



MLB GAME LENGTH DECISION MAKING

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Decision Making in a Complex
Environment

ABSTRACT

The goal of our project was to determine the best choice for the MLB in regard to shortening the length of their games. Major league baseball is the oldest sport in America and since its conception it has been played for 9 innings. However, over time the total time of the games has increased significantly due to a multitude of factors. In recent years the question has arose “should the MLB shorten the length of their games” and if so, how would they go about doing this? We believe the best option to shorten the length of games is to reduce the number of innings that are played, which is the leading solution many experts suggest. Our project analyzes the decision of whether or not the MLB should shorten games to 7 innings or remain with the alternative 9 inning game.

INTRODUCTION

Major League Baseball was founded in 1869 making it the oldest major professional sport league in the United States. Since its formation the league has seen minimal changes made to the rules. No such rules have ever adjusted the number of innings played in a regular scheduled game and only two rule changes have been made since 1975. However, the average total time in which games are played has increased by 30 minutes over the past 50 years. This increase in average game time is due to many factors including players taking more time between pitches, innings and celebrations. Has games increase in length, possible injuries to players also increases and fan interest in the game drops. Currently, only 14% of 18–34 year old’s consider themselves “avid fans”. Many fans simply don’t have the time to watch a 4-hour baseball game or lose interest in the game after a certain point. To correct this loss of interest in baseball, MLB has discussed solutions. The most popular suggestion to solve this problem has been to reduce the number of innings played from nine to seven. Major League Baseball has recently explored this rule change during the 2020 season. As with all major league sports covid effected how MLB was played in the 2020 season. For MLB this was seen by greatly reducing the number of games and more importantly, for this possible rule change, making double header games only 7 innings. In the 2020 season, whenever teams played each other twice in the same day, both games were played for 7innings instead of the usual 9. This change was made to reduce player contact with each other however it also offered an insight in to how the game could be played in the future. This change not only shortened the length of the games but also the

impact on the players bodies. Pitchers, in particular, threw less pitches due to the inning reduction which in turn reduced the strain put on their arms. With this possible rule change our model set out to determine the best choice for MLB regarding the shortening of games.

METHODOLOGY

Two possible alternatives for MLB were considered:

1. No changes
2. Move to shorter games

No Changes:

If MLB chooses to not make any rule changes, then the game will be played as it currently is with 9 inning games. This would also include making double header games 9 innings again as covid comes to an end.

Move to Shorter Games:

If MLB chooses to move to shorter games, then we will assume that it is 7 inning games. This assumption is made off the fact that they have done this for some games in the 2020 season and the fact that they have presented this as an option in the future.

The top level decision making criteria are as follows:

Benefits:

- Financial
 - Staff costs
 - Operating costs
 - Broadcast costs
- Fan Engagement
 - Time Commitment
 - Excitement
 - Attractiveness

Opportunity:

- Financial
 - Ticket Revenue
 - Merchandise Revenue
 - Concession Revenue
 - Broadcast Revenue
- Player/Team Impact
 - Compensation
 - Injury Risk
 - Game Strategy
- Fan Engagement
 - Excitement
 - Attendance
 - Attractiveness

- # of Fans
- Viewership

Cost:

- Financial
 - New signage (needed for shortening, not needed for no changes)
 - Training Staff (staff would require training on changes if made)
 - Marketing
- Player/Team Impact
 - Rules – (Adapting to new rules)
 - Performance Statistics – (Better or worse performance statics)
 - Procedures – (Change of routines and procedures)
 - Playing Time – (More of less opportunity to play?)

Risk:

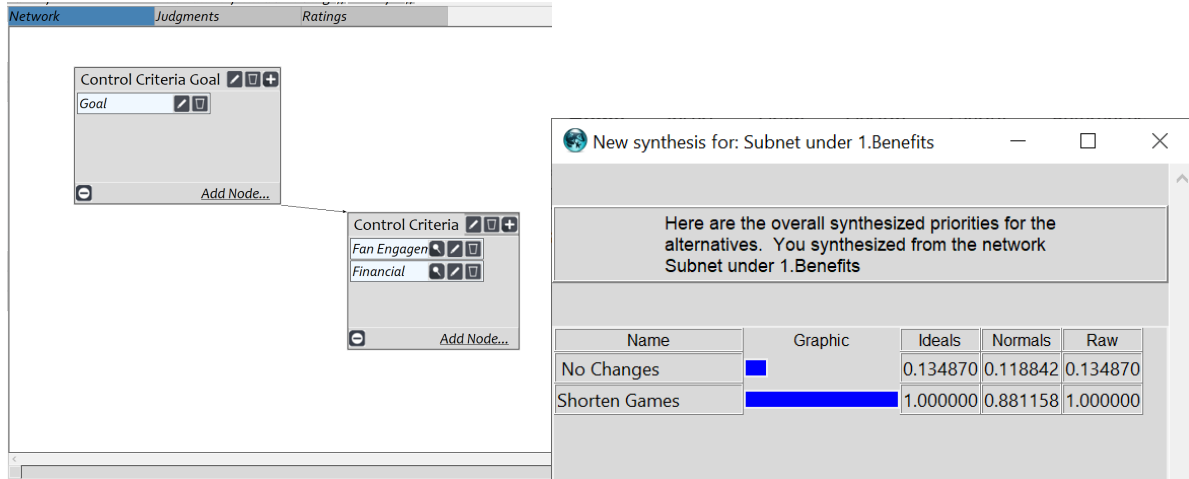
- Financial
 - Ticket Revenue
 - Merchandise Revenue
 - Concession Revenue
 - Broadcast Revenue
- Player/Team Impact
 - Compensation
 - In-Game Strategy
 - Injury
- Fan/Team Impact
 - Entertainment Value (Less entertainment value for some fans)
 - Gambling (Less gambling opportunities with shorter game)
 - # of Fans – (Loss of appeal for purist fans)

