



CASINO GAMING EDA

KELLY OLIVEIRA

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INTRODUCTION: CASINO GAMING EXPLORATORY DATA ANALYSIS (EDA)

OBJECTIVE:

- ANALYZE REVENUE, PLAYER ENGAGEMENT & PROMOTIONS.
- IDENTIFY TRENDS & ANOMALIES.
- OPTIMIZE STRATEGIES FOR PROFITABILITY.

WHY IT MATTERS:

- DATA-DRIVEN INSIGHTS IMPROVE CASINO OPERATIONS.
- PROMOTIONS IMPACT PLAYER BEHAVIOR & REVENUE.
- SEASONAL TRENDS AFFECT PROFITABILITY.

KEY FOCUS AREAS:

- HOW PROMOTIONS INFLUENCE REVENUE.
- CONSISTENCY IN WAGERS & PLAYER ACTIVITY.
- REVENUE FLUCTUATIONS & RISK ANALYSIS.



DATA OVERVIEW



DATASET DESCRIPTION:

- FINANCIAL AND OPERATIONAL DATA FROM CASINO GAMING ACTIVITIES.
- TRACKS PLAYER ACTIVITY TRENDS, REVENUE, AND THE IMPACT OF PROMOTIONS.
- TIME PERIOD: JANUARY 2022 – JANUARY 2025



KEY VARIABLES:

- FISCAL YEAR
- LICENSEE
- WAGERS,
- PATRON WINNINGS
- CANCELLED WAGERS
- ONLINE CASINO GAMING WIN/(LOSS)
- PROMOTIONAL COUPONS OR CREDITS WAGERED
- PROMOTIONAL DEDUCTION
- TOTAL GROSS GAMING REVENUE

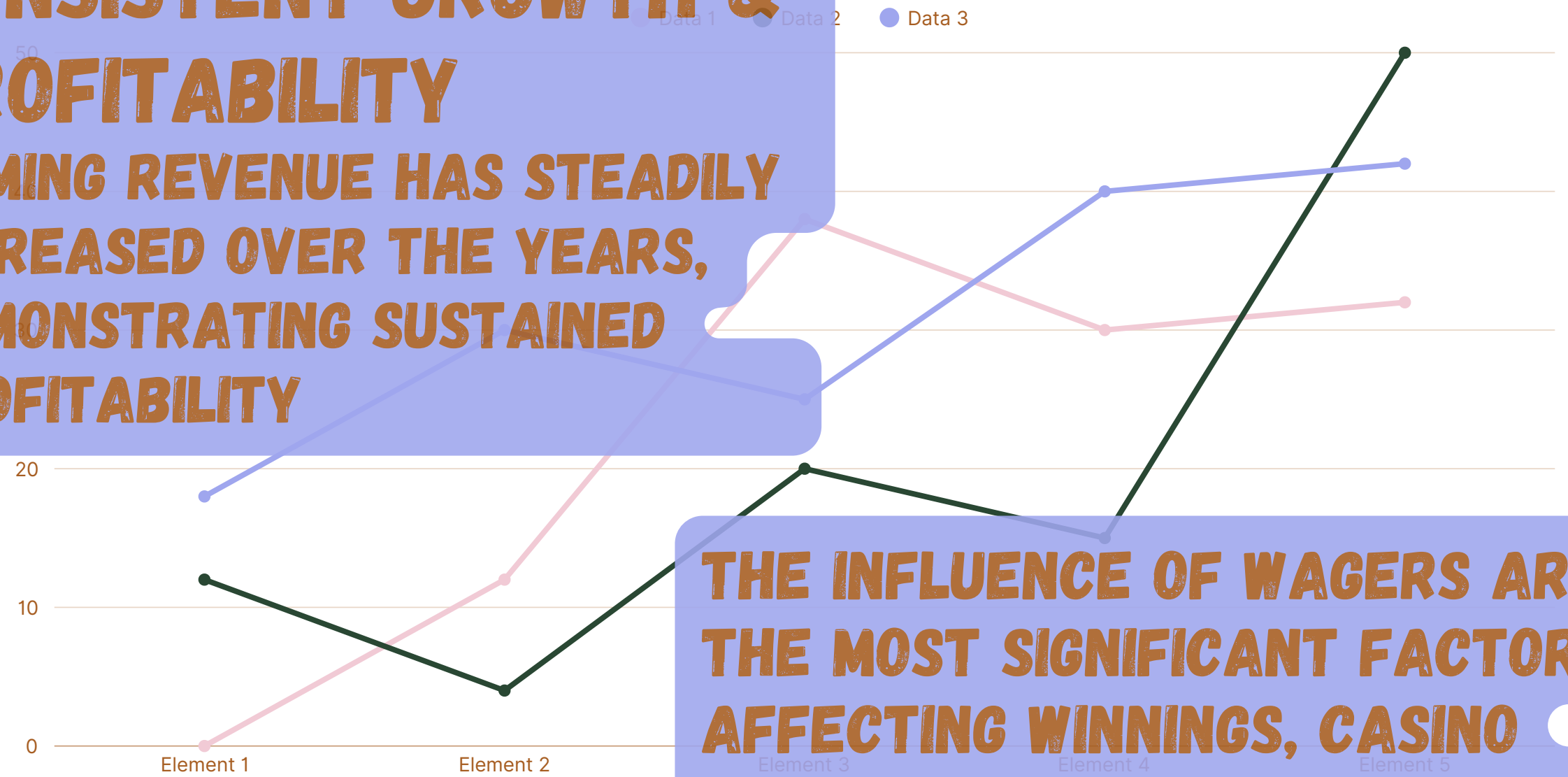


DATASET SOURCE:
KAGGLE: CASINO GAMING DATA

ANALYSIS OF: REVENUE GROWTH & KEY INFLUENCES

CONSISTENT GROWTH & PROFITABILITY

GAMING REVENUE HAS STEADILY
INCREASED OVER THE YEARS,
DEMONSTRATING SUSTAINED
PROFITABILITY



THE INFLUENCE OF WAGERS ARE
THE MOST SIGNIFICANT FACTOR
AFFECTING WINNINGS, CASINO
REVENUE, AND PAYMENTS.

