# Detecting Cheating, Theft, and Fraud through Data Analysis
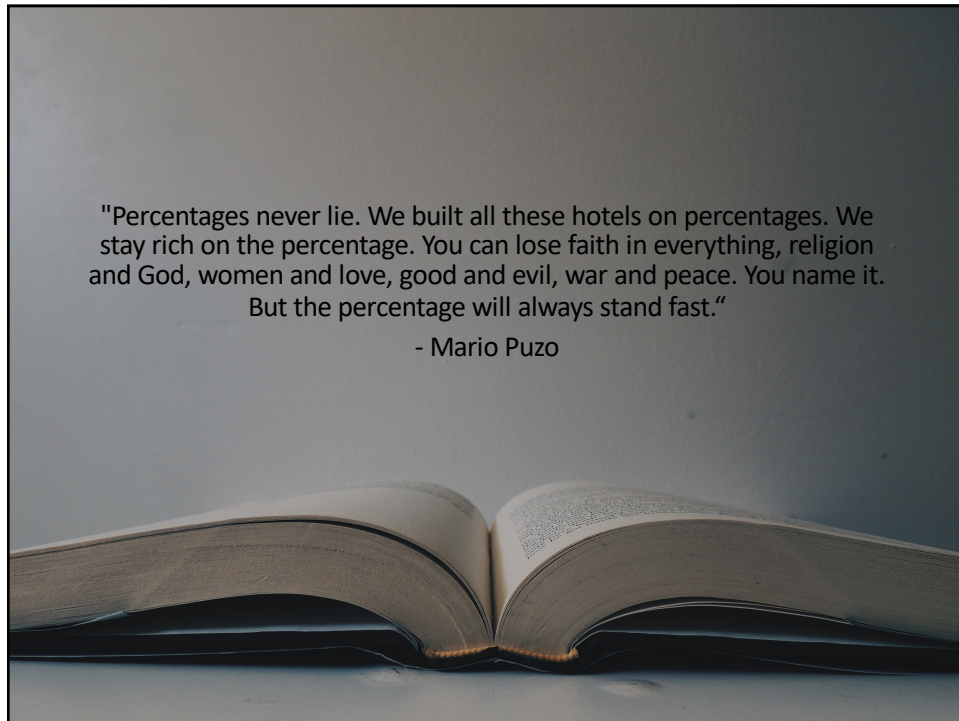
In Gaming

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## What ?

- Did you know that every area in a casino has an auditing trail and exception reporting system?

- Did you know that most Gaming Commissions require the auditing trails and exception reports?

- Did you know that significant exceptions are required to be investigated, by most Gaming Commissions?

- Did you know that your Surveillance team can utilize these reports to investigate or assist in an investigation?
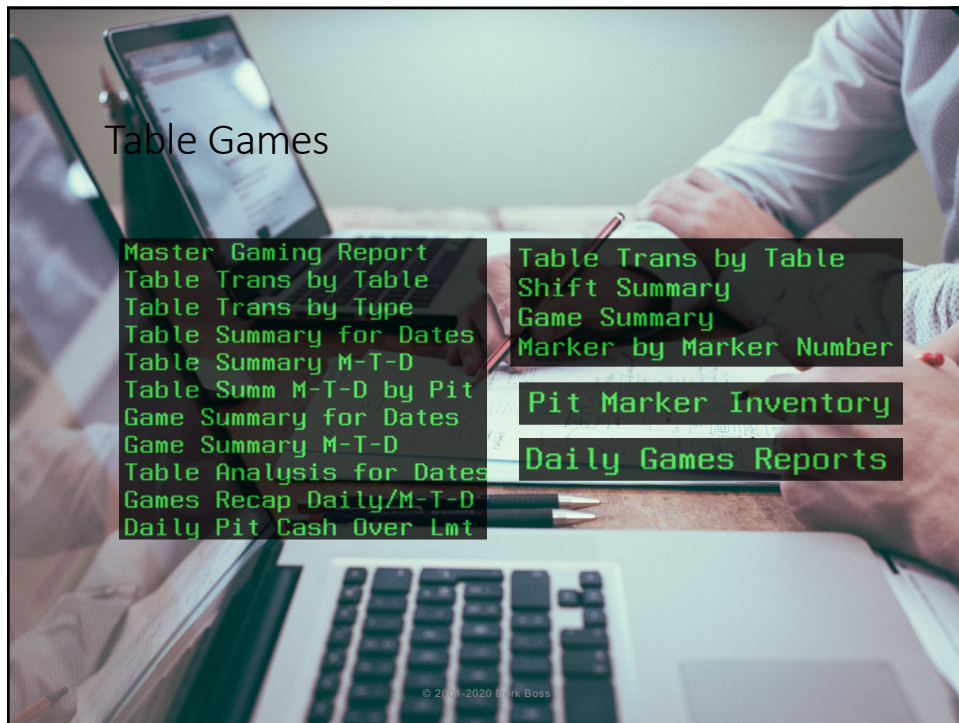
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"Percentages never lie. We built all these hotels on percentages. We stay rich on the percentage. You can lose faith in everything, religion and God, women and love, good and evil, war and peace. You name it. But the percentage will always stand fast."

- Mario Puzo

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Table Games

4

## Table Games

```
Master Gaming Report        Table Trans by Table
Table Trans by Table        Shift Summary
Table Trans by Type         Game Summary
Table Summary for Dates     Marker by Marker Number
Table Summary M-T-D
Table Summ M-T-D by Pit     Pit Marker Inventory
Game Summary for Dates
Game Summary M-T-D          Daily Games Reports
Table Analysis for Dates
Games Recap Daily/M-T-D
Daily Pit Cash Over Lmt
```

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## Table Games

- Most, if not all, Gaming properties have Table Games statistical reports.

- These reports show gaming revenue activity by the day, month, and year.

- These reports will also show gaming management how their Table Games held (Hold % ) by the day, month and year.

