

DVD Rental Systems and the Encircling Business

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ABSTRACT

Ever since the breakout of the COVID-19 pandemic, people have been home bound. With increasing time in the quarantine, people require more entertainment resources at the convenience of their home. DVDs and DVD players, although slightly old school, might just serve the purpose. With the introduction of DVD rental business models, one can hope to provide people with the need of the hour, in terms of entertainment. Such business models proved to be a huge success in the form of a chain of offline stores in America in the early 2000s. This paper aims at studying and analysing the old DVD rental business models, and plans on implementing them in today's modernised world.

INTRODUCTION

The early 2000s saw a rise in the consumer base of DVDs (Digital Versatile Discs), which slowly became a much convenient alternative to floppy discs. DVDs offered the feature of carrying much more data, which meant a person could carry larger files in less physical storages. Apart from this, DVDs offered great competition to VHS (Video Home Systems) & VCR players as DVDs offered better picture quality and were not subject to degradation like VHS tapes. This gave birth to DVD rental businesses, which became hugely popular during the decade 2000-2010. Even though the rental businesses were in existence before (renting out VHS), the introduction of this new technology provided them with a boost.

This paper aims at discussing the functioning, rise, and decline of DVD rental systems and the business engulfing it in recent times.

THE RISE OF THE MOVIE RENTAL BUSINESS

The competition for viewers in the movie industry has taken many different forms in the past. Traditional movie theaters, with high quality pictures on large screens and high quality sound effects, needed the patrons to show up physically. This viewing method later evolved into VHS, i.e, Video Home Systems, wherein the patrons were able to view the movie at their own home. This system gave rise to many rental businesses, which would give out VHS to customers on lease. Blockbuster was one such venture that became a huge success in America, with over 9000 worldwide locations in 2004. Blockbuster introduced the movie rental business model, the functioning of which was quite simple. It was a lot like going to the library. The customer would browse the store, pick up a new release for a couple bucks, and have a few days to watch the film. If he brought it back late, he got late fees. In 1988, just three years after its first store opening, Blockbuster had become America's number one video chain, with over 400 brick-and-mortar stores nationwide.

As technology evolved, the VHS tapes were gradually replaced by DVDs. In 1997, Reed Hastings founded Netflix. Netflix initiated the system of renting out DVDs by mailing them to their customers. The company later introduced a subscription plan wherein customers were able to keep the DVDs for as long as they wished, without any late fee. This feature, combined with the mail service, provided Netflix with an upper hand over all the rental businesses at the time, including Blockbuster.

Most of the DVD rental stores have the same outline of functioning. A video rental store has an inventory of recordings. These recordings can be rented and returned to the inventory. The inventory can be searched through by searching film titles. The entire inventory can be printed, too. Each recording has a Unique ID Number and a rental history that tells which customer rented it and for what period. Recordings include DVDs and video tapes. Every recording is a recording of some film. Each film can be defined by one or more genres. Comedies, Dramas, Romances, Science Fiction (Sci-Fi), and Thrillers are some of the common genres seen in films.

A film has a title, a short description, a director, and a rating (excellent, good, fair, bad) and a cast of characters. A character has a name and an actor who plays the character. Actors, directors, and customers are persons. A person has a name. Customers also have an ID number, a telephone number, and a rental history. Although such branched models vary from store to store, the basic idea revolving around their functioning remains very similar.

The decade of 2000s proved to be fruitful for DVD rental businesses. With DVD making every previous technology obsolete, the stores brought up a variety of product options other than just movies. These included music, games and other computer softwares. The business model gradually became popular among the common mass. The thirty week period from October 2, 2009 through April 29, 2010 saw more than 49 million rental transactions.

THE RELEVANCE OF DVD RENTAL BUSINESS MODEL IN 2021

The DVD rental stores had become a major source of affordable entertainment for the majority of the households in America by the end of 2010. However, after introducing the online streaming service in 2007, Netflix began a gradual shift towards an online platform. Although the company's majority of the revenue was still generated from the rental model, by 2010 Netflix had signed deals with entertainment industry giants like Disney, Lionsgate, MGM, Paramount, and Sony.

