Rockbuster Stealth LLC Data Dictionary

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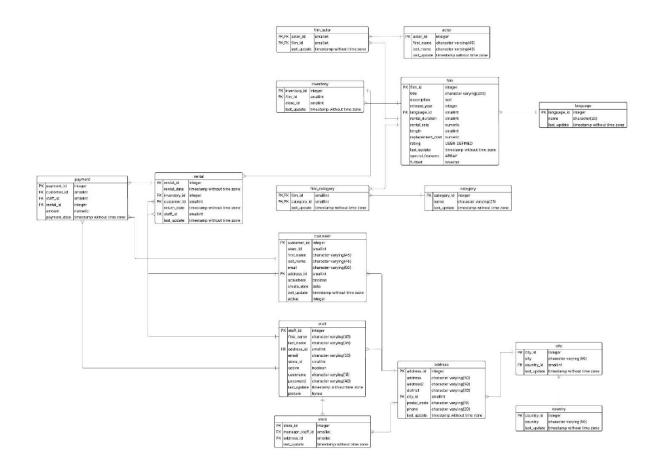
Introduction

Rockbuster Stealth LLC is a movie rental company that previously had stores around the world. Due to rapidly evolving digital entertainment and increased competition from streaming services like Netflix and Amazon Prime, Rockbuster plans to transition to an online rental platform leveraging its already existing movie licenses.

This data dictionary supports a data analysis initiative aimed at guiding this strategic shift. The analysis focuses on identifying the highest and lowest performing rental movies, calculating average rental durations, locating high-value customers, understanding the geographic distribution of Rockbuster's core audience, and comparing sales figures across different regions.

The definitions and descriptions provided in this document serve as a reference for all stakeholders working with the data, ensuring consistency and accuracy throughout the analysis process.

Entity Relationship Diagram (ERD)



Fact and Dimension Tables

Fact Table: payment

| Name | Columns | Data Type | Description |
|----------|--------------|-----------------------------|--------------------------------|
| | payment_id | integer | Payment ID (PK) |
| | customer_id | smallint | Customer ID (FK) |
| Payment | staff_id | smallint | Staff ID (FK) |
| Fayinent | rental_id | integer | Rental ID (FK) |
| | amount | numeric (5,2) | Amount of payment |
| | payment_date | timestamp without time zone | Date payment was made/accepted |

Links to:

| Table | Column Name | Join | Description |
|----------|-------------|---|------------------|
| staff | staff_id | payment.staff_id = staff.staff_id | Staff ID (PK) |
| customer | customer_id | <pre>payment.customer_id = customer.customer_id</pre> | Customer ID (PK) |
| rental | customer_id | payment.customer_id = rental.customer_id | Customer ID (FK) |

Fact Table: rental

| Name | Columns | Data Type | Description |
|--------|--------------|-----------------------------|----------------------|
| | rental_id | integer | Rental ID (PK) |
| | rental_date | timestamp without time zone | Date of movie rental |
| | inventory_id | integer | Inventory ID (FK) |
| Rental | customer_id | smallint | Customer ID (FK) |
| | return_date | timestamp without time zone | Date of movie return |
| | staff_id | smallint | Staff ID (FK) |
| | last_update | timestamp without time zone | Last update |

Links to:

| Table | Column Name | Join | Description |
|-----------|--------------|--|-------------------|
| staff | staff_id | rental.staff_id = staff.staff_id | Staff ID (PK) |
| customer | customer_id | rental.customer_id = customer.customer_id | Customer ID (PK) |
| inventory | inventory_id | rental.inventory_id = inventory.inventory_id | Inventory ID (PK) |

Links from:

| Table | Column Name | Join | Description |
|---------|-------------|--|------------------|
| payment | customer_id | rental.customer_id = payment.cusomter_id | Customer ID (FK) |

Dimension Table: actor

| Name | Columns | Data Type | Description |
|-------|-------------|-----------------------------|------------------|
| | actor_id | integer | Actor ID (PK) |
| actor | first_name | charater varying (45) | Actor first name |
| actor | last_name | charater varying (45) | Actor last name |
| | last_update | timestamp without time zone | Last update |

Links from:

| Table | Column Name | Join | Description |
|------------|-------------|---------------------------------|-------------------|
| film_actor | actor_id | actor.actor_id = actor.actor_id | Actor ID (PK, FK) |