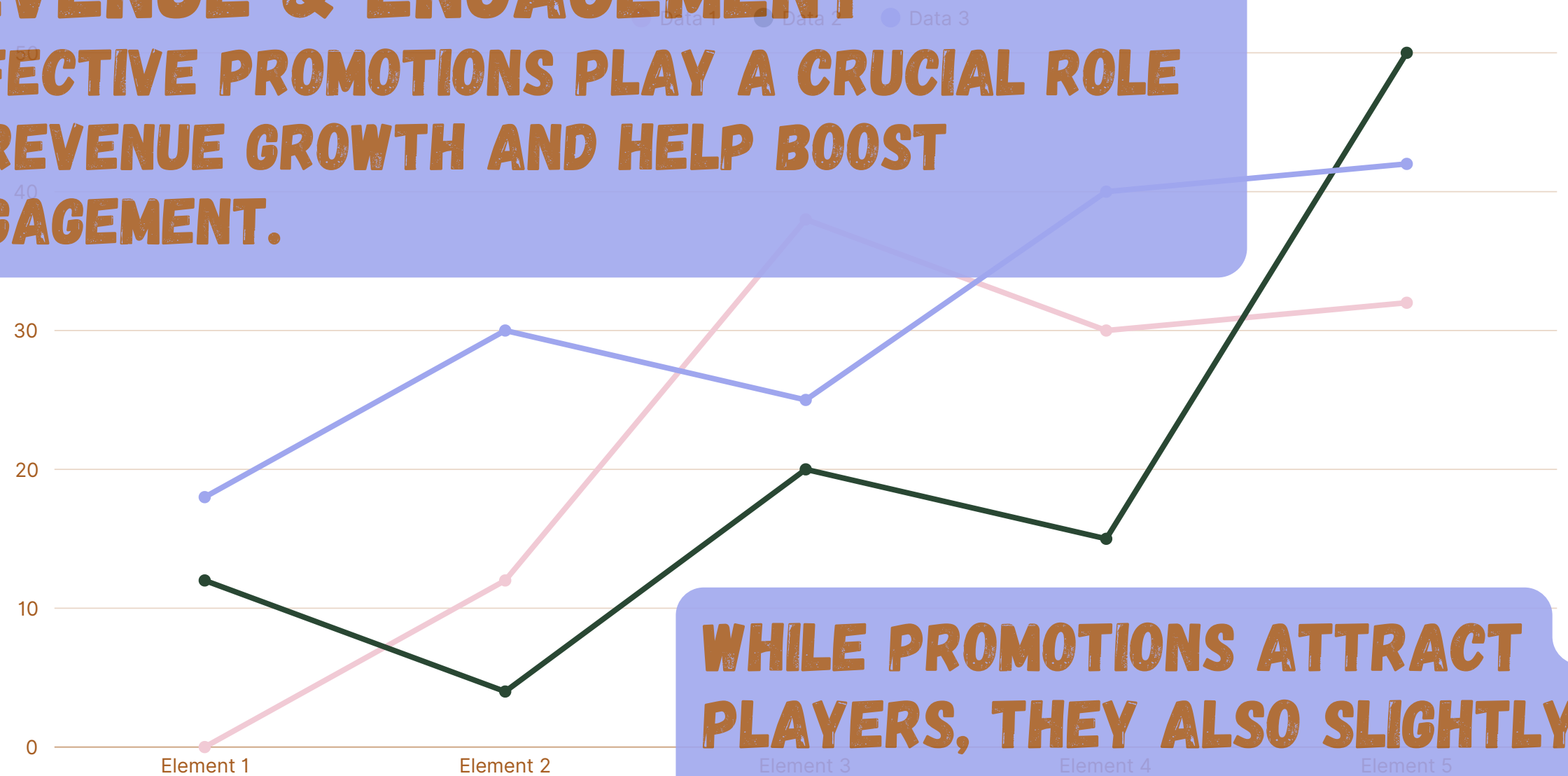
HIGH RETURN TO PLAYERS

- WINNINGS PERCENTAGES ARE CLOSE TO 100%, MEANING PLAYERS ARE GETTING FAIR ODDS.
- THIS BALANCE IS CRUCIAL FOR MAINTAINING TRUST AND ENGAGEMENT IN ONLINE GAMING.

ANALYSIS OF: THE IMPACT OF PROMOTIONS ON REVENUE

REVENUE & ENGAGEMENT

EFFECTIVE PROMOTIONS PLAY A CRUCIAL ROLE IN REVENUE GROWTH AND HELP BOOST ENGAGEMENT.



WHILE PROMOTIONS ATTRACT PLAYERS, THEY ALSO SLIGHTLY RAISE CANCELLATION RATES.S.