DATA

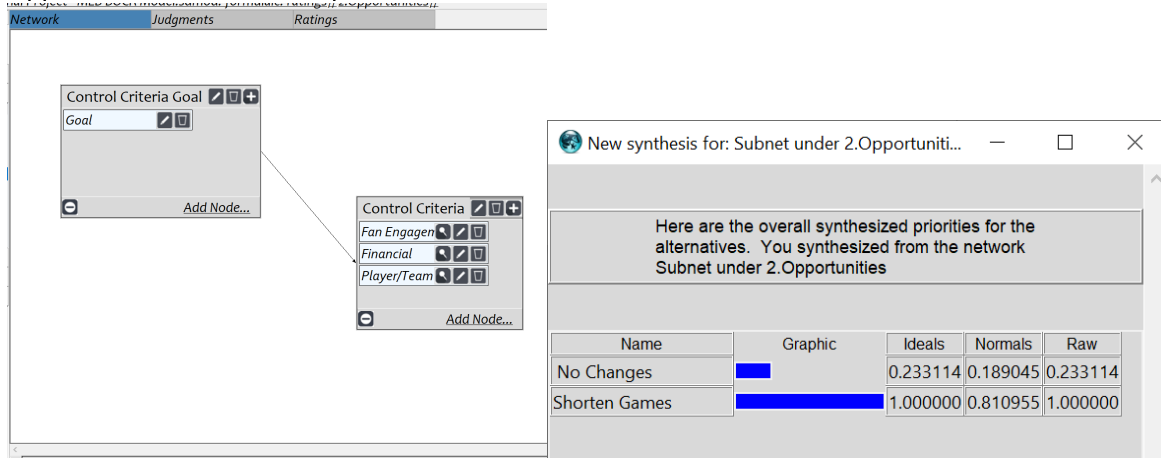
Strategic Criteria and Structure:



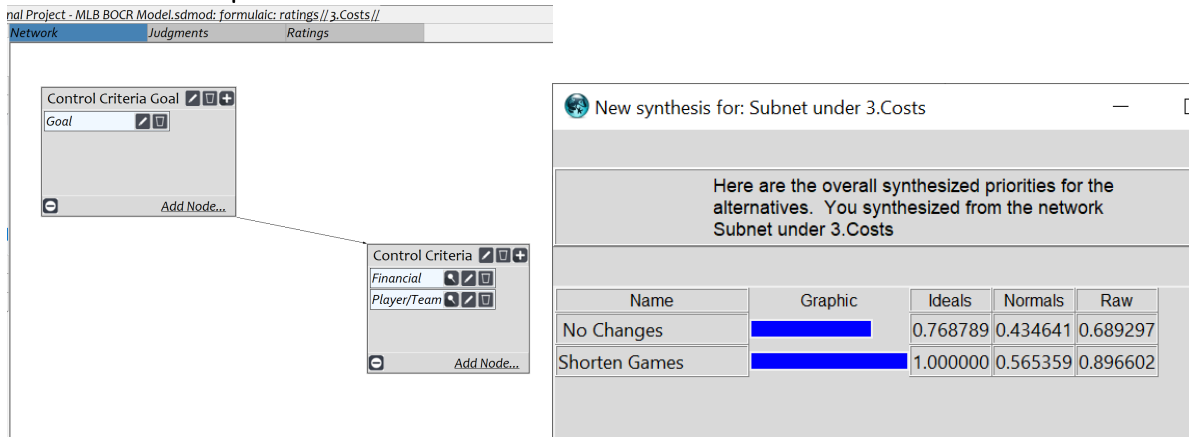
Benefits Subnet Example and Result:



Opportunities Subnet Example and Result:

