APPENDIX E

Cinema Booking System

Table E.1 shows results obtained with respect to interactions using varying interval constants for the Cinema Booking System.

Table E.1. Results of Interactions with Varying Interval Constant Values for Cinema Booking System.

Interval Constant	Sample Size	Mean Number of Interactions	Standard Deviation
1	7	19.57143	8.657504
5	7	15.28571	9.464218
10	7	18.85714	9.754120
15	7	15.42875	6.347103
20	7	13.71429	7.846760
25	7	13.71429	6.651172
30	4	11.75000	2.121320
35	4	10.50000	1.914840
40	4	10.50000	5.446712

The interaction data for CBS have been analysed using an analysis of variance for a one-way, between-subjects design. Results indicate that the mean number of interactions for CBS does not significantly differ between levels of interaction constant ($p = 0.407$). Analysis of variance has been performed using the Minitab 15.1 statistical software package yielding the following data:

One-way ANOVA: CBS versus Interaction Constant

```
Source                 DF      SS    MS     F      P
Interaction Constant    8   479.5  59.9  1.06  0.407
Error                  45  2543.3  56.5
Total                  53  3022.8

S = 7.518   R-Sq = 15.86%   R-Sq(adj) = 0.91%
```

Graduate Development Program

Table E.2 shows results obtained with respect to interactions using varying interval constants for the Graduate Development Program.

Table E.2. Results of Interactions with Varying Interval Constant Values for the Graduate Development Program.

Interval Constant	Sample Size	Mean Number of Interactions	Standard Deviation
1	6	12.50000	9.137833
5	6	11.00000	8.246211
10	6	13.66670	7.089899
15	7	12.42857	7.322503
20	7	12.14286	8.132826
25	7	11.57143	7.54668
30	7	11.42857	9.848858
35	4	12.50000	3.696846
40	4	13.00000	5.371546

The interaction data for GDP have also been analysed using an analysis of variance for a one-way, between-subjects design. Results indicate that the mean number of interactions for GDP does not significantly differ between levels of interaction constant ($p = 1.000$). Analysis of variance has been performed using Minitab 15.1 statistical software package yielding the following data:

One-way ANOVA: GDP versus Interaction Constant

```
Source                DF      SS    MS     F      P
Interaction Constant   8    32.3   4.0  0.07  1.000
Error                 45  2673.8  59.4
Total                 53  2706.1

S = 7.708   R-Sq = 1.19%   R-Sq(adj) = 0.00%
```

Select Cruises

Table E.3 shows results obtained with respect to interactions using varying interval constants for the Select Cruises.

Table E.3. Results of Interactions with Varying Interval Constant Values for Select Cruises.

Interval Constant	Sample Size	Mean Number of Interactions	Standard Deviation
1	3	13.0000	7.000000
5	3	13.0000	7.000000
10	3	13.3333	7.767453
15	5	12.0000	8.285353
20	5	10.2000	6.058052
25	5	10.8000	6.880226
30	5	10.2000	7.000000
35	5	13.0000	6.164414
40	5	13.0000	6.196773

The interaction data for SC have also been analysed using an analysis of variance for a one-way, between-subjects design. Results indicate that the mean number of interactions for SC does not significantly differ between levels of interaction constant ($p = 0.994$). Analysis of variance has been performed using Minitab 15.1 statistical software package yielding the following data:

One-way ANOVA: SC versus Interaction Constant

```
Source                DF      SS    MS     F      P
Interaction Constant   8    63.0   7.9  0.17  0.994
Error                 32  1509.1  47.2
Total                 40  1572.0

S = 6.867   R-Sq = 4.01%   R-Sq(adj) = 0.00%
```