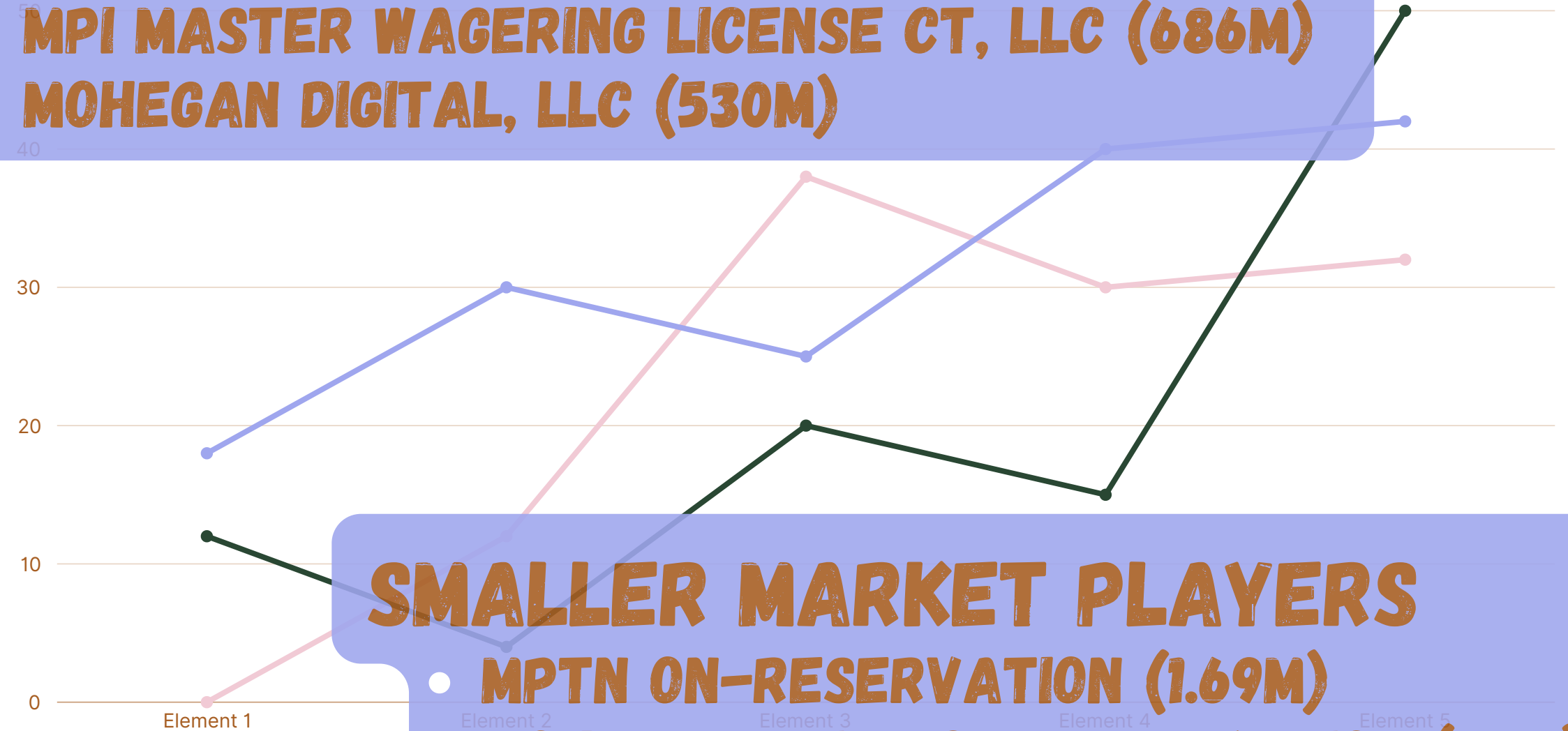
PROMOTIONAL DEDUCTIONS HAVE A STRONG IMPACT ON REVENUE, MEANING THAT CASINOS MAY BE USING PROMOTIONS STRATEGICALLY TO BOOST ENGAGEMENT WHILE MAINTAINING PROFITABILITY. HOWEVER, IN SOME CASES, SIGNIFICANT FLUCTUATIONS IN PROMOTIONAL DEDUCTIONS, DESPITE STABLE WAGER LEVELS, SUGGEST THAT PROMOTIONS ARE DRIVING REVENUE SWINGS RATHER THAN SUSTAINING CONSISTENT PLAYER ACTIVITY.

ANALYSIS OF:

MARKET LEADERS & COMPETITION

DOMINANT MARKET PLAYERS

- MPI MASTER WAGERING LICENSE CT, LLC (686M)
- MOHEGAN DIGITAL, LLC (530M)

