School of Media Studies

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**GAME THEORY** \*

Should KAAA Switch to Early Prime?

 KAAA-TV, a CBS affiliate in a top-25 market in the Pacific time zone, was considering switching its current network prime time (8:00-11:00 p.m.) to an early prime time schedule (7:00-10:00 p.m.).  KAAA was number two in prime time and in late news ratings.

 KBBB-TV, the market's NBC affiliate, was number one in the prime time ratings, and because of NBC's strong 10:30-11:00 p.m. lead-ins, KBBB's late news was number one in the ratings and demos even though KAAA's news product and promotion approach was competitive.

KAAA's late fringe ranked number two in the ratings and demos.  KBBB's late fringe was number one, providing a robust lead-out for its late news.

KCCC-TV, the ABC affiliate, was number three in prime time and late news.  KCCC was a network-owned station and would not switch to early prime because the network wouldn't allow it.  The network thought a switch would have serious implications, as it might signal tacit approval of such a swap for other affiliates.  ABC believed such a wholesale switch to early prime by its Pacific time zone affiliates would hurt its ratings substantially.  KCCC's late fringe was also a weak number three.

KAAA and KBBB were both owned by large, powerful television station groups, which didn't mind risking their own networks' disapproval of a switch to early prime.

KAAA knew that KBBB was also considering a switch.  To help it make a decision about the switch to early prime, KAAA produced the following decision tree to lay out the various alternatives.

DECISION TREE

KBBB – No change

KAAA - Early prime

KBBB - Early prime

KBBB – No change

KAAA

KAAA - No change

KBBB – Early prime

Next, KAAA constructed a payoff matrix on which the possible alternatives were included from the decision tree.  KAAA assigned ranks of 1,2,3,4 (ordinal numbers, with 4 being the best alternative for KAAA and 1 the worst) based on how desirable an alternative was for KAAA and based on its estimate of how KBBB would rank its alternatives.

PAYOFF MATRIX

|  |  |  |
| --- | --- | --- |
|  | Go \* | No Go \* |
| Go \* | A  4,2\*\* | B  3,3 |
| No Go \* | C  1,4 | D  2,2 |

\*    Go = Switch to early prime.  No Go = Keep current prime time schedule.

\*\*  The first number is each set is KAAA's weight, the second number, KBBB's.

Explanation

In Cell A, 4,2 indicates that if KAAA switched to early prime and KBBB also switched (Go, Go), both would gain more revenue from higher ratings for a 10:00-10:30 p.m. late news.  But KBBB wouldn't gain as much as it would if KAAA switched and KBBB didn't (3,3 in Cell B).  The Cell A alternative is the most desirable for KAAA.

In Cell B, 3,3 indicates that if KAAA switched to early prime and KBBB didn't switch (Go, No Go), KAAA would gain more revenue for its 10:00-10:30 p.m. news than it currently receives, but not as much as it would if KBBB also switched (4,2 in Cell A) because KAAA's late news would be up against KBBB's strong 10:00-11:00 p.m. prime.  This alternative is the second best one for KAAA.

In Cell C, 1,4 indicates that if KAAA didn't switch to early prime and KBBB did (No Go, Go), KBBB's 10:00 p.m. news would get the jump on KAAA's late news, which would probably hurt KAAA's 11:00 p.m. news, and KBBB would increase its revenue substantially for late news, which would be in prime time.  Also, such a switch would hurt KAAA's prime access (7:00-7:30 p.m.), which would then be competing with KBBB's strong network programming.  This alternative is the least desirable for KAAA.

In Cell D, 2,2 indicates that if neither KAAA nor KBBB switches (No Go, No Go), the current situation remains the same.  If KAAA didn't switch and KBBB didn't switch, nothing changes, but neither KBBB nor KAAA would have taken advantage of an opportunity to increase revenues by switching.

Strategies

By adding KAAA's numbers *across the rows*, with its Go numbers 4+3=7 (top row), it is obvious that switching is the best strategy because its No Go weights, 1+2=3 (bottom row), are much worse.  Also, it is slightly better for KAAA if KBBB switched (Cell A, 4,2) than if it switched and KBBB didn't (Cell B, 3,3).

By adding KBBB's numbers *down the columns*, they are close with either decision: Go, Go, 4+2=6 (left column) and No Go, No Go, 3+2=5 (right column) with Go, Go slightly favored.

KAAA could publicly announce (false announcement) that it has considered switching to early prime but has decided not to because of network pressure (the TV newspaper columnists are sure to run the story).  By doing so, KAAA would hope that KBBB would switch to early prime to gain an obvious advantage (Cell C, 1,4).  KAAA might also try a trial balloon to see if KBBB bites.

If KAAA decides to use a false announcement, it must maintain absolute secrecy and then at the last possible moment switch to early prime to gain its maximum advantage (Cell A, 4,2).

Numbers in the Payoff Matrix

The numbers in a Payoff Matrix should be ordinal numbers (ranks) because using weighted numbers, a ten-point scale for example, is highly subjective.  In this Game Theory case you should try to estimate how the competition would rank the various alternatives based on their assessment of the revenue opportunities.  Using ranks (ordinal numbers) is straightforward and will give you sufficient answers.  Thorough knowledge of the competition and its response profile, competitive strategy profile, and the personality characteristics of its top decision maker are important to understand.

ASSIGNMENT

1. Should KAAA switch to early prime?  Why or why not?
2. Should KAAA use a false announcement or a trial balloon?  Which one and why or why not?

\* This case was prepared by Charles Warner