.58

- Key Metrics of the Company are as follows,

Number_of_Invoices	Number_of_Customers	Number_Of_Tracks	Countries	Total_Quantity	Total_Sales
412	59	1984	24	2240	20848.62

- **Inference:** The company has **412 Invoices** from **59 Customers**, having sold **1984 media tracks** and a total **purchase quantity of 2240**, generating a **revenue of \$20848.62** from **24 different countries** in a span of **5 years**.

B. CUSTOMER ASPECTS:

- The firm has 10 Company Clients & 49 Regular Customers
- The Last transaction happened before 7 years with a Total Spending of \$2328.6 and the average spending comes around \$5.65

Since_Last_Purchase_In_Years	Total_Spending	Average_Spending
7	2328.6	5.651942

- There are totally 2240 purchases done by customers with an average purchase rate of 1 quantity
- The total tenure of the customers in our firm is 12 Years (From the first Invoice Date)
- Our Customers are primarily located in Argentina, Australia, Austria, Belgium, Brazil, Canada, Chile, Czech Republic, Denmark, Finland, France, Germany, Hungary, India, Ireland, Italy, Netherlands, Norway, Poland, Portugal, Spain, Sweden, USA & UK.
- Our Biggest Market is Europe with a Total Sales of \$1001.5 and the second largest market is North America with a Total Sales of \$827.02

Market_Name	Sales
Europe	1001.5
North America	827.02
South America	274.34
UK	112.86
Asia	75.26
Oceania	37.62

- The major country accounting for the huge Customer Base and the Revenue Flow is USA.

Country	No_Of_Customers	Total_Revenue	Average_Revenue
USA	13	523.06	5.747912
Canada	8	303.96	5.427857
France	5	195.1	5.574286
Brazil	5	190.1	5.431429

- Major customer countries with High Invoice Quantity are USA, Canada, Brazil, France, Germany & United Kingdom

Country	No_Of_Invoices
USA	91
Canada	56
Brazil	35
France	35
Germany	28
United Kingdom	21

- **Inference:** We have very few Company Clients compared to regular customers. Majority of our revenue comes from the Europe Market whereas the Customer base & Number of Invoices are high in the USA.

C. INTERNAL BUSINESS PROCESSES:

- Genres: The top selling genre is Rock with a Total Purchase of 835 Nos. Customers also highly prefer buying Latin, Metal & Alternative_Punk genres with the total purchase of 386, 264 & 244 respectively.

Products_Classification	Name	Total_Purchases
Genres - Good Performing Group	Rock	835
Genres - Good Performing Group	Latin	386
Genres - Good Performing Group	Metal	264
Genres - Good Performing Group	Alternative & Punk	244

- Media Types: Top selling Media Types is MPEG with a Total Purchase of 1976 Nos

Products_Classification	Name	Total_Purchases
Media - Good Performing Group	MPEG audio file	1976
Media - Avg. Performing Group	Protected AAC audio file	146
Media - Avg. Performing Group	Protected MPEG-4 video file	111
Media - Low Performing Group	Purchased AAC audio file	4
Media - Low Performing Group	AAC audio file	3

- Tracks: The top selling Track is The Trooper followed by Eruption, Hallowed, Sure Know Something, The number of the beast & the untitled.

- We can actually delete the following 9 tracks as they have very poor sales. By deleting this we would be able to save 169,730,683 Bytes

Track_Name	Playlist_Name	Media_Type	Bytes	Sales
Bye, Bye Brasil	Brazilian Music	MPEG audio file	9499590	0.99
Desire	90's Music	MPEG audio file	5893206	0.99
Go Back	90's Music	MPEG audio file	7668899	0.99
Master Of Puppets	Heavy Metal Classic	MPEG audio file	16893720	0.99
Naked In Front Of The Computer	90's Music	MPEG audio file	4225077	0.99
Plush	90's Music	MPEG audio file	10229848	0.99
Plush	Grunge	MPEG audio file	10229848	0.99
Right Next Door to Hell	90's Music	Protected AAC audio file	3175950	0.99
Valentino's	90's Music	MPEG audio file	9848545	0.99

- The following are the Top 3 best selling artists,

Artist_Name	Total_Sales
Iron Maiden	1233.54
U2	895.59
Lost	833.7

- **Inference:** Our customers highly prefer Rock Genre, Eruption Track & MPEG Audio File. We can delete 9 tracks.

D. EMPLOYEES:

- There are totally 8 employees in the company with 2 in the retirement age
- We have totally 5 different roles in the company
- The sales made by the agents are as follows,

EmployeeId	FirstName	LastName	Sales_Quantity
3	Jane	Peacock	796
4	Margaret	Park	760
5	Steve	Johnson	684
2	Nancy	Edwards	2240