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## Typical Hold Percentages
(Nevada)

| Game | Hold % |
|---|---|
| Baccarat | 15% |
| Blackjack | 12 – 18% (# 0f Decks, Rules, Region) |
| Craps | 13% |
| Caribbean Stud | 28% |
| Keno | 28% |
| Pai Gow Poker | 22% |
| Roulette | 22% |
| Slots | 6-9% |
| Three Card Poker | 25% |
| Sports Book | House Take: 4.55% (11/10 wager assuming 50% win probability) |

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## RULE VARIATIONS (BLACKJACK)

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| Rule | Effect |
|---|---|
| Single Deck | 0.48% |
| Early surrender against ten | 0.24% |
| Player may double on any number of cards | 0.23% |
| Double Deck | 0.19% |
| Player may draw to split aces | 0.08% |
| Six-card Charlie | 0.16% |
| Player may resplit aces | 0.08% |
| Late surrender | 0.08% |
| Six Deck | 0.02% |
| Player may double on 9-11 only | -0.09% |
| Player may not double after splitting | -0.14% |
| Player may double 10,11 only | -0..18% |
| Dealer hits on soft 17 | -0.22% |
| Blackjack pays 6-5 | -1.39% |
| Blackjack pay 2-1 | +2.27% |

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# TABLE GAMES ANALYSIS REPORT

TIME 9.43 — CMS400 CASINO MANAGEMENT SYSTEM
REPORT CSG6970A — TABLE ANALYSIS FOR 1/01/2006 THRU 4/22/2006

| GM/TBL | CURRENT DAY | | | CURRENT YEAR M-T-D | | | PRIOR YEAR M-T-D | | |
|---|---|---|---|---|---|---|---|---|---|
| | TOTAL DROP | WIN | P.C. | TOTAL DROP | WIN | P.C. | TOTAL DROP | WIN | P.C. |
| **BJ 3** | | | | | | | | | |
| GRAVE | 1,601.00 | 901.00 | 56.2 | 30,227.00 | 2,397.00 | 7.9 | 39,235.00 | 12,385.00 | 31.6 |
| DAY | 2,460.00 | 1,000.00 | 40.6 | 55,776.00 | 9,926.00 | 17.8 | 67,411.00 | 13,431.00 | 19.9 |
| SWING | 1,910.00 | 30.00 | 1.5 | 48,640.00 | 9,460.00 | 19.4 | 51,817.00 | 8,917.00 | 17.2 |
| *TOTAL | 5,971.00 | 1,931.00 | 32.3 | 134,643.00 | 21,783.00 | 16.1 | 158,463.00 | 34,733.00 | 21.9 |
| **BJ 4** | | | | | | | | | |
| GRAVE | 1,573.00 | 77.00- | 4.8- | 21,249.00 | 6,759.00 | 31.8 | 4,210.00 | 1,000.00 | 23.8 |
| DAY | 2,285.00 | 505.00 | 22.1 | 47,646.00 | 949.00- | 2.0- | 36,667.00 | 2,952.00 | 8.1 |
| SWING | 2,070.00 | 20.00 | .9 | 43,626.00 | 9,071.00 | 20.8 | 40,263.00 | 9,253.00 | 23.0 |
| *TOTAL | 5,928.00 | 448.00 | 7.5 | 112,521.00 | 14,881.00 | 13.2 | 81,140.00 | 13,205.00 | 16.2 |
| **BJ 5** | | | | | | | | | |
| GRAVE | .00 | .00 | .0 | .00 | .00 | .0 | .00 | .00 | .0 |
| DAY | .00 | .00 | .0 | .00 | .00 | .0 | .00 | .00 | .0 |
| SWING | .00 | .00 | .0 | .00 | .00 | .0 | .00 | .00 | .0 |
| *TOTAL | .00 | .00 | .0 | .00 | .00 | .0 | .00 | .00 | .0 |
| **BJ 6** | | | | | | | | | |
| GRAVE | .00 | .00 | .0 | .00 | .00 | .0 | .00 | .00 | .0 |
| DAY | .00 | .00 | .0 | .00 | .00 | .0 | .00 | .00 | .0 |
| SWING | .00 | .00 | .0 | .00 | .00 | .0 | .00 | .00 | .0 |
| *TOTAL | .00 | .00 | .0 | .00 | .00 | .0 | .00 | .00 | .0 |
| **BJ 7** | | | | | | | | | |
| GRAVE | .00 | .00 | .0 | 6,727.00 | 1,077.00 | 16.0 | .00 | 30.00 | .0 |
| DAY | .00 | .00 | .0 | 14,814.00 | 1,044.00 | 7.0 | 1,410.00 | 1,030.00- | 73.0- |
| SWING | 1,330.00 | 95.00 | 7.1 | 21,845.00 | 7,565.00 | 34.6 | 3,250.00 | 165.00- | 5.1- |
| *TOTAL | 1,330.00 | 95.00 | 7.1 | 43,386.00 | 9,686.00 | 22.3 | 4,660.00 | 1,165.00- | 25.0- |
| **BJ 8** | | | | | | | | | |
| GRAVE | .00 | .00 | .0 | .00 | .00 | .0 | 20,564.00 | 3,724.00 | 18.1 |
| DAY | .00 | .00 | .0 | .00 | .00 | .0 | 57,666.00 | 5,266.00 | 9.1 |
| SWING | .00 | .00 | .0 | .00 | .00 | .0 | 50,958.00 | 11,038.00 | 21.7 |
| *TOTAL | .00 | .00 | .0 | .00 | .00 | .0 | 129,188.00 | 20,028.00 | 15.5 |
| **BJ 9** | | | | | | | | | |
| GRAVE | 830.00 | 130.00- | 15.6- | 24,848.00 | 302.00- | 1.2- | 30,153.00 | 12,833.00 | 42.6 |
| DAY | 1,735.00 | 25.00- | 1.4- | 47,778.00 | 8,798.00 | 18.4 | 57,100.00 | 4,870.00 | 8.5 |
| SWING | 2,491.00 | 249.00- | 9.9- | 54,626.00 | 7,776.00 | 14.2 | 53,466.00 | 5,776.00 | 10.8 |
| *TOTAL | 5,056.00 | 404.00- | 7.9- | 127,252.00 | 16,272.00 | 12.7 | 140,719.00 | 23,479.00 | 16.6 |
| **BJ 10** | | | | | | | | | |
| GRAVE | 765.00 | 465.00 | 60.7 | 22,928.00 | 3,828.00 | 16.7 | 33,660.00 | 3,950.00- | 11.7- |
| DAY | 1,880.00 | 1,180.00 | 62.7 | 46,010.00 | 24,060.00 | 52.3 | 67,365.00 | 1,295.00- | 1.9- |
| SWING | 1,550.00 | 1,750.00- | 112.9- | 38,788.00 | 6,712.00- | 17.3- | 79,506.00 | 54.00- | .1- |
| *TOTAL | 4,195.00 | 105.00- | 2.5- | 107,726.00 | 21,176.00 | 19.6 | 180,531.00 | 5,299.00- | 2.9- |