Dimension Table: address

| Name | Columns | Data Type | Description |
|---------|-------------|-----------------------------|-----------------|
| | address_id | integer | Address ID (PK) |
| | address | character varying (50) | Address |
| | address2 | character varying (50) | Address 2 |
| address | district | character varying (20) | District |
| audiess | city_id | smallint | City ID (FK) |
| | postal_code | character varying (10) | Postal code |
| | phone | character varying (20) | Phone number |
| | last_update | timestamp without time zone | Last update |

Links to:

| Table | Column Name | Join | Description |
|-------|-------------|--------------------------------|--------------|
| city | city_id | address.city_id = city.city_id | City ID (PK) |

Links from:

| Table | Column Name | Join | Description |
|----------|-------------|--|-----------------|
| customer | address_id | address.address_id = customer.address_id | Address ID (FK) |
| staff | address_id | address.addressr_id = staff.address_id | Address ID (FK) |
| store | address_id | address.address_id = store.address_id | Address ID (FK) |

Dimension Table: category

| Name | Columns | Data Type | Description |
|----------|-------------|-----------------------------|------------------|
| | category_id | integer | Category ID (PK) |
| category | name | character varying (25) | Category name |
| | last_update | timestamp without time zone | Last update |

Links from:

| Table | Column Name | Join | Description |
|---------------|-------------|--|------------------|
| film_category | category_id | category.category_id = film_category.category_id | Category ID (PK) |

Dimension Table: city

| Name | Columns | Data Type | Description |
|------|-------------|-----------------------------|-----------------|
| city | city_id | integer | City ID (PK) |
| | city | character varying (50) | City |
| | country_id | smallint | Country ID (FK) |
| | last_update | timestamp without time zone | Last update |

Links to:

| Table | Column Name | Join | Description |
|---------|-------------|--------------------------------------|-----------------|
| country | country_id | city.country_id = country.country_id | Country ID (PK) |

Links from:

| Table | Column Name | Join | Description |
|---------|-------------|---|--------------|
| address | city_id | <pre>city.city_id = address.city_id</pre> | City ID (FK) |

Dimension Table: country

| Name | Columns | Data Type | Description |
|---------|-------------|-----------------------------|-----------------|
| country | country_id | integer | Country ID (PK) |
| | country | character varying (50) | Country |
| | last_update | timestamp without time zone | Last update |

Links from:

| Table | Column Name | Join | Description |
|-------|-------------|--|-----------------|
| city | country_id | <pre>country.country_id = country.country_id</pre> | Country ID (FK) |

Dimension Table: customer

| Name | Columns | Data Type | Description |
|----------|-------------|-----------------------------|------------------------------------|
| | customer_id | integer | Customer ID (PK) |
| | store_id | smallint | Store ID |
| | first_name | character varying (45) | Customer first name |
| | last_name | character varying (45) | Customer last name |
| customer | email | character varying (50) | Customer email |
| Customer | address_id | smallint | Customer address (FK) |
| | activebool | boolean | If customer is active (true/false) |
| | create_date | date | Customer created date |
| | last_update | timestamp without time zone | Last update |
| | active | integer | If customer is active (0/1) |

Links to:

| Table | Column Name | Join | Description |
|---------|-------------|--|-----------------|
| address | address_id | customer.address_id = address.address_id | Address ID (PK) |

Links from:

| Table | Column Name | Join | Description |
|---------|-------------|--|------------------|
| payment | customer_id | customer .customer_id = payment.customer_id | Customer ID (FK) |
| rental | customer_id | customer.customer_id = rental.customer_id | Customer ID (FK) |

Dimension Table: film

| Name | Columns | Data Type | Description |
|------|------------------|-----------------------------|------------------------------|
| | film_id | integer | Film ID (PK) |
| | title | character varying (255) | Film title |
| | description | text | Film description |
| | release_year | year | Film release year |
| | language_id | smallint | Film language (FK) |
| | rental_duration | smallint | Duration of rental |
| film | rental_rate | numeric (4,2) | Cost of rental per day |
| | length | smallint | Film length/duration |
| | replacement_cost | numeric (5,2) | Rental replacement cost |
| | rating | mpaa_rating | Film rating by MPAA |
| | last_update | timestamp without time zone | Last update |
| | special_features | text[] | Special features on the film |
| | fulltext | tsvector | Film keywords |

Links to:

| Table | Column Name | Join | Description |
|----------|-------------|--|------------------|
| language | language_id | film.language_id = lanaguage.language_id | Language ID (FK) |