On the other hand, on 23rd September, 2010, Blockbuster signed for bankruptcy. Netflix's innovative and fast moving business model crushed Blockbuster. As of today, there is only one Blockbuster brick-and-mortar store left in the world, in Oregon, USA, where it has become a tourist attraction as a relic of the past.

Moreover, with the introduction of Android and efficient internet services in the period in 2011 offered a great competition to these businesses. New storage technologies such as USB, Hard Drives, and even cloud storage gradually began making DVDs to be seen as obsolete. Post 2015, online streaming (OTT, i.e, Over-The-Top) services such as Netflix and Amazon Prime Video began gaining popularity among the audience, as they were offering the convenience of choosing from and watching movies at the audience's fingertips. In 2021, with the complete world being in a state of lockdown and self-quarantine, the OTT services have provided a strong entertainment back for the users to help them through these difficult times. In the past year (2020-2021), the internet has seen a user base increment of more than 70%, while streaming services alone have experienced a 12% gain in their user base.

In essence, this means that DVD rental systems and the surrounding businesses are gradually losing grip in 2021. The business saw a growth decline of 14.7% in the period 2015-2020. However, there are a certain percentage of patrons who still use the business model and avail its

services on a regular basis. These include people who are not familiar with the internet, or those who live in areas wherein the streaming services are not offered. Moreover, the people in the gaming community still use DVDs for playing games. Modern day gaming consoles such as the Playstation 5 come in two variants - Digital and Standard. While the digital variant comes with no disc slot, the standard variant offers backwards compatibility, i.e, the game DVDs from older consoles (Such as the PS4 and PS3) to be used on the PS5. The buyer can choose to purchase any of the two variants available. However, Sony offering a digital edition on its latest generation console might just be an indication that DVDs will become obsolete 5-6 years down the road.