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# TABLE GAMES ANALYSIS REPORT

TIME 9.43 — CMS400 CASINO MANAGEMENT SYSTEM
REPORT CSG6970A — TABLE ANALYSIS FOR 1/01/2006 THRU 4/22/200

| GAME TYPE | CURRENT DAY | | | CURRENT YEAR M-T-D | | | PRIOR YEAR M-T-D | | |
|---|---|---|---|---|---|---|---|---|---|
| | TOTAL DROP | WIN | P.C. | TOTAL DROP | WIN | P.C. | TOTAL DROP | WIN | P.C. |
| **MINI-BACC** | | | | | | | | | |
| GRAVE | 4,890.00 | 420.00- | 8.5- | 54,568.00 | 3,037.00- | 5.6- | 11,842.00 | 6,717.00 | 56.7 |
| DAY | 1,570.00 | 310.00 | 19.7 | 127,657.00 | 9,208.00- | 7.2- | 49,837.00 | 363.00- | .7- |
| SWING | 6,335.00 | 485.00 | 7.6 | 195,725.00 | 11,880.00 | 6.1 | 58,781.00 | 2,386.00 | 4.1 |
| *TOTAL | 12,795.00 | 375.00 | 2.9 | 377,950.00 | 365.00- | .0 | 120,460.00 | 8,740.00 | 7.2 |
| **PAI GOW** | | | | | | | | | |
| GRAVE | 1,690.00 | 1,000.00 | 59.1 | 32,130.00 | 17,420.00 | 54.2 | 39,800.00 | 19,310.00 | 48.5 |
| DAY | 3,113.00 | 1,143.00 | 36.7 | 78,059.00 | 12,934.00 | 16.6 | 68,124.00 | 25,144.00 | 36.9 |
| SWING | 3,952.00 | 1,772.00 | 44.8 | 92,680.00 | 24,755.00 | 26.7 | 79,955.00 | 25,845.00 | 32.3 |
| *TOTAL | 8,755.00 | 3,915.00 | 44.7 | 202,869.00 | 55,109.00 | 27.1 | 187,879.00 | 70,299.00 | 37.4 |
| **POKER** | | | | | | | | | |
| GRAVE | .00 | .00 | .0 | 2,624.00 | 2,624.00 | 100.0 | .00 | .00 | .0 |
| DAY | .00 | .00 | .0 | .00 | .00 | .0 | .00 | .00 | .0 |
| SWING | 4,302.00 | 4,302.00 | 100.0 | 67,126.00 | 67,126.00 | 100.0 | .00 | .00 | .0 |
| *TOTAL | 4,302.00 | 4,302.00 | 100.0 | 69,750.00 | 69,750.00 | 100.0 | .00 | .00 | .0 |
| **POKER SEVN** | | | | | | | | | |
| GRAVE | 60.00 | 2,380.00- | 3,966.6- | 6,280.00 | 625.00 | 10.0 | 6,086.00 | 4,206.00 | 69.1 |
| DAY | 1,195.00 | 635.00 | 53.1 | 29,266.00 | 4,506.00 | 15.4 | 32,591.00 | 6,026.00 | 18.5 |
| SWING | 930.00 | 530.00 | 56.9 | 38,607.00 | 4,372.00 | 11.3 | 30,786.00 | 11,311.00 | 36.7 |
| *TOTAL | 2,185.00 | 1,215.00- | 55.6- | 74,153.00 | 9,503.00 | 12.8 | 69,463.00 | 21,543.00 | 31.0 |
| **-O- RW** | | | | | | | | | |
| GRAVE | 1,665.00 | 465.00 | 27.9 | 47,720.00 | 2,990.00- | 6.3- | 64,582.00 | 8,462.00 | 13.1 |
| DAY | 3,425.00 | 275.00- | 8.0- | 103,488.00 | 15,568.00 | 15.0 | 118,521.00 | 18,279.00- | 15.4- |
| SWING | 6,633.00 | 693.00 | 10.4 | 100,961.00 | 7,411.00 | 7.3 | 123,444.00 | 12,924.00 | 10.5 |
| *TOTAL | 11,723.00 | 883.00 | 7.5 | 252,169.00 | 19,989.00 | 7.9 | 306,547.00 | 3,107.00 | 1.0 |
| **00 RW** | | | | | | | | | |
| GRAVE | 5,254.00 | 154.00 | 2.9 | 86,111.00 | 18,308.00 | 21.3 | 72,722.00 | 19,538.00- | 26.9- |
| DAY | 9,142.00 | 2,142.00 | 23.4 | 137,566.00 | 31,726.00 | 23.1 | 146,212.00 | 74,707.00 | 51.1 |
| SWING | 9,878.00 | 4,538.00 | 45.9 | 215,224.00 | 57,819.00 | 26.9 | 233,565.00 | 62,010.00 | 26.5 |
| *TOTAL | 24,274.00 | 6,834.00 | 28.1 | 438,901.00 | 107,853.00 | 24.5 | 452,499.00 | 117,179.00 | 25.8 |
| **SF 21** | | | | | | | | | |
| GRAVE | 5,235.00 | 1,980.00 | 37.8 | 88,060.00 | 24,820.00 | 28.2 | 120,842.00 | 53,757.00 | 44.5 |
| DAY | 7,921.00 | 2,006.00 | 25.3 | 133,925.00 | 28,075.00 | 21.0 | 184,836.00 | 37,596.00 | 20.3 |
| SWING | 8,450.00 | 1,990.00 | 23.5 | 168,089.00 | 41,849.00 | 24.9 | 218,299.00 | 46,444.00 | 21.3 |
| *TOTAL | 21,606.00 | 5,976.00 | 27.6 | 390,074.00 | 94,744.00 | 24.2 | 523,977.00 | 137,797.00 | 26.2 |
| **3 CD PKR** | | | | | | | | | |
| GRAVE | 2,910.00 | 1,375.00 | 47.2 | 46,799.00 | 10,544.00 | 22.5 | 59,087.00 | 15,827.00 | 26.8 |
| DAY | 5,855.00 | 1,190.00 | 20.3 | 125,504.00 | 32,864.00 | 26.2 | 134,138.00 | 21,108.00 | 15.7 |
| SWING | 8,205.00 | 5,325.00 | 64.8 | 138,628.00 | 51,203.00 | 36.9 | 152,021.00 | 26,651.00 | 17.5 |
| *TOTAL | 16,970.00 | 7,890.00 | 46.4 | 310,931.00 | 94,611.00 | 30.4 | 345,246.00 | 63,586.00 | 18.4 |
| **\*\*ALL GAMES** | | | | | | | | | |
| GRAVE | 70,970.00 | 11,982.00 | 16.8 | 1,069,601.00 | 185,274.00 | 17.3 | 1,080,385.00 | 320,765.00 | 29.7 |
| DAY | 141,674.00 | 15,688.00 | 11.0- | 2,354,131.00 | 324,237.00 | 13.8 | 2,283,957.00 | 322,097.00 | 14.1 |
| SWING | 169,455.00 | 50,121.00 | 29.5 | 2,907,598.00 | 588,522.00 | 20.2 | 2,754,588.00 | 525,138.00 | 19.1 |
| *TOTAL | 382,099.00 | 46,415.00 | 12.1 | 6,331,330.00 | 1,098,033.00 | 17.3 | 6,118,930.00 | 1,168,000.00 | 19.0 |

