**ABSTRACT**: Cinemex is a company that has been characterized by having a very strong expansion strategy, and in recent years has acquired companies being competition as part of its strategy and be able to extend its market power against the industry’s leader called Cinepolis, however, this strategy hasn’t done Cinemex win market even competing by price. The main strength of Cinepolis is technological innovation so the strategy is to expand the firm is to open new complex projects highly technological. Moreover, opening Cinemex complex projects a lower level. The conclusion of the trial is that for Cinemex can continue to expand should redirect its strategy to open theatres with top-level projects that currently use in order to win market power Cinepolis.

**KEYWORDS**: Cinemex, Duopoly, Game Theory, No Cooperatives Games, Strategies.

**JEL**: D43, C7, C72, L1, L13.
that is Cinepolis. Comparison is made from the perspective of market share to corroborate what is the firm that uses the best strategies to gain market power so we can expand in a faster way.

The film apart from being an industry, is also considered an artistic product with the qualities to be massive and be consumed by large sections of the population, which are exposed to a more complex technological development (Vizcarra, 2005, p. 195)

The concept that manages Cinepolis, some researchers calls "Multicines" or "Megacines" (Cuadrado & Frasquet, 2008). These business formats appeared in the seventies in North America. A decade later generalize this business in Europe. The main reason that the high profitability of the multicines or megacines is due to variety of movies, long opening hours, better projection, modern facilities and easy accessibility (Cuadrado & Frasquet, 2008, p. 38,).

Mexico is a big booming market for film exhibition. Reports from 2009 put the country in fifth place worldwide in terms of movie attendance with 180 million tickets sold, just below countries like India, USA, China and France. Below of Mexico some countries like Brazil, with 113 million tickets sold. This is an interesting fact, considering that this population is twice compared to Mexico. Other countries such as Argentina, Colombia and Chile are also below the indicator of tickets sold compared to Mexico, with 33, 23 and 12 million, respectively (Martinez, Padilla, Schatan and Vega, 2010, p.39).

**Figure 1. Main countries of the world according to cinema attendance, 2009**

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*Source: take it from Martinez, Padilla, Schatan & Vega (2010)*
Background to the study

Cinemex is a company that started operations in 1995. Since its inception has been characterized by the objective to be positioned as the leader in its field and has achieved it in the metropolitan area of Mexico City. Its expansion plan led Cinemex to acquire MM Cinemas in February 2008, and the Lumiere cinema in April 2012 to reach the sum of 190 complexes within the Mexican Republic. Cinemark cinemas were acquired by Cinemex in February 2013 (Alonso, 2011, 13 de junio; Cámara Nacional de la Industria del Cine, 2011).

Cinemark cinemas had a total of 30 complexes: With these acquisitions, Cinemex reached 220 complexes located all over the republic against its main competitor, Cinepolis that has 303 rooms. And according to the article published by Gutiérrez (2013) in The Economist, continues its expansion plan and has scheduled several openings throughout Mexico in order to approach the industry leader.

Problem delimitation

Cinemex has a strategy of rapid expansion, so that it has acquired companies that were part of their competition (MM Cinemas, Lumiere and Cinemark): Having a clear expansion strategy of the firm and with the information published on the website of items “made in business” in 2012, Cinemex bet on several openings along the Mexican Republic for the purpose of positioning in the industry which it competes, but Cinemark acquisition materialized. Then in this new context, it is unclear what the new strategy Cinemex.

Justification

The purpose of the present work focuses on the importance of the expansion strategies of a company to compete with the rest of the industry. Growth strategies can be implemented in various ways, one of which is the acquisition and transfer of control of the assets, operations and management of a company to another (purchaser), becoming the first in the last unit, as defined by Peng (2006). But there are other strategies that determine the growth of the company, such as the one is using Cinepolis, competing in quality and technology offer.