IMPLEMENTATION OF DVD RENTAL BUSINESS MODEL IN 2021

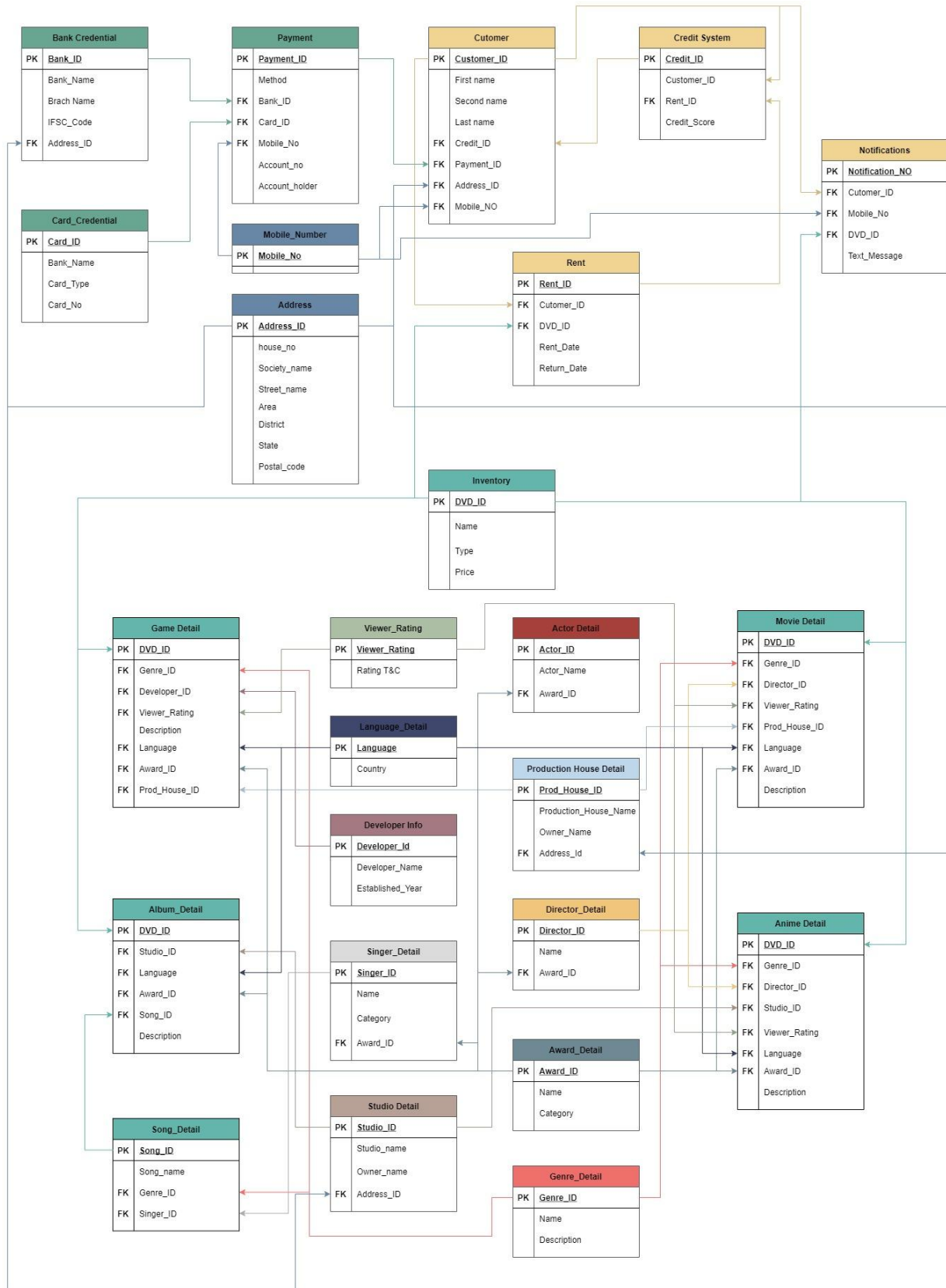
Even though the DVD rental industry is gradually losing relevance in 2021, the business model for the same can still have great applications in terms of its functionality. In developing countries like India, the majority of the common still utilises DVDs and DVD Players for entertainment, which means that the implementation of an upgraded business model can still prove to be fruitful. With the whole world being connected to the internet in today's date, it'd be best to reform the database into an online management system, which would make the data more easily accessible than an offline system. While the features of the business model shall remain more or less the same, this shift to the online world would help the business maintain transparency, convenience and accessibility. This shift would also save customers a lot of time that they might otherwise spend in finding the right store and the DVD that they want. With a wider array of categories customers can browse the DVDs of Movies, Games, Anime and Song Albums all at one place.

One of the most advantageous features of this business model would be the flexibility of payment. Customers can choose from a variety of payment methods. They can link their bank account, debit card, credit card and UPI (or any other online wallet). Moreover, the model also offers the feature of 'Pay Later', wherein customers would be able to rent DVDs in store credit upto a limited amount and make the payment late. This would get the customer connected to the service and also they don't have to go through the whole reactivation process again. Customers can use these payment methods to pay for their family and friends account, if they wish to.