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# Table Games Analysis Report

| Current Day | Current Month To Date | Prior Month To Date | Current Year To Date | Prior Year To Date |
|---|---|---|---|---|
| Drop | The amount listed is the total funds counted by the Count Room. | | | |
| Win | The amount that is actual win or total revenue from the table. Ending – Beginning Table Inventory – Fills – Marker Payments + Credits + Markers issued. | | | |
| PC Percentage | This is the hold % by the table. WIN / Drop ( Win total divided by the Drop total) | | | |
| When reviewing the report, you should compare MTD's and YTD's to prior year totals.  When negative numbers are observed, you should be investigating into the reason. | | | | |

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## Table Games Reports as used by Surveillance

- Your surveillance management team should be reviewing these reports on a daily basis.
- Most reports are broken down by individual table numbers and types.
  - BJ 1 through the last table number for each table/type.
  - Craps, Roulette, Pai Gow Poker, etc.

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# Table Games Reports as used by Surveillance

- Once the Surveillance team has reviewed the "numbers" for the previous day, they can use the information to determine if a table lost a significant amount or won a significant amount.
- Significant losses from the previous day should be investigated to determine if :
  - Surveillance was notified of action
  - Play was evaluated by surveillance
  - Known players or unknown players
  - Any suspicious activity observed

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## Daily Casino Shift Report

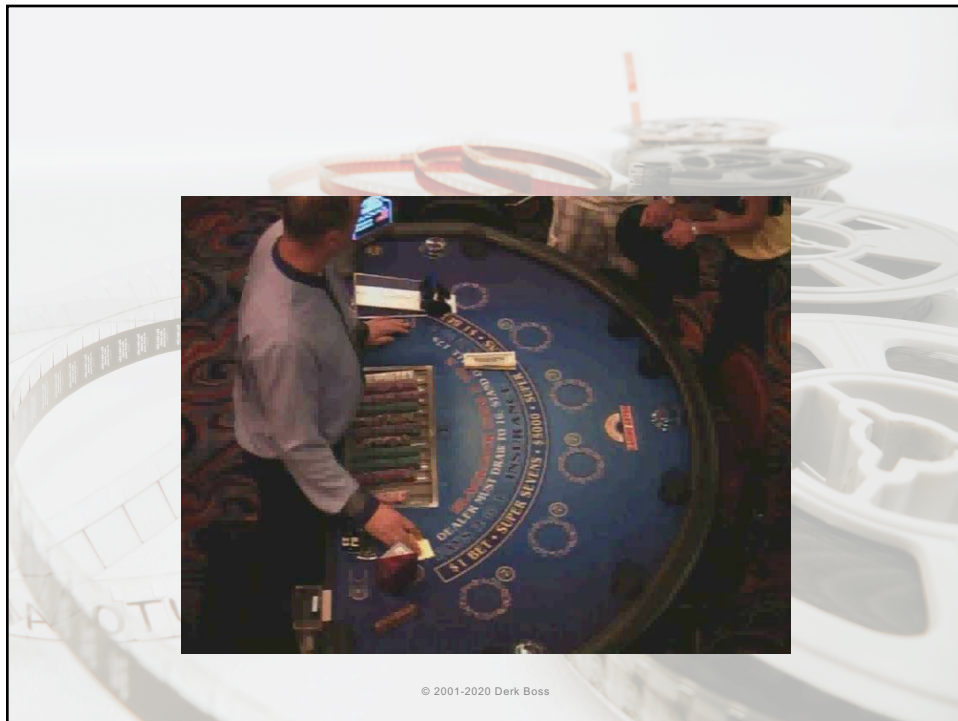| Date | Shift | Player | Account # | Game | Win/Loss |
|------|-------|--------|-----------|------|----------|
| 08/01/2015 | GYD | Newie Newton | 12345 | BJ-7 | $1500 |
| | Days | Refused Name | N/A | BJ-1 | $2500 |
| | Days | Sally Smart | 010203 | Mini-Bacc | - $3500 |
| | Swing | Ansel Adams | 020406 | PG-1 | $1750 |
| | Swing | T. Hyland | N/A | BJ-1 | $5000 |
| | | | | | |

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## Table Games Reports as used by Surveillance

- The Surveillance team can also use daily reports to determine if table game hold is where it should be.
- If Surveillance determines that certain games or game types are not holding well, an investigation should be started.
- You will be surprised with some of the results...