Links from:

| Table | Column Name | Join | Description |
|---------------|-------------|--------------------------------------|------------------|
| film_actor | film_id | film.film_id = film_actor.film_id | Film_ID (PK, FK) |
| inventory | film_id | film.film_id = inventory.film_id | Film_ID (FK) |
| film_category | film_id | film.film_id = film_category.film_id | Film_ID (PK, FK) |

Dimension Table: film_actor

| Name | Columns | Data Type | Description |
|------|-------------|-----------------------------|-------------------|
| | actor_id | smallint | Actor ID (PK, FK) |
| _ | film_id | smallint | Film ID (PK, FK) |
| | last_update | timestamp without time zone | Last update |

Links to:

| Table | Column Name | Join | Description |
|-------|-------------|--------------------------------------|---------------|
| actor | actor_id | film_actor.actor_id = actor.actor_id | Actor ID (PK) |
| film | film_id | film_actor.film_id = film.film_id | Film ID (PK) |

Dimension Table: film_category

| Name | Columns | Data Type | Description |
|---------------|-------------|-----------------------------|----------------------|
| | film_id | smallint | Film ID (PK, FK) |
| film_category | category_id | smallint | Category ID (PK, FK) |
| | last_update | timestmap without time zone | Last update |

Links to:

| Table | Column Name | Join | Description |
|----------|-------------|--|------------------|
| category | category_id | film_category.category_id = category.category_id | Category ID (PK) |
| film | film_id | film_category.film_id = film.film_id | Film ID (PK) |

Dimension Table: inventory

| Name | Columns | Data Type | Description |
|-----------|--------------|-----------------------------|-------------------|
| inventory | inventory_id | integer | Inventory ID (PK) |
| | film_id | smallint | Film ID (FK) |
| | store_id | smallint | Store ID |
| | last_update | timestamp without time zone | Last update |

Links to:

| Table | Column Name | Join | Description |
|-------|-------------|---------------------------------|--------------|
| film | film_id | iventory.film_id = film.film_id | Film ID (PK) |

Links from:

| Table | Column Name | Join | Description |
|--------|--------------|--|-------------------|
| rental | inventory_id | <pre>iventory.inventory_id = rental.inventory_id</pre> | Inventory ID (FK) |

Dimension Table: language

| Name | Columns | Data Type | Description |
|----------|-------------|-----------------------------|------------------|
| | language_id | integer | Language ID (PK) |
| language | name | character (20) | Language name |
| | last_update | timestamp without time zone | Last update |

Links from:

| Table | Column Name | Join | Description |
|-------|-------------|---|------------------|
| film | language id | language.language_id = language.language_id | Language ID (FK) |

Dimension Table: staff

| Name | Columns | Data Type | Description |
|-------|-------------|-----------------------------|--|
| | staff_id | integer | Staff ID (PK) |
| | first_name | character varying (45) | Staff first name |
| | last_name | character varying (45) | Staff last name |
| | address_id | smallint | Staff address unique ID (FK) |
| | email | character varying (50) | Staff email |
| staff | store_id | smallint | Store ID |
| | active | boolean | If staff is active employee (true/false) |
| | username | character varying (16) | Staff username |
| | password | character varying (40) | Staff password |
| | last_update | timestamp without time zone | Last update |
| | picture | bytea | Staff picture |

Links to:

| Table | Column Name | Join | Description |
|---------|-------------|---------------------------------------|-----------------|
| address | address_id | staff.address_id = address.address_id | Address ID (PK) |

Links from:

| Table | Column Name | Join | Description |
|---------|-------------|-------------------------------------|-----------------|
| rental | staff_id | staff.staff_id = rental.staff_id | Staff ID (FK) |
| payment | staff_id | staff.staff_id = payment.staff_id | Address ID (FK) |
| store | address_id | staff.address_id = store.address_id | Address ID (FK |

Dimension Table: store

| Name | Columns | Data Type | Description |
|-------|------------------|-----------------------------|------------------------------|
| store | store_id | integer | Store ID (PK) |
| | manager_staff_id | smallint | Store manager unique ID (FK) |
| | address_id | smallint | Store address unique ID (FK) |
| | last_update | timestamp without time zone | Last update |

Links to:

| Table | Column Name | Join | Description |
|---------|-------------|---------------------------------------|-----------------|
| staff | address_id | store.address_id = staff.address_id | Address ID (FK) |
| address | address_id | store.address_id = address.address_id | Address ID (PK) |