Cinepolis strategy in particular is trying to do only the experience of going to the movies, so you want to leave your house. That's our bet that going to the movies is one experience alone. Today, for very good home theater you have at home does not compare to going to a super-super-production on a screen with surround sound, comfortable chairs and lounges have comfy chairs and popcorn to take your place. We sought to develop a more complete concept to be worth leaving the house. Alejandro Ramirez (Ramirez Organization).
Working hypothesis

Cinemex may sustain it’s grow if it formulates its expansion strategy basing its competition in quality and technology offer.

THEORETICAL – CONCEPTUAL FRAMEWORK


Game theory is a formal way to analyze the interaction between groups of rational players who interact strategically. Economic agents, in this case the bidders, may adopt very different strategies in their relationships, i. e. strategic interdependence, which is the object of study of game theory (Varian, 2011). For Gibbons (1993), game theory is the study of multiperson decision problems, such problems are posed in the economy.

A game is a process, in which multiple agents interact, subject to rules, with well-defined outcome, characterized by strategic interdependence. The components of the games that are used in game theory are:

Players: There must be two or more players (i) (companies) so they can interact. Playeri: 1,2, ...n.

1). Types

a) Rational agents with capacity for rational decision making
b) Nature. The player does not pursue any particular goal (random decisions).
c) Action or movement: It’s a decision of player i.
d) Joint information: State specifically what each player knows. It is the knowledge of player on the game and its features (the set of information changes over time).

B. Information

According to Rasmussen (1996) different types of information used in game theory are:

a) Perfect: Games in which the past history of the game is in the public domain and no simultaneous decisions.
b) Imperfect: When a player does not know what other players have done previously.
c) Complete: Games in which payments of all players are public information.
d) Incomplete: When a player does not know the characteristics of their rivals (preferences, strategies).
e) Symmetric: Nature does not intervene after the players.
f) Uncertainty: Player payments are uncertain. Players try to maximize their expected utility.
C. Strategy

It must be defined the possible movements (actions) to be made by each player and their sequential or simultaneous. This is the rule that states that action should be taken in every moment of the game, given the set of information (if)

Each player if $i \in S_1 = \{s(1)i, s(2)i, ... s(m)i\}m = n^o$ number of feasible strategies. $S = \{s1, s2, ... sn\}n$ number of players.

D. Payments

There must be a specific payment. It indicates the value that reaches the player after the nature and other players have selected their action and developed the game.

Results: Must be known the results obtained by every one of the players for each possible set of actions that are followed. It is the set of elements of the game that the analyst selects once the game was played, to summarize or describe what will happen.

To determine the equilibrium and solving games, these are defined in terms of dominant strategy (Gibbons, 1993) as one strategy for each possible combination of the strategies of the remaining players. Gains of these players are strictly less than the gain of the player's strategy that has a strictly dominant strategy.

When the combination of strategies in which each strategy is an optimal response to the other, as all players use optimal responses, none has reason to change strategy. The combination of strategies is said to be in equilibrium i.e. that is stable. This is what is defined as Nash equilibrium (Sánchez, 2004). This balance is the optimal choice as it provides better benefits than any other strategy taken Varian (2006), explains that Nash equilibrium always consists of dominant strategies but not always a dominant strategy is Nash equilibrium.

To analyze the Cinemex expansion strategies are used games with incomplete information. Games with in complete information are characterized by at least one player who does not know payments as an unknown function of another player. These are simultaneous games in which the players do not know any relevant element of the opponent' spay off function.

E. Reasons to make acquisitions

One of the main reasons for making an acquisition is productive synergies that can generate a business (Abellán, 2004):

a) Cost reduction through economies of scale and scope.

b) Improving strategic benefits and income resources.

c) Growth: to grow in the current market or enter new ones.
Market power: increase the market share of the company.