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Slots

19

20



21

## Slots Net Win Report: Details

| | |
|---|---|
| DTD | Date To Date |
| CUR | Current |
| PTD | Period To Date |
| MTD | Month To Date |
| QTD | Quarter To Date |
| YTD | Year To Date |
| LTD | Lifetime To Date |

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## Slot Net Win Report Details

| | |
|---|---|
| Denom | Machine Denomination<br>Multi Denominational Machines |
| Coin In | The coin cycled and recycled through the machine |
| Gross Drop | Electronic Coin/Bill/Ticket Drops + Coin/Bill/Ticket Drop Variances |
| JP + TK | Jackpots + Tickets hit/issued from machine |
| Fills | Any fills put into machine |
| Net Win | Gross Drop – Fills/Credits |
| Act % | What the machine is actually holding.  True value |
| Par % | What is machine is set up to hold with optimum play and strategy |
| Var % | The Variance % from the PAR % as compared to Actual % |
| Est $ Var | The estimated dollar amount based on the Variance % |

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## Slot Net Win Report: Usage by Surveillance

- By reviewing the net win report on a regular basis, the Surveillance department can utilize the information to determine if a particular denominational machine is performing at expected rate.

- When large variances between the Actual % as compared to the PAR %, an investigation should be conducted by either the Surveillance Department or Internal Audit.

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## Slot Extended Handle Report

| Slot # | OASIS ID | Denom | Handle | Slot # | OASIS ID | Denom | Handle | Slot # | OASIS ID | Denom | Handle |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20202 | 01-000-00 | 0.05 | 0.00 | 30676 | 01-004-02 | 0.25 | 1,033.50 | 50408 | 01-006-09 | 1.00 | 270.00 |
| 20203 | 01-000-00 | 0.25 | 0.00 | 30677 | 01-004-03 | 0.25 | 1,103.25 | 50409 | 01-006-10 | 1.00 | 613.00 |
| 20205 | 01-000-00 | 0.50 | 0.00 | 30678 | 01-004-04 | 0.25 | 861.00 | 30708 | 01-006-11 | 0.25 | 514.00 |
| 20206 | 01-000-00 | 1.00 | 0.00 | 10106 | 01-004-05 | 0.01 | 2,032.11 | 30709 | 01-006-12 | 0.25 | 502.75 |
| 20208 | 01-000-00 | 5.00 | 0.00 | 10107 | 01-004-06 | 0.01 | 631.85 | 30710 | 01-006-13 | 0.25 | 1,105.25 |
| 20209 | 01-000-00 | 25.00 | 0.00 | 10108 | 01-004-07 | 0.01 | 692.62 | 30711 | 01-006-14 | 0.25 | 201.75 |
| 20210 | 01-000-00 | 100.00 | 0.00 | 10109 | 01-004-08 | 0.01 | 766.37 | 30712 | 01-006-15 | 0.25 | 605.75 |
| 20207 | 01-000-00 | 2.00 | 0.00 | 10110 | 01-004-09 | 0.01 | 24,273.80 | 30713 | 01-006-16 | 0.25 | 580.00 |
| 20211 | 01-000-00 | 10.00 | 0.00 | 10111 | 01-004-10 | 0.01 | 388.65 | 10305 | 01-007-11 | 0.01 | 817.75 |
| 20201 | 01-000-00 | 0.01 | 0.00 | 20616 | 01-004-13 | 0.05 | 1,595.95 | 10112 | 01-007-12 | 0.01 | 897.55 |

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## Slot Extended Handle Report: Details

| Slot # | Slot Machine Number |
|--------|---------------------|
| Oasis ID | Slot System ID Number |
| Denom | Denomination of Machine |
| Handle | Circulated and Re-circulated Coin through the machine |

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## Slot Extended Handle Report: Details

- The Slot Extended Handle Reports shows the dollar amount of coin circulated through any given machine.
- This includes re-circulated coin
  - Example: if you put a dollar into a machine and hit max bet to play $ 1. It will register $ 1 in coin in on the handle report.
  - From that $ 1 played, you win and your credits now reflect $ 5.
  - Any coin played from the total credits of $ 5 will register on this report as coin handle through the machine.

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## Slot Extended Handle Report: Details

Story Time – True Story

Normal review of report found that several machines registered millions in coin in played for the handle for one day. Machines were .01 denomination. This registered a flag to the manager who was reviewing the reports. A check through the jackpot ledger report showed not enough jackpots to justify this type of handle. The manager got in touch with the Slot Technical manager to have the machines physically checked on the floor. When the check was conducted, it was discovered that the machines were actually set up wrong when they were put on the floor. According to the discovered set up, they were set as .05 denomination. This resulted in 5x the actual amount played. Not only this effect the handle reading of the machine, but each person who played the machine was registering a much higher amount played for their Slot Player Account through the Player's Club. Basically if you were playing 25 credits per spin, this should have registered .25 played, instead it was registering $ 1.25 played. As a result of this, reports had to be generated to determine players on the machine and ALL of their accounts had to be adjusted and auditing had to adjust and correct all slot reports. This was the result just from one error.