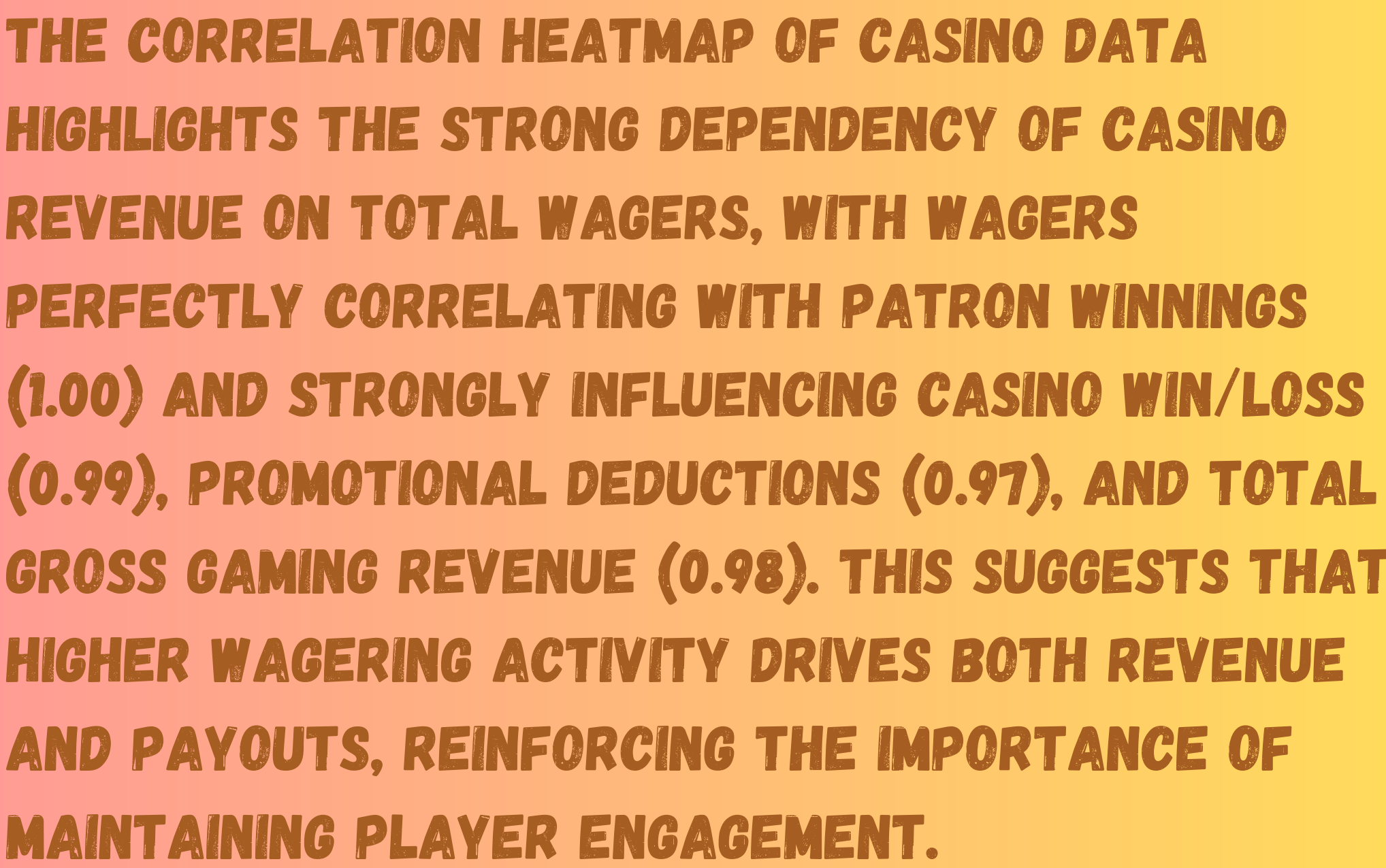


SMALLER MARKET PLAYERS

- MPTN ON-RESERVATION (1.69M)
- MOHEGAN TRIBE ON-RESERVATION (1.11M)

THE ONLINE GAMING MARKET IS HEAVILY DOMINATED BY THE LLC CASINOS, WHICH CONSISTENTLY GENERATE HIGH REVENUE DUE TO STRONG PLATFORMS, EFFECTIVE PROMOTIONS, AND WELL-EXECUTED PLAYER RETENTION STRATEGIES. IN CONTRAST, ON-RESERVATION CASINOS CONTRIBUTE INSIGNIFICANTLY TO TOTAL GAMING REVENUE, EXHIBITING HIGH VOLATILITY AND PERIODIC REVENUE DECLINES. THESE FLUCTUATIONS SUGGEST OPERATIONAL INEFFICIENCIES AND RELIANCE ON PROMOTIONS THAT FAIL TO SUSTAIN LONG-TERM ENGAGEMENT.