Setting context

According to the statistics of the Mexican Institute of Cinematography and to raise the scheme in a general context of competition for this industry, the movie industry in 2012 generated revenues of $10,674,274,000 in Mexico. In 2011, the exhibition film industry attended 205 million of people who are basically divided between 4 companies, Cinepolis, Cinemex, Cinemas and Lumpier.

This situation raises oligopolistic market structure and in 2012, 228 million people attended which was partitioned between 3 and then between two companies. Thus, this indicates that the exhibition industry of films in Mexico currently has a duopolistic structure.

In Table 1 it is analyzed some indicators of the film industry in 2011 and 2012. It is appreciated that Cinepolis increased the percentage of their screens from 30% to 33%. This is due to the acquisition of the Lumiere cinema. There is clear that Cinemex expansion strategy is based on acquisitions.

According to Zozaya (2009), an acquisition is the purchase of one company by another resulting in a larger-size and is one of the ways used to day to increase size and gain competitiveness through a transient competitive advantage (Gunther McGrath, 2013). That is why Cinemex followed its strategy and acquired most of its competition being its last big move buying the Cinemark cinemas. Thus, Cinemark cinemas have reached 38% of the complex to 41% of Cinepolis, which appears to shorten distance with the leader but is not reflected in just as the percentage of market participants (market share). That despite the short distance that exists in the percentage of complex number by these two companies, there is a difference of 15%.

Table 1- Comparison of indicators in Mexico exhibiting percentages

<table>
<thead>
<tr>
<th>Exhibitor</th>
<th>Percentage of exhibitors</th>
<th>Cinemas screens Percent</th>
<th>Percentage of assistants</th>
<th>Percentage of Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cinepolis</td>
<td>41</td>
<td>42</td>
<td>48</td>
<td>49</td>
</tr>
<tr>
<td>Cinemex</td>
<td>30</td>
<td>33</td>
<td>34</td>
<td>36</td>
</tr>
<tr>
<td>Cinemark</td>
<td>6</td>
<td>5</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Otras</td>
<td>23</td>
<td>20</td>
<td>12</td>
<td>9</td>
</tr>
</tbody>
</table>

A. Analyzing the growth strategies of competition

In an article published by Mendoza (2012) by CNN Expansion Magazine, the Cinepolis CEO Alejandro Ramirez, explains the strategies that have been crucial to the growth of the firm that runs:

a) Reinvests about 90% of their profits.

b) Go a step further, means that at the end of 2013 all Cinepolis screens will feature digital projection technology which will help to save costs and improve the customer experience.

c) Know your audience

d) Factor surprise: Investment in technological innovations, such as 3d and 4d screens of which are the only suppliers in the country.

Moreover, the general manager of marketing Cinemex, Claudio Sanchez, told the newspaper *El Universal* in 2012 that have been investing millions in acquisitions, renovations and new openings that have been historic for the firm, in order to monopolize the market share. Moreover, employing the strategic variable is price, to achieve thus attracting more attendees.
B. The following table is a comparison of the overall context of the two companies.

Cinemex, despite Cinemas Lumiere acquired in 2012, had no growth in terms of market share as noted in Figures 3, 4 and 5, even to acquire Cinemark cinemas had no substantial growth in terms of market share.

**Figure 3. Market share by number of cinemas**


**Figure 4. Market share by number of screens**
The main purpose of the company is to cut away in front of its competitor. But there is observed that the little growth that the company gets is because local theatres stop receiving market and even Cinepolis also gains market share from local cinemas every year just in greater proportion than Cinemex. Figure 6 shows that Cinemex only has obtained market share through acquisitions strategies and not by beating Cinepolis market in direct competition or even by giving lower prices. Hence, it is concluded that the main factor to win market share and technological innovation unlike differences in offered services between the two companies that are screens and larger rooms by Cinepolis.

**Figure 5.** Market share for attendance.

**Figure 6: Market share by attendance.**
In February 2013, Cinemark Holdings Company had reached an agreement to sell its 29 cinema complexes to Cinemex, but in August the Federal Competition Commission (Comisión Federal de Competencia, CFC) has not approved (Unomásuno, 2013).