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## Slot Bill Drop Variance Report

Audit Date: Tue 3/21/06

**Bill Drop Variance Report for Divisions**

Audit Status: Unaudited

| Div | Slot | Denom | OASIS ID | Location | Description | Manufacturer | Electronic Bill Drop DTD | Manual Bill Drop CUR | Bill Drop Var CUR | Bill Drop Var CUR (%) | BillDrop Var MTD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 10156 | 0.01 | 01-057-10 | 01 07-00- | 1 P 150C BH BUBBLIN P | IGT | 1,850 | 1,850 | 0 | 0.00 | 5 |
| 3 | 10157 | 0.01 | 01-057-11 | 01 07-00- | 1 P 150C BH BUBBLIN P | IGT | 1,638 | 1,638 | 0 | 0.00 | 0 |
| 3 | 10159 | 0.01 | 01-057-13 | 01 07-00- | 1 P 150C BH BUBBLIN P | IGT | 1,538 | 1,538 | 0 | 0.00 | 0 |
| 3 | 10373 | 0.01 | 01-057-14 | 01 07-00- | 1 P 400 ITSMYPARTY_PT P | IGT | 1,818 | 1,818 | 0 | 0.00 | 0 |
| 3 | 10374 | 0.01 | 01-057-15 | 01 07-00- | 1 P 400 MYSTICALMERMAID PT P | IGT | 1,793 | 1,793 | 0 | 0.00 | 0 |
| 3 | 10375 | 0.01 | 01-057-16 | 01 07-00- | 1 P 400 PARTYFANTASTICO PT P | IGT | 1,435 | 1,435 | 0 | 0.00 | 0 |
| 3 | 10376 | 0.01 | 01-057-17 | 01 07-00- | 1 P 400 TRAILERPARKPARTY PT P | IGT | 2,508 | 2,508 | 0 | 0.00 | 0 |
| 3 | 10377 | 0.01 | 01-057-18 | 01 07-00- | 1 P 400 MYSTICALMERMAID PT P | IGT | 1,436 | 1,436 | 0 | 0.00 | 0 |
| 3 | 10158 | 0.01 | 01-057-12 | 01 07-00- | 1 P 150C BH BUBBLIN P | IGT | 1,995 | 1,995 | 0 | 0.00 | 0 |
| 3 | 10378 | 0.01 | 01-057-19 | 01 07-00- | 1 P 400 PARTYFANTASTICO PT P | IGT | 1,363 | 1,363 | 0 | 0.00 | -5 |
| 3 | 61021 | 5.00 | 01-057-07 | 01 07-01- | 1 5 2 WOF-5X PAY S | IGT | 5,330 | 5,330 | 0 | 0.00 | 0 |
| 3 | 61022 | 5.00 | 01-057-08 | 01 07-01- | 1 5 2 WOF-TRIPLE STARS S | IGT | 6,475 | 6,475 | 0 | 0.00 | 5 |
| 3 | 61023 | 5.00 | 01-057-09 | 01 07-01- | 1 5 2C WOF-DD | IGT | 7,810 | 7,810 | 0 | 0.00 | 0 |
| 3 | 50418 | 1.00 | 01-091-01 | 01 07-01- | 1 1 3C MEGADDD SP R | IGT | 1,686 | 1,706 | 20 | 1.17 | 20 |
| 3 | 50420 | 1.00 | 01-091-03 | 01 07-01- | 1 1 3C MEGADDD SP R | IGT | 2,147 | 2,167 | 20 | 0.92 | 20 |
| 3 | 50421 | 1.00 | 01-091-04 | 01 07-01- | 1 1 MEGATD SP R | IGT | 1,685 | 1,685 | 0 | 0.00 | 0 |
| 3 | 50422 | 1.00 | 01-091-05 | 01 07-01- | 1 1 3C MEGADDD SP R | IGT | 2,380 | 2,400 | 20 | 0.83 | 20 |
| 3 | 50427 | 1.00 | 01-091-02 | 01 07-01- | 1 1 3C MEGA3X4X5X PS R | IGT | 2,106 | 2,116 | 10 | 0.47 | 10 |
| 3 | 50361 | 1.00 | 01-057-03 | 01 07-01- | 1 D 45 SALLY SHRIMPMANIA H | IGT | 1,427 | 1,427 | 0 | 0.00 | 0 |
| 3 | 50359 | 1.00 | 01-057-01 | 01 07-01- | 1 D 45 TAILGATE PARTY H | IGT | 1,784 | 1,784 | 0 | 0.00 | 0 |
| 3 | 50360 | 1.00 | 01-057-02 | 01 07-01- | 1 1 45C TEXAS TEA | IGT | 1,266 | 1,266 | 0 | 0.00 | 0 |

Bill Drop Var.rpt

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# Bill Drop Variance Report Detail

| Div | Slot Floor Division |
|---|---|
| Slot | Slot Machine Number |
| Denom | Denomination |
| Oasis ID | Slot System Machine Number |
| Location | Slot Bank Number |
| Description | Description of Slot Machine Type |
| Manufacturer | Who makes machine |
| Electronic Bill Drop | Slot System count of the bill drop total including TITO tickets |
| Manual Bill Drop | Actual count of the bill drop total including TITO tickets by the count team |
| Bill Drop Var | Variance between Electronic Bill Drop vs Manual Bill Drop from count team |
| Bill Drop Var % | Variance percentage |
| Bill Drop Var MTD | Month To Date variance between Electronic Bill Drop vs Manual Bill Drop from count team |

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## Bill Drop Variance Report

- This report is beneficial to surveillance due it showing any variances from the validator drop/count

- Any unusual variances should be investigated

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## Bill Drop Variance Report

- By reviewing these reports, we have seen total Electronic Bill Drop amount as compared to the Manual Bill Drop amount show up as a variance.
- These should be investigated immediately !
- Results that have been determined:
  - The amount was credited to the wrong machine
  - The machine "hot can" was not pulled from the floor
  - The machine is not reporting correctly
  - The machine had to be pulled in an emergency drop
  - The amount was stolen