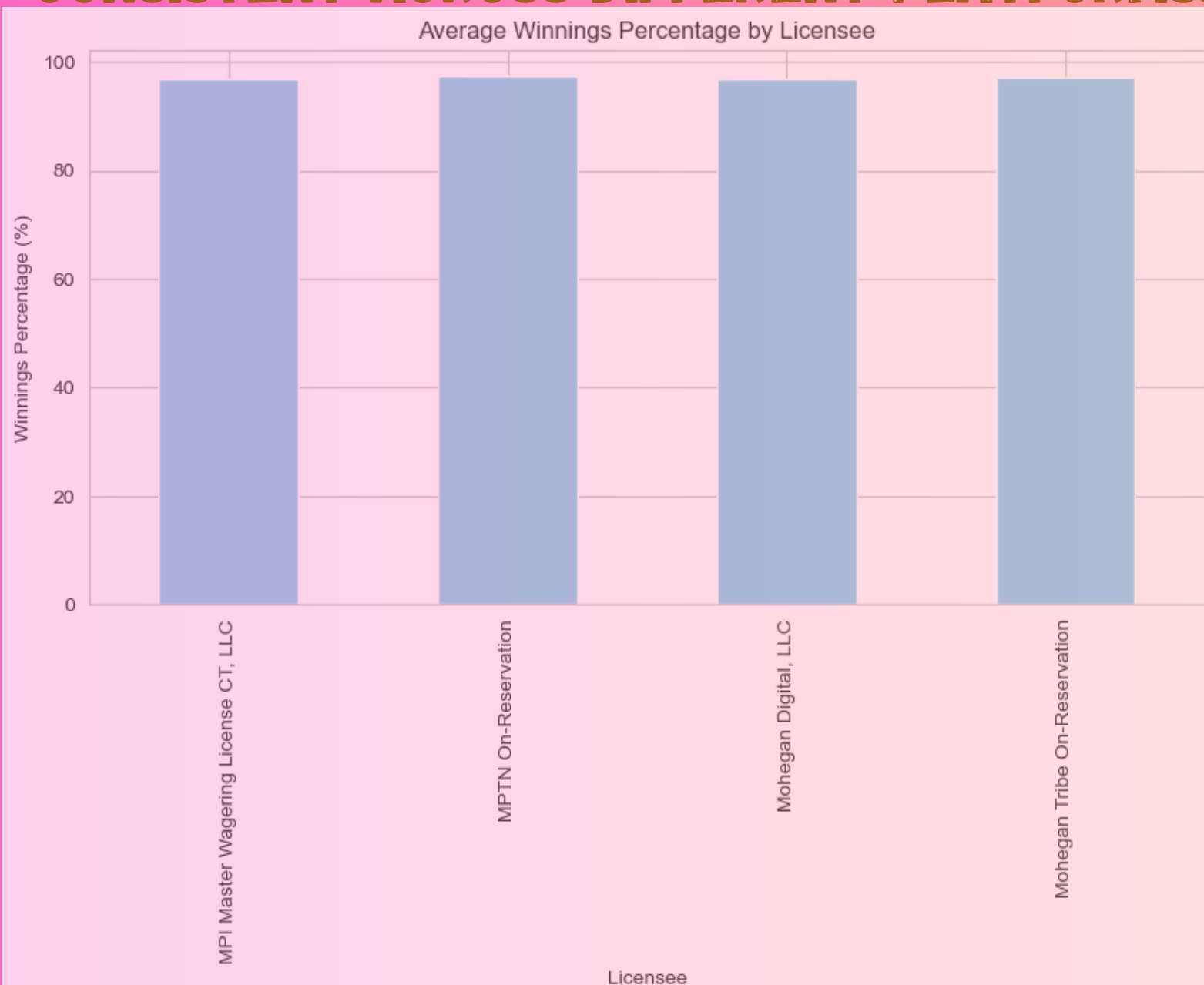
VISUALIZATIONS & INTERPRETATIONS



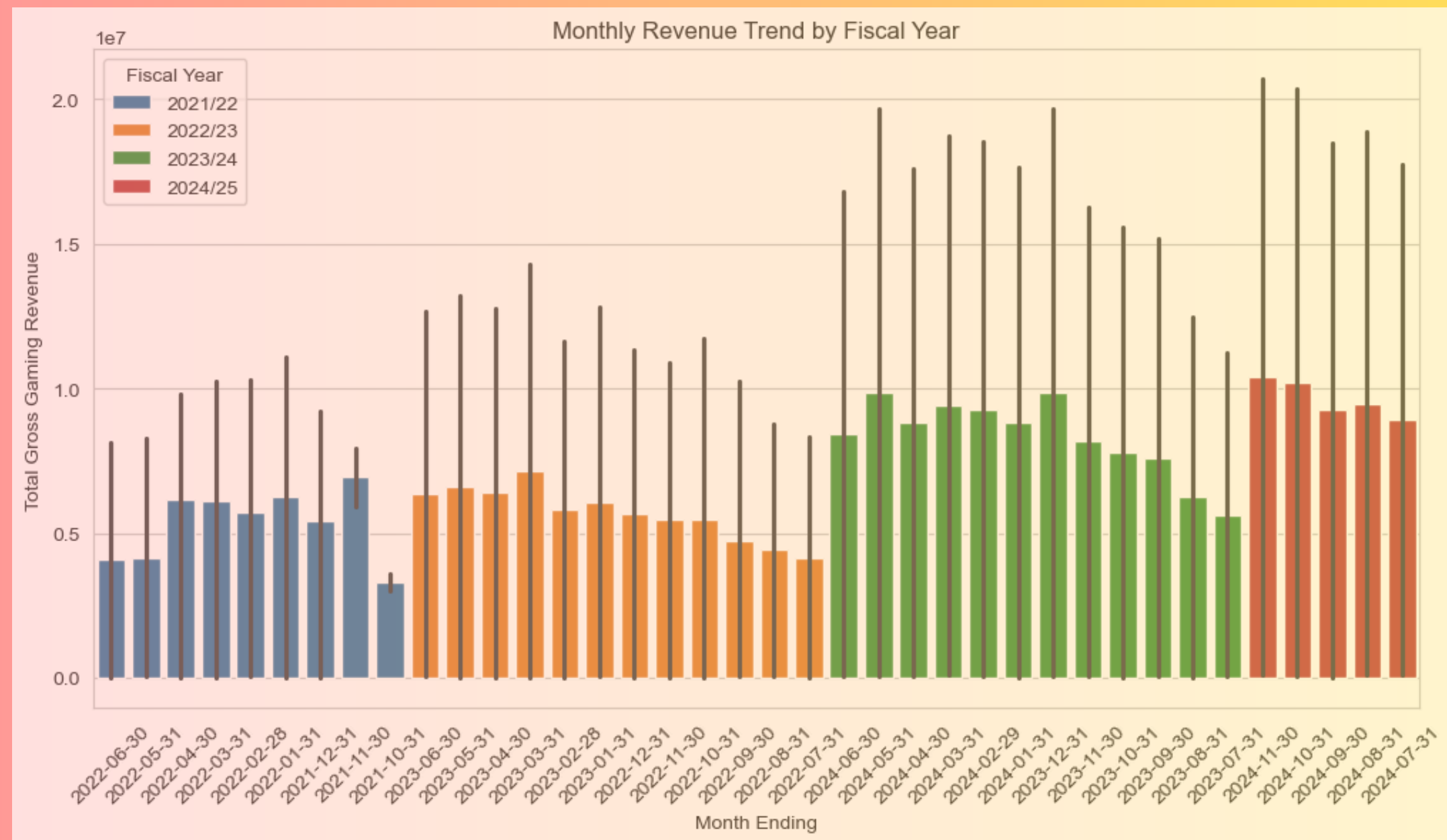
PROMOTIONAL DEDUCTIONS SHOW A HIGH CORRELATION WITH REVENUE (0.94), INDICATING THAT CASINOS STRATEGICALLY USE PROMOTIONS TO BOOST PLAYER ACTIVITY, THOUGH FLUCTUATIONS IN PROMOTIONAL CREDITS (WEAK CORRELATION WITH REVENUE AT 0.44) SUGGEST PROMOTIONS DO NOT ALWAYS TRANSLATE TO LONG-TERM PROFITABILITY.