METHOD

The method used in this research is a comparison of indicators between the two largest chains of movie exhibitors: Cinepolis and Cinemex and use of game theory to analyze it based on an example written by Fernández (2002) in his book “Theory of Games: their application in economics.”

Games with incomplete information: the case of simultaneous movements.

A. Players

E1=Cinepolis
E2=Cinemex

B. Rules

Each company has 2 options to do: Expand or not to expand.

a) There are 5 points that do not belong to any company.
b) Every company does not know what the other company does.
c) The movements are simultaneous as they have to develop strategies to implement in the short term.
d) The e1 (Cinepolis) -manages an expansion project- standard good.
e) e2 (Cinemex) - There are questions about the type of project that can carry out. This uncertainty comes from the technology that can be used, some features of the product and the form of financing.

C. Payments

a) If they expand without making acquisitions with their current projects:
b) The e1 grows 2 points
c) The e2 growing 0 points
d) If e1 expands and e2 does not expand (3,-1)
e) If both expand (2, 0 +x)
f) If e1 does not expand and e2 expanded (0, 1+x)
g) If none expands everything stays the same
h) If the project is good x= 2
i) If the project is standard x=0
*Good project = Opening of new cinemas with high technology, comfortable seating, large rooms.
## Payment matrix

<table>
<thead>
<tr>
<th></th>
<th>CINEPOLIS</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Standard project (X=0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Expand</td>
<td>Not expand</td>
<td></td>
</tr>
<tr>
<td>Expand</td>
<td>(2,0)</td>
<td>(3-1)</td>
<td></td>
</tr>
<tr>
<td>Not expand</td>
<td>(-1,1)</td>
<td>(0,0)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>CINEPOLIS</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Good project (X=2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Expand</td>
<td>Not expand</td>
<td></td>
</tr>
<tr>
<td>Expand</td>
<td>(2,2)</td>
<td>(3-1)</td>
<td></td>
</tr>
<tr>
<td>Not expand</td>
<td>(-1,3)</td>
<td>(0,0)</td>
<td></td>
</tr>
</tbody>
</table>

## ANALYSIS OF RESULTS

A. Cinepolis always prefers to carry out a good project, since it is dominant strategy as the company Cinemex.

B. The dominant strategy of both companies is expanding, then it is Nash equilibrium, in this way, both companies will reap the greatest benefits of the market.

## IMPLICATIONS OF THIS RESEARCH

This analysis has important as a business concept for the transformation of business models in areas such as technology development, film production, distribution, cinema exhibition. It also has far reaching implications in policy formulation on free market strategies aimed to expand the duopollic activities of two players that share and control the market. These two players controlling the market bring consequences for producers, consumers and for the national culture (Sosa Plata, 2013). There also implications for the resolutions of the regulatory bides such as the Federal Competition Commission (Comisión Federal de Competencia, CFC).

Further and beyond the economic implications, there evidences of other adverse features, such as for example, that this concentration has not derived on a real expansion of cinematographic showrooms in all over the country. The showrooms are currently concentrated in certain wealthy areas of cities targeting the segment with the highest income who regularly attends. This concentration has also implications for other local films despite the significant size of the market segment showing a marked shift from domestic films to United States films productions adding up to the oligopolistic power of contributors.

The analysis also has implications on the legislation to include film as a cultural industry.
CONCLUSIONS AND RECOMMENDATIONS

The Cinemex expansion strategy should focus on opening new complex with a technology offer enough to compete with Cinepolis. The variable price is not insignificant to increase market share in this industry, since the only difference between the services offered by these two companies is the price range, offer of technology, sizes of rooms and displays. In the last 3 Cinepolis has transient competitive advantage and are those that appear to be the variables that define which company gets more market share.

REFERENCES

Corresponding author’s email address: j.josevargas@cucea.udg.mx