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## Statistical Reports

Miscellaneous

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## Jackpot Ledger Report

### Jackpots Ledger
Posted

| Ticket # | Tx ID | Slot | Denom | Amount |
|---|---|---|---|---|
| 660,605 | 265853 | 61001 | 5.00 | 1,200.00 |
| 660,607 | 265854 | 10411 | .01 | 1,400.40 |
| 660,613 | 265855 | 30172 | .25 | 4,000.00 |
| 660,615 | 265856 | 30360 | .25 | 1,000.00 |
| 660,617 | 265857 | 20548 | .05 | 1.00 |
| 660,618 | 265858 | 4600 | .25 | 625.00 |
| 660,619 | 265859 | 20435 | .05 | 1,000.00 |
| 660,621 | 265860 | 50363 | 1.00 | 1,000.00 |
| 660,628 | 265861 | 50321 | 1.00 | 1,555.00 |
| 660,630 | 265862 | 30216 | .25 | 1,000.00 |
| 660,631 | 265863 | 50272 | 1.00 | 1,000.00 |
| 660,633 | 265864 | 30702 | .25 | 1,000.00 |
| 660,638 | 265865 | 50127 | 1.00 | 1,800.00 |

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## Jackpot/Fill Ticket Void Report

**Jackpot / Fill Ticket Void Report**
From 03/21/2006 Through 03/22/2006

------------ Entry Information ------------                                                                                                            ------------ Void Informatio

-------------- Entered By --------------

| Date | Time | Shift | Login ID | Full Name | Booth | Window | Type | Ticket # | Amount | Date | Time | Shift | Reason |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3/21/2006 | 9:01:59 | Grav | booth5 | Booth, Five | 3 | SJ | Fill | 03-SJ-0000660685 | 400.00 | 3/21/2006 | 5:56:26 PM | Swing | DUPLICATE TICKET |
| 3/21/2006 | 3:54:54 | Day | booth2 | Booth, Two | 5 | SJ | Jackpot | 05-SJ-0000660897 | 2.46 | 3/21/2006 | 4:24:14 PM | Swing | DUPLICATE |
| 3/21/2006 | 4:06:33 | Swin | booth3 | Booth, Three | 8 | 1 | Jackpot | 08-01-0000660914 | 50.00 | 3/21/2006 | 4:10:20 PM | Swing | DUPLICATE TICKET |
| 3/21/2006 | 4:07:01 | Swin | booth2 | Booth, Two | 5 | SJ | Jackpot | 05-SJ-0000660916 | 8.00 | 3/21/2006 | 4:13:08 PM | Swing | DUPLICATE |
| 3/21/2006 | 6:06:32 | Swin | booth6 | Booth, Six | 3 | SJ | Jackpot | 03-SJ-0000660938 | 5.75 | 3/21/2006 | 6:10:41 PM | Swing | WRONG AMT |
| 3/21/2006 | 6:19:12 | Swin | booth6 | Booth, Six | 3 | SJ | Jackpot | 03-SJ-0000660942 | 4.38 | 3/21/2006 | 6:25:35 PM | Swing | NOT NEEDED |
| 3/21/2006 | 6:23:00 | Swin | booth6 | Booth, Six | 3 | SJ | Jackpot | 03-SJ-0000660944 | 0.70 | 3/21/2006 | 8:17:03 PM | Swing | WRONG AMOUNT |
| 3/21/2006 | 6:46:28 | Swin | booth6 | Booth, Six | 3 | SJ | Jackpot | 03-SJ-0000660959 | 0.72 | 3/21/2006 | 8:28:31 PM | Swing | WRONG AMOUNT |
| 3/21/2006 | 6:55:07 | Swin | booth3 | Booth, Three | 8 | 1 | Jackpot | 08-01-0000660968 | 50.00 | 3/21/2006 | 7:02:37 PM | Swing | LOST IN SYSTEM |
| 3/21/2006 | 6:58:03 | Swin | booth3 | Booth, Three | 8 | 1 | Jackpot | 08-01-0000660970 | 199.75 | 3/21/2006 | 7:15:11 PM | Swing | WRONG AMT |

**Summary by Denomination**

| Denomination | Jackpots | Fills | Misc | Total | | Booth | Jackpots |
|---|---|---|---|---|---|---|---|
| 0.01 | 6.84 | 0.00 | 0.00 | 6.84 | | 3 | 11.55 |
| 0.05 | 1.42 | 0.00 | 0.00 | 1.42 | | 5 | 10.46 |
| 0.25 | 255.50 | 0.00 | 0.00 | 255.50 | | 8 | 299.75 |
| 1.00 | 58.00 | 400.00 | 0.00 | 458.00 | | | |
| Grand Total: | 321.76 | 400.00 | 0.00 | 721.76 | | Grand Total: | 321.76 |

*** End of Jackpot / Fill Ticket Void Report ***

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# Daily Override Report



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# Other Important Reports

- Player win reports (daily, monthly, YTD, Career)

- Kiosk redemption

- Expiration of TITO

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# Casino Cage

```
Daily Personal Checks        Current Markers
Daily Other Checks           Aged Markers
Daily Business Checks        Aged Mrkrs by Cred Aprvr
Daily Markers Issued         Current Marker Summary
Daily Mrkrs by Cred Aprv     Cage Marker Activity
Daily Marker Payments        Shift Marker Activity
Daily Over Limit Trans       Marker Deposit list
Daily Front Money Trans      Current Front Money
Daily Returned Checks        Shift F.M. Activity
Daily Retn Check Pymts       Current Returns
Daily Write Offs             Aged Returns
Daily Write Off Pymts        Shift Returns Activity
Daily Cash Transactions      Current Write Offs
Daily Customer Updates       Accts Receivable Recap
Daily Cash Over Limit        Cage Fills & Credits
Daily Business Updates       In-House Customer list
Daily Safekeeping Trans      User Security list
Daily Trans by Item Nbr      Transaction Log
                             Customer Master Summary
                             Current Safekeeping
                             Shift Safekping Actvity
```

