Data Science in Gaming

Please stand by.
Webinar will begin at 1:00 p.m. EDT

Presented by:

[Logos] THE INNOVATION GROUP  [Logos] INNOVATION ANALYTICS
Technical Overview
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- Ensure the top right icons are highlighted blue
Ask a question

- At your top right corner, make sure the “Q&A” box is blue (ie enabled). Then at your bottom right corner, ask “All Panelists” and type/submit your question.
If you’re attending via mobile phone

- Double tap the box showing our panelists, and they’ll go full-screen
Data Science in Gaming
About Innovation Analytics

Innovation Analytics is the data analysis and new technologies arm of The Innovation Group.

Leveraging the Company’s experience working with industry operators, technology developers and investors, Innovation Analytics uses quantitative methods as the key to unlocking business insights in management, strategy, and marketing.
Panelists

Anthony “A.J.” Mason – Principal, Innovation Analytics

Based out of Winter Park, Florida, A.J.’s contributions include database decision analysis, digital interactive gap analysis, primary customer research, social/interactive gaming platform, and on-site mobile customer data capture. He provides expertise in direct marketing, CRM, campaign and promotional design, loyalty programs, e-commerce, media planning, business intelligence, consumer insights, statistical modeling, partnerships, and branding.

A.J. has worked as a multi-channel marketing executive in the international, regional, and tribal gaming and hospitality industry for Las Vegas Sands Corporation, Ameristar Casinos Inc., and Foxwoods Resort Casino. His focus has been on developing fully integrated marketing strategies by quantifying the economic impact of promotional and advertising spend.

A.J. holds several economics degrees, a Bachelor of Arts degree from Indiana University, and a Master of Arts degree from the University of Nevada, Las Vegas.

Matt Konopka – Principal, Innovation Analytics

Matt is based out of San Francisco and has expertise in quantitative analysis and statistical programming for a diverse array of applications. He has consulted as a lead statistical analyst on projects for federal government clients including the Environmental Protection Agency, the National Oceanic and Atmospheric Administration, and the Department of Justice. Projects and cases include economic damage calculation for the Deepwater Horizon oil spill, procedural assessments of the American Recovery and Reinvestment Act of 2009, and EPA financial assurance rulemaking evaluations for extractive industries.

Matt graduated from University of California, San Diego’s School of International Relations and Pacific Studies with a Master of Pacific and International Affairs. He holds a B.A. from American University in International Studies.
Data Science
What is data science?

An interdisciplinary field that turns raw data into insights by leveraging statistics, economics, and analytics.

**Data**
- Operational data warehouses
  - Customer Relationship Management Databases
  - Revenue Management Databases
  - Customer satisfaction surveys
- Complementary data sources
  - Geographical Information Systems
  - Demographic data (Census, etc.)

**Science**
- Customer behavior predictive models
- A/B Testing
- Econometric modeling of customer price sensitivity
- Experimental optimization via controlled testing on customer samples
Scientific Method as Workflow

- Frame Question
- Collect Data
- Perform Statistical Test
- Describe Insight
- Recommend Action
Scientific Method as Workflow

- Collect Data
- Perform Statistical Test
- Describe Insight
- Recommend Action
- Too much unstructured data
Scientific Method as Workflow

- Frame Question
- Collect Data
- Perform Statistical Test
- Describe Insight
- Recommend Action

Failure to turn insights into actions
Scientific Method as Workflow

- Frame Question
- Collect Data
- Describe Insight
- Perform Statistical Test
- Recommend Action

Expensive IT & Skills
Case: Promotional Testing
Case: Promotional Testing

$10 Promo Offer

$10 Promo Offer

$10 Promo Offer

Unmotivated

$50 Revenue

$70 Revenue

$90 Revenue

$20 Promo Expense

$100 Profit

$120 Revenue
Case: Promotional Testing
Case: Promotional Testing

- **Promo Offer A**: $5 Promo Offer Required
- **Promo Offer B**: $10 Promo Offer Required
- **Promo Offer C**: $15 Promo Offer Required

- **Revenue**: $50, $70, $90
- **Promo Expense**: $30
- **Profit**: $180
- **Total Revenue**: $210
Case: Promotional Testing
Panelist Questions
How do you describe data science?
What is the role of data science in the gaming industry?
What hurdles are there to instituting processes informed by data science? How can we decrease the impact of these hurdles?
What are some practical applications for data science in gaming?

Which operational areas are most benefitted by data science?
Audience Q&A