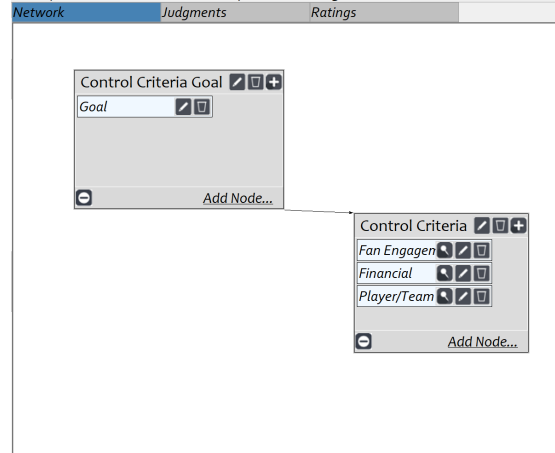


Costs Subnet Example and Result:



Risks Subnet Example and Result:

nal Project - MLB BOCR Model.sdm: formulaic: ratings// 4.Risks//



New synthesis for: Subnet under 4.Risks

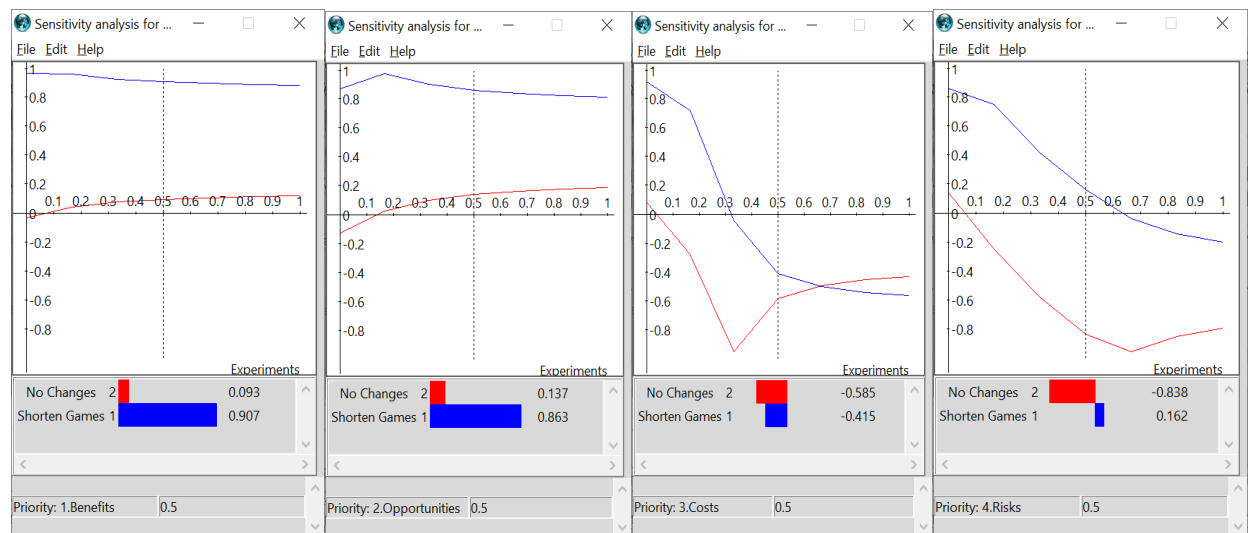
Here are the overall synthesized priorities for the alternatives. You synthesized from the network Subnet under 4.Risks

Name	Graphic	Ideals	Normals	Raw
No Changes		1.000000	0.795074	1.000000
Shorten Games		0.257745	0.204926	0.257745

ANALYSIS

The model showed that shortened games far outweighed no changes in both benefits and opportunities. For costs, shortened games were shown to be slightly better. This was likely due to the fact that shorter games would correspond with less stadium operation costs, tv broadcast time, and more fans attending games. Drawbacks to shorter games in the cost section included less time to sell food and beverages as well as a possible reduction in merchandise sales at stadiums. In the Risk subnet, no changes were greatly favored over shorter games. This is because when changes are made to the game there are inherently more risks associated.

Sensitivity



CONCLUSION

According to our model the best alternative for major league baseball is to reduce game length. This change would provide greater benefits, increase opportunities and decrease costs. As for bias within our model there could have been some due to the fact we are both MLB fans. However, this bias would be limited as we are fans of the game how it currently stands at 9 inning games. The reduction of innings would affect many aspects of the game that we enjoy, including the statistics for players which would change dramatically due to less innings being played per game. This decision to move to 7 inning games may also be a hard sell to the decision makers. Though the league has recently had a chance to experiment with 7 inning games thanks to Covid-19. Major league baseball has been played about the same way for over 150 years and a change like this would certainly change how the game is played. The decision ultimately comes down to the commissioner and the head of the players union but perhaps viewing a model such as ours could sway them.