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# Player's Club

```
Rating Detail for Dates      Customer Summary Select
Rating Detail Select         In-House Cust Win/Loss
Rating Detail by User        Customer Master list
Pit Win/Loss by Game         Group Customer list
Unused Comps                 Exp Arrivals Credit list
Comps Automatic Update       Room Reservations list
Comp Detail by Customer      Arrive & Depart list
Comp Detail by Issuer        Guest Services list
Comp Detail by Outlet        Comp Summary by Issuer
Trip History for Dates       Comp Exceptions list
Trip History Select          Rating Dtl Date & Shift
Last Five Trips list         Group/Offer Detail list
Point Transaction list       Group/Offer Summary list
Club Adjustments list        Group Summary list
Club Activity Summary        Offer Detail list
Point Liability list         Offer Summary list
Event Detail list            Offer Dtl by Date Range
Event Summary list           Offer Summary Listing
Comp Liability list          Casino Offer Select Detl
Daily Customer Updates       Casino Offer Select Summ
```
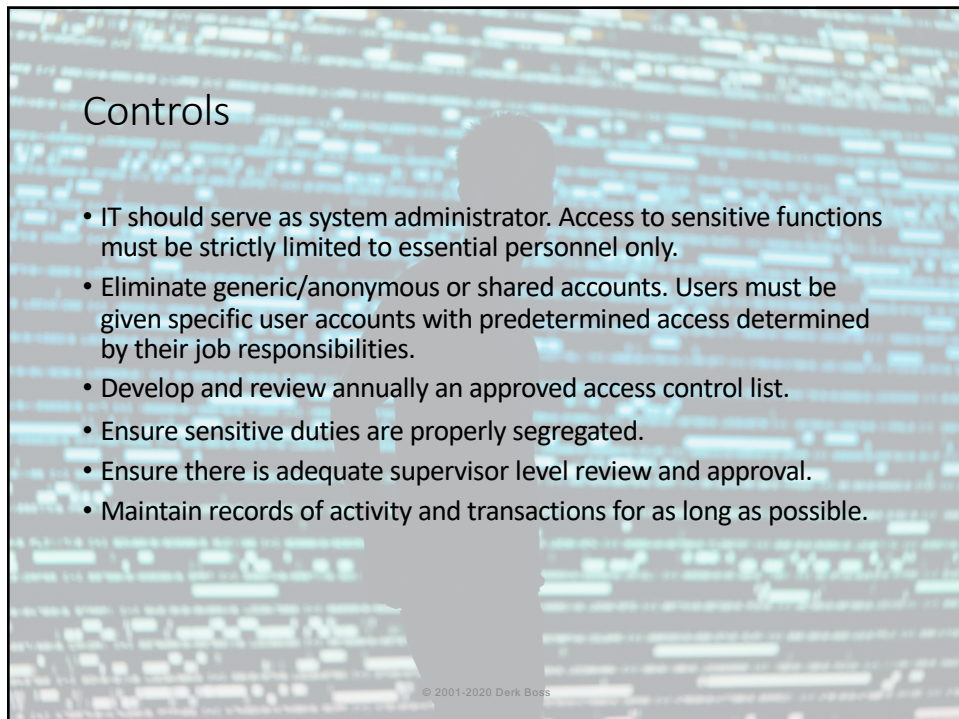
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## Key Reports

- Name Change Reports

- PIN Number Changes

- Account Merges

- Point Adjustments

- Promotion winner list

- Win Report

- Top free play redemption (include

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## Controls

- IT should serve as system administrator. Access to sensitive functions must be strictly limited to essential personnel only.
- Eliminate generic/anonymous or shared accounts. Users must be given specific user accounts with predetermined access determined by their job responsibilities.
- Develop and review annually an approved access control list.
- Ensure sensitive duties are properly segregated.
- Ensure there is adequate supervisor level review and approval.
- Maintain records of activity and transactions for as long as possible.

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## High Risk Transactions

- Promotional Events and Point Multipliers: The risk is that points are not accruing at the correct rates and times as advertised on promotional material.
- Manual Point Adjustments: There is a high degree of risk created as this is a function that can be easily abused if is not adequately controlled and monitored.
- Merging Accounts: Allows the pooling of two players' gaming activity to include points and rewards. The main reason this security function exists is to eliminate duplicate accounts. This feature is a common area of abuse by employees who can merge dormant accounts into another player's account who is an accomplice to the fraudulent scheme.

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## High Risk Transactions

- Table Ratings = average bet  x hours played x decisions-per-hour x house advantage
- Surveillance possesses the sole ability to ensure ratings are correct.
- Common inaccuracies:
  - Bets listed incorrectly
  - Hours listed incorrectly
  - Incorrect player or no player at all
  - Correct decisions and skill levels not used or reviewed

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## High Risk Transactions

- Club Tiers:  Risk that employees can move players to a higher level tier than their actual play permits so the player earns more points.
- Free Play: –The ability to add free play to players' accounts poses a significant risk if not properly monitored.
- Drawing Entries: There may be  a risk that allows an employee to add and subtract ticket stubs so that a player's chance of winning is altered.
- PIN Code Changes: When the code can be obtained or changed access to player accounts can be made.

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## In Summary

- By reviewing various reporting functions, your Surveillance team can get a different perspective as to what is occurring in all areas.
- We, as an industry, rely on departments to monitor their own areas, but as all of us know, they usually get busy with other job tasks and the reporting functions get overlooked.
- By having the Surveillance department involved, you are getting an independent department to back up the operating departments.
- This also allows the Surveillance department to become more knowledgeable in Gaming operations and increase their value to the company.

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## Key Takeaways

- Clubs are extremely vulnerable to exploitation

- The only method to protect them is to constantly observe and monitor reports.

- All things lead back to the club. Make sure you know your marketing programs and promotions.

- Free play is dangerous!!!

- Proactive investigation will reduce loss. If not us, then who?

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# Detecting Cheating, Theft, and Fraud through Data Analysis

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