



NORWAY'S LEADING LOTTERY/GAMBLING COMPANY NORSK TIPPING (EUROJACKPOT, VIKINGLOTTO, KENO, FLEX, SPORTS BETTING ETC.) SOCIAL MISSION FOR MORE RESPONSIBLE GAMBLING THROUGH PROGRESSIVE ANALYTICS

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DESCRIPTION

The goal of the project by the Norsk Tipping was to prove that media has considerable different effect on how risky or non-risky players are activated and correct media mix can improve socially responsible gambling. Analytical Alley worked out the best mathematical approach – multivariate log-linear models with Random Forest (approximate 0.5 billion simulations) to determine each medium's/message's effect on risky players by each product level.

1. WHAT WAS THE PURPOSE OF THE WORK?

Norway's population survey for the year 2019 showed that gambling problems in Norway were on the rise. Local government was worried and planned to force extra legal restrictions to the category. Norsk Tipping took upon themselves to reverse that trend and find different solutions to provide more balanced approach to gambling. Norsk Tipping, largest public Norwegian lottery (Eurojackpot, Vikinglotto, Flex, Keno etc.) and gambling services provider has a social mission to offer a responsible and attractive gambling, where the profits go back to society. As media is one of the main factors that brings in new players and activates old players, then Marketing Clinic as the project's lead and Analytical Alley as the project's technical executor were chosen to run this project.

Norsk Tipping/Marketing Clinic has previously worked together with Analytical Alley to use econometric/statistical modelling (Random forest and predictive regArima models) to find the effectiveness of media and improve it through seasonal, investment level, ROI optimization and synergy increase through multiple media usage. In this case Analytical Alley took upon themselves to find mathematical and data-based solutions for media strategies that would create more responsible gambling market to draw players to Norsk Tipping and at the same time does not stimulate an increase in inappropriate gambling behaviour.

Norsk Tipping, together with Marketing Clinic, started with the idea and accompanied the analytical and technical help from Analytical Alley to construct the best analytical and data-driven approach to find out what influences the unhealthy gambling behaviour and what could be the strategic approach to have holistic perspective on the drivers of gaming behaviour in media and ensure that the correct choices are made to follow the given social mission.

2. STAGES

- **Setting the hypothesis and goal together with Marketing Clinic and Analytical Alley**

Decrease the Gross Gaming Revenue coming from clients that are allocated into high-risk category by:

- decreasing number of new clients joining Norsk Tipping that have negative gambling behavior;
 - at the same time simulating more responsible gambling for players that are already high risk;
 - bringing more socially responsible new players to Norsk Tipping.
- Analytical Alley worked out the best mathematical approach to solve given task/hypothesis – Analytical Alley created multivariate log-linear models with Random Forest simulation tests to run ca 0.5 billion simulations to determine each medium effect on the risk player by each product level: lottery games, sports betting, online gambling. The average prediction power of models was 92%.
 - Marketing Clinic took these insights and implemented them on the strategic level to help Norsk Tipping to achieve their social responsibility goal.

Some strategical changes:

- TV investments to the general brand increased the likelihood of getting more socially responsible players. Sports Betting TV spots and sponsored clips increased the likelihood of risky players joining and people reaching to the risky segments. Therefore, switch from sports betting to general brand ads was made.
- Through the model we discovered that digital media channels had very different effects on the risky players. Due to that larger changes in digital media were executed by switching to more awareness-based channels that increased the socially responsible gambling.
- With the statistical model we also simulated what effects unregulated competitors have on our risky players and found that their activities have significant effect. This was used to weigh the Norsk Tipping risky player amount to make more objective decisions on how Norsk Tipping activities are affecting the Norway's gambling market.

3. RESULTS

- The share of Norsk Tipping's income that comes from risky players has fallen by **10%** points in one year from the implementation made in October 2021
- The rising trend of players being categorized as risk players has reversed and is now declining. At the same time, Norsk Tipping has gained more players, it proves considerably positive effect
- Before our new strategical approach, the risk players lost an average of NOK **3,425** per month. One year later, the amount is **2,733** - a reduction of **20%**
- The results of these projects are now a central part of how Norsk Tipping works with its own marketing and how they engage in conversations with clients, owners and other interested parties. With the project Norsk Tipping could document how various marketing activities affect risky gamblers and show how gambling can be advertised responsibly. With the help of advanced statistical models and holistic strategic data driven marketing, Norsk Tipping could continue to ensure that players are drawn into a regulated gaming arena, but at the same time without increase in inappropriate gambling behaviour. Norsk Tipping, as a public company and market leader, set a standard to other gambling companies to follow in their footsteps.
- Thanks to this analytical project Norsk Tipping proved that socially responsible marketing can be executed which helped the lottery and gaming sector to avoid extra legal restrictions by Norwegian government.

Thorbjørn A. Unneberg, EVP Customer & Market at Norsk Tipping: *"Delivering on our social responsibility is of extremely high importance to Norsk Tipping. We have an a comprehensive commitment in the data and analysis focus areas, where we use advanced statistical models and methods to ensure that we deliver on our social mission. Marketing Clinic in conjoint with Analytical Alley has been an important partner for us in this work. The companies understand the strategic business perspective, while at the same time being very strong in method, analysis and modelling"*

4. WHAT WAS THERE ABOUT THE WORK THAT DESERVES TO BE HIGHLIGHTED IN TERMS OF CREATIVITY AND INNOVATION?

This current problem with lottery and gambling is very real in each relevant country. It is very unprecedented and bold that a market leading company takes this kind of progressive and analytics-based act of responsibility to prove that different media usage has considerably different effect how risky/non-risky players can be activated. Furthermore - it is a very tricky and unprecedented task for an analytics company to take. Analytical Alley, using extremely sophisticated mathematical and analytical approach, found clear patterns and methods how Norweign lottery and gambling market can through right marketing be improved to be more responsible and socially healthy market. Very exact strategic insights were given to Norsk Tipping/Marketing Clinic, who through responsible and professional media execution proved the absolute success of the whole project. We believe that this kind of discussions/projects should be activated also in other different markets, who consider this topic to be relevant.

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