VISUALIZATIONS & INTERPRETATIONS

THE BAR CHART SHOWS THAT ALL OPERATORS HAVE A HIGH AND NEARLY IDENTICAL PAYOUT RATE, CLOSE TO 100%. THIS MEANS PLAYER WINNINGS ARE CONSISTENT ACROSS DIFFERENT PLATFORMS.

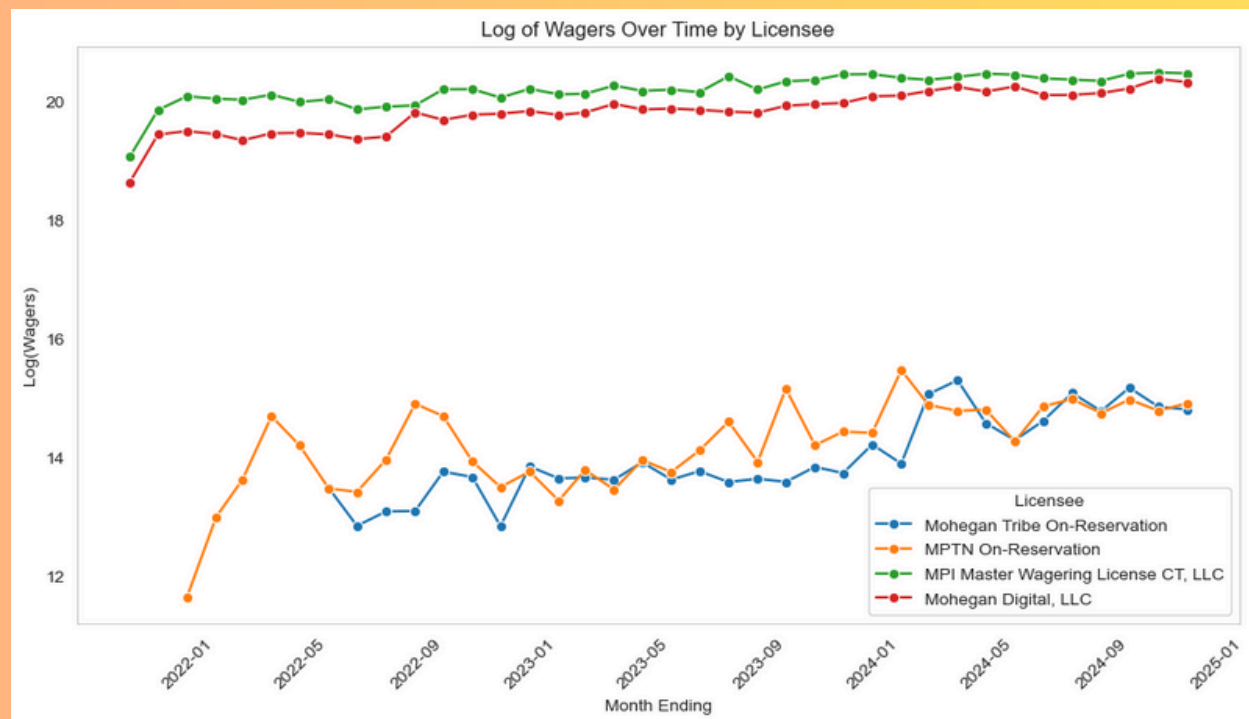
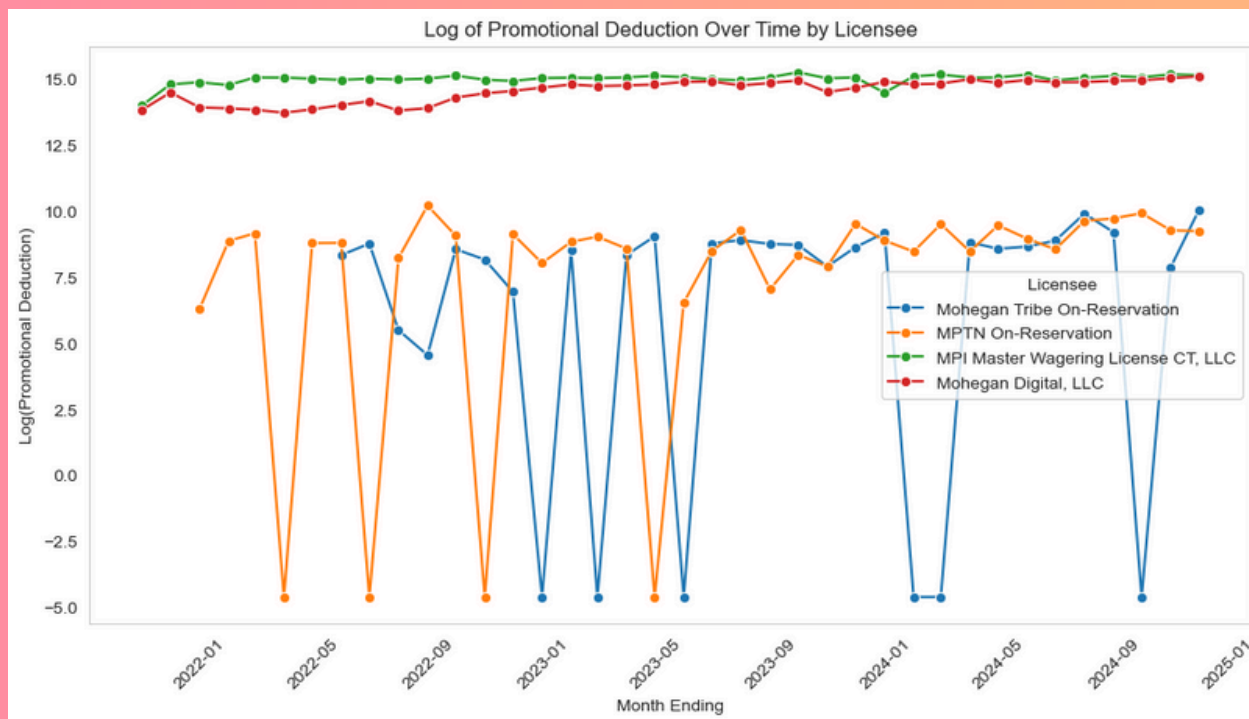
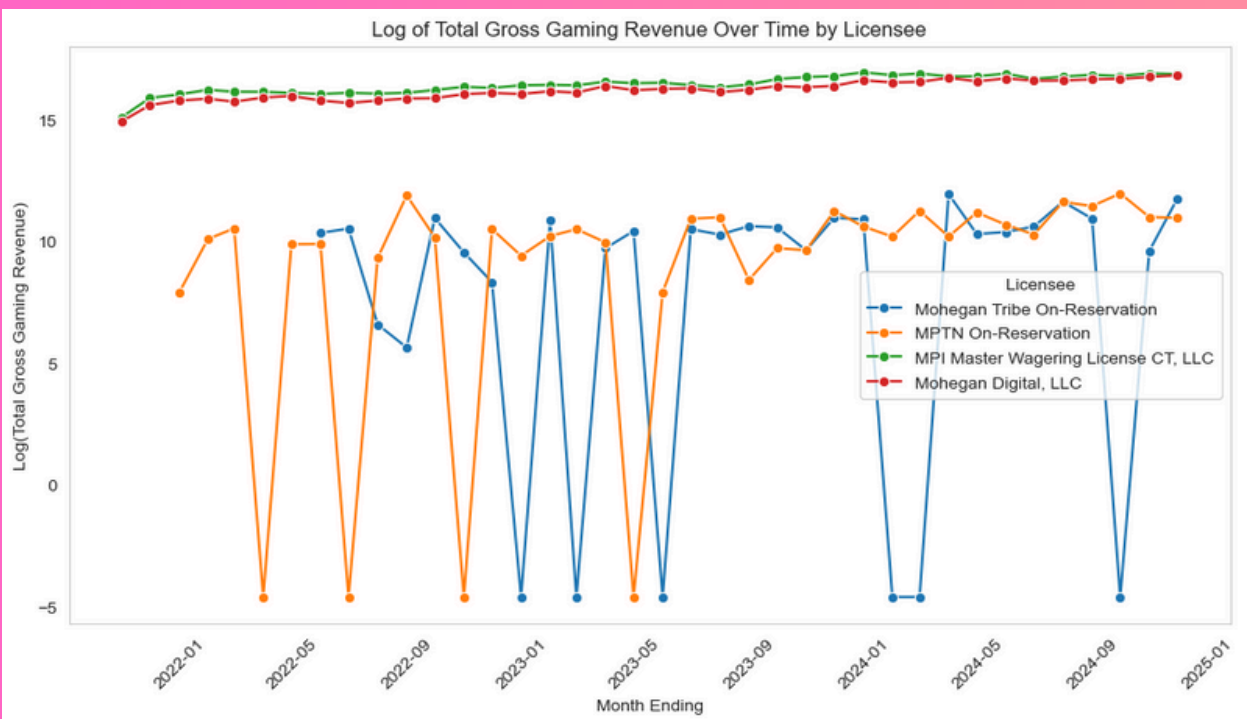


THE BAR CHART SHOWS MONTHLY TOTAL GROSS GAMING REVENUE ACROSS FOUR FISCAL YEARS. REVENUE SHOWS AN OVERALL INCREASING TREND, THOUGH EACH YEAR EXPERIENCES SOME FLUCTUATIONS. LARGE BLACK ERROR BARS INDICATE THE FLUCTUATIONS.



VISUALIZATIONS & INTERPRETATIONS

THE FIRST TWO GRAPHS REVEALS A STRONG CORRELATION BETWEEN PROMOTIONAL DEDUCTIONS AND TOTAL GROSS GAMING REVENUE, PARTICULARLY FOR ON-RESERVATION LICENSEES, WHERE BOTH METRICS EXHIBIT SIMILAR FLUCTUATIONS OVER TIME. THIS SUGGESTS THAT REVENUE SWINGS ARE LARGELY DRIVEN BY PROMOTIONAL INCENTIVES RATHER THAN FUNDAMENTAL CHANGES IN PLAYER ACTIVITY. DESPITE THESE FLUCTUATIONS, TOTAL WAGERS REMAIN RELATIVELY STABLE, ESPECIALLY FOR LLC CASINOS, INDICATING THAT BETTING VOLUME IS CONSISTENT. THE HIGH VOLATILITY IN PROMOTIONAL DEDUCTIONS REDUCING GROSS REVENUE FURTHER SUPPORTS THE IDEA THAT PROMOTIONS PLAY A CRUCIAL ROLE IN SHAPING REVENUE TRENDS. THIS LIKELY MEANS THAT PERIODS OF INCREASED REVENUE ARE OFTEN TIED TO AGGRESSIVE PROMOTIONAL CAMPAIGNS RATHER THAN ORGANIC GROWTH IN PLAYER ENGAGEMENT.