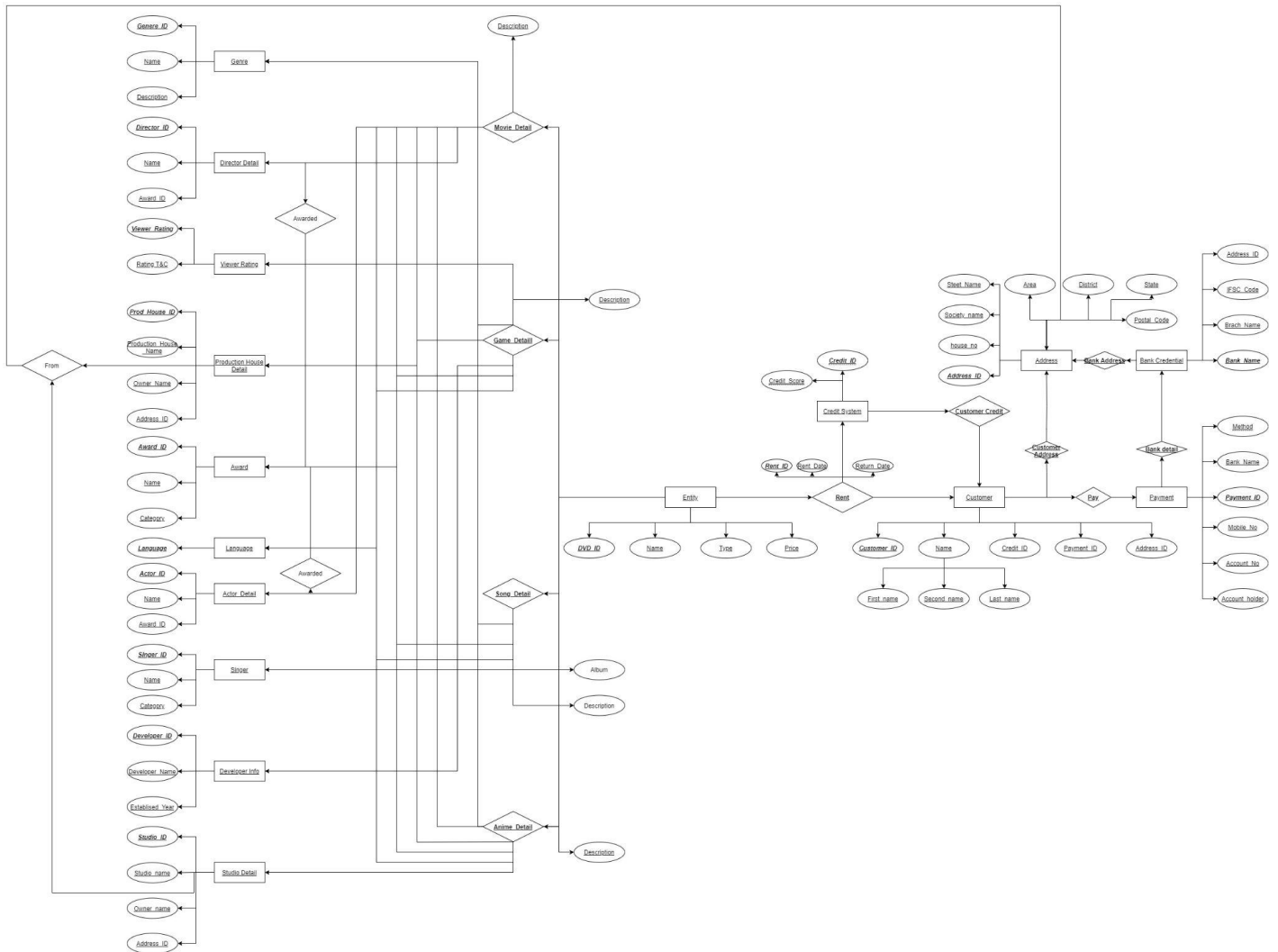
In terms of unique features, this model offers a credit based system. The way it works is very simple. For every DVD that customer rents, he/she gets some credit points for the DVD. Once collected in enough amounts, these credits can be used to rent more DVDs. Moreover, customers can use these credits to get early access to the seasonal and festival offers. This functionality increases the engagement of the customer with the company.

Adding to all this, the business model also has a feature which notifies the customer about the new arrivals based on their previous choices and purchases, i.e, it creates personalised recommendations based on the customer's preferences. It will send the list of DVDs with computer generated text messages to the customer with the date from when they can rent the CDs. This feature will keep the customer updated with the new Movies, Games, Anime and Song albums. Customers can choose the mobile number on which they want to receive the update regarding the upcoming DVDs.

RELATIONAL DIAGRAM OF THE PROPOSED BUSINESS MODEL



ER DIAGRAM OF THE PROPOSED BUSINESS MODEL



CONCLUSION

When a business model is unable to keep up with the day's technological advancements, it fails. This is clearly evident in the case of Blockbuster, a company that remained focused on offline marketing while the world moved online. The DVD rental business model has great potential, even in 2021, if implemented properly. With the current rise in the demand of at-home entertainment services and DVD games due to the COVID-19 pandemic, the model can play an important role in serving people's entertainment needs. In conclusion, the DVD Rental Database Management System and business models working around similar ideas can have great applications today, and even in the future.

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