CONCLUSIONS

IN CONCLUSION, WHILE THE CASINO REMAINS CONSISTENTLY PROFITABLE, REVENUE FLUCTUATIONS ARE HEAVILY INFLUENCED BY PROMOTIONAL DEDUCTIONS. HIGH PROMOTIONAL SPENDING CAN DRIVE ENGAGEMENT, BUT EXCESSIVE GIVEAWAYS RISK ERODING PROFITS RATHER THAN FOSTERING SUSTAINABLE GROWTH. THE STABILITY OF THE LLC CASINOS, SUGGESTS MORE CONTROLLED PROMOTIONAL STRATEGIES OR A FOCUS ON LONG-TERM PLAYER RETENTION, WHEREAS ON-RESERVATION OPERATORS EXPERIENCE VOLATILE REVENUE SWINGS DUE TO AGGRESSIVE OR SEASONAL PROMOTIONS. WAGERS REMAIN STABLE ACROSS ALL LICENSEES, REINFORCING THAT PLAYER ACTIVITY IS CONSISTENT, BUT REVENUE VARIATIONS INDICATE THAT PROMOTIONS PLAY A LARGER ROLE IN SHORT-TERM EARNINGS THAN ACTUAL BETTING BEHAVIOR. AS INCREASING PROMOTIONAL SPENDING DOES NOT ALWAYS TRANSLATE TO HIGHER REVENUE. THE LLC CASINOS APPEARS TO BE THE MORE STABLE AND PROFITABLE MODEL, WHILE ON-RESERVATION MAY REQUIRE STRATEGIC ADJUSTMENTS TO MITIGATE VOLATILITY AND MAXIMIZE LONG-TERM PROFITABILITY.

FUTURE RECOMMENDATIONS

ON-RESERVATION CASINOS:

- **STRENGTHEN ONLINE PLATFORMS OR CONSIDER PARTNERSHIPS WITH ESTABLISHED DIGITAL OPERATORS TO EXPAND REACH AND STABILIZE REVENUE STREAMS.**
- **RETHINK PROMOTIONAL STRATEGIES BY SHIFTING FOCUS TO LOYALTY-DRIVEN OR NICHE CAMPAIGNS THAT FOSTER LONG-TERM ENGAGEMENT OVER SHORT-TERM SPIKES.**
- **LEVERAGE CROSS-PROMOTIONS BETWEEN PHYSICAL CASINOS AND ONLINE PLATFORMS TO CREATE A SEAMLESS, OMNI-CHANNEL PLAYER EXPERIENCE.**
- **INVESTIGATE PROMOTIONAL PERFORMANCE TO IDENTIFY INEFFICIENCIES AND ADJUST OFFER STRUCTURES ACCORDINGLY.**

LLC CASINOS:

- **MAINTAIN DATA-DRIVEN PROMOTIONAL STRATEGIES, BUT CLOSELY MONITOR ROI TO PREVENT PROMOTIONAL DEDUCTIONS FROM ERODING PROFITS.**
- **INVEST IN PLAYER RETENTION VIA PERSONALIZED EXPERIENCES, LOYALTY PROGRAMS, AND EXCLUSIVE DIGITAL OFFERS THAT BUILD SUSTAINED ENGAGEMENT.**

FUTURE RECOMMENDATIONS

MARKET STRATEGY:

- **ANALYZE THE PERFORMANCE GAP BETWEEN LLC AND ON-RESERVATION CASINOS TO UNCOVER POSSIBLE REGULATORY, OPERATIONAL, OR TECHNOLOGICAL ADVANTAGES.**
- **IDENTIFY UNDERSERVED MARKET SEGMENTS WHERE ON-RESERVATION OPERATORS CAN COMPETE MORE EFFECTIVELY WITH TAILORED OFFERINGS.**

PROMOTION OPTIMIZATION:

- **AVOID BLANKET PROMOTIONS—INSTEAD, DEPLOY TARGETED, SEASONAL, OR EVENT-BASED CAMPAIGNS THAT ALIGN WITH PLAYER BEHAVIOR AND DEMAND PEAKS.**
- **OPTIMIZE CAMPAIGN TIMING TO PREVENT SHARP, PERIODIC REVENUE DROPS; SPREADING PROMOTIONS MORE EVENLY CAN HELP SMOOTH EARNINGS OVER TIME.**
- **SET STRICTER PROMOTIONAL LIMITS AND REFINE TARGETING TO FOCUS ON HIGH-VALUE, ENGAGED PLAYERS, REDUCING UNNECESSARY DEDUCTIONS WHILE PRESERVING ENGAGEMENT.**

BY ALIGNING PROMOTIONAL STRATEGIES WITH PLAYER BEHAVIOR AND MARKET CONDITIONS, CASINOS CAN IMPROVE EFFICIENCY, REDUCE VOLATILITY, AND SUPPORT LONG-TERM PROFITABILITY.

**THANK
YOU**

**KELLY
OLIVEIRA**