COMPETE TO LEARN

A playbook for amping up analytics in your organization

DO YOU

HAVE BUSINESS PROBLEMS THAT SEEM UNSOLVABLE?

WANT TO GIVE YOUR WORKFORCE THE FREEDOM TO INNOVATE?

WANT TO MAKE YOUR DIGITAL TRANSFORMATION GO FASTER?

There is no better way to push the limits of what is possible than competition. From the original Olympic Games in Ancient Greece, to Hooke vs. Newton, to the modern free market economy – there are countless examples of how rivalry can result in great advancements.

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PRESENTING THE...

ALTERYX DATA CHALLENGE PLAYBOOK

Use following playbook if you want to:

.01   Accelerate the adoption of a data-driven culture within your organization

.02   Gather the brightest minds across different teams and departments to tackle the hardest problems

.03   Optimize and automate legacy processes to improve the bottom line

Data challenges come in many shapes and sizes – the type you choose will depend on your goals and organizational challenges. The following three pages will walk you through three challenge types that we call The Hackathon, The Grand Prix, and The Kaggle.

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THE HACKATHON

GOALS

Encourage innovation
Solve impossible problems

FORMAT

Teams work on a project for a dedicated amount of time. Judges award prizes based on various criteria

TIME COMMITMENT

Minimum: 1 Day
Maximum: 1 Week

RESOURCES NEEDED

People need dedicated time away from their day-to-day tasks. Optionally you can also provide project ideas

Hackathons have earned a reputation as Red Bull-fueled, millennial coder hoodie-wearing, all-nighter coding sprees, but it doesn't have to be this way. (People have kids, don't make them stay up all night.)

Hackathons are really about innovation and solving the impossible problems. Hackathons can take on many different functional forms. In this context, we're really talking about data challenges. The purpose of the contest is to convert data into insights and enable data driven decisions across the company. Support from executive leadership is important – consider making senior leaders judges. Cool prizes are encouraged: think lunch with CEO, PTO day, etc. This type of challenge can vary from open-ended to structured.

Open-ended... Participants can truly work on ANYTHING, within reason. At Alteryx we have Innovation Days: each quarter for three days in our Broomfield, CO development HQ, employees are encouraged to work on a side project. It can be anything as long as it has the potential to benefit the company in some way. Innovation days are broken down into two days of continuous, uninterrupted work, free from day to day tasks, and one day of presentations. It's amazing what people can come up with when the guard rails are removed. In a 2017 Innovation Days, one project showed off a potential integration between Alteryx Designer and a model deployment product called Yhat ScienceOps. Fast forward a few months; Alteryx buys Yhat and ScienceOps becomes Alteryx Promote.

Semi-open-ended... Like the above, but with a specific goal in mind. For example, the Department of Health and Human Services (HHS) has sponsored a codeathon to help combat the opioid epidemic. For the codeathon, HHS defined three different focus tracks: prevention, usage, and treatment, and provided various datasets to work with. Within the structure, participants were empowered to design their projects and methodology all on their own.

Structured... Provide a well-defined problem that needs solving. Similar to The Kaggle (see below), except the use case does not need to be a prediction problem.

At the end of the competition judges will pick the winners based on various criteria such as:

.01   Does the project solve an interesting problem (in the case of an open-ended competition) with an analytically sound methodology?

.02   Is the solution repeatable, generalizable, and easy to follow?

.03   How much value or savings is captured by implementing this solution?

Companies that have run this type of challenge have been pleasantly surprised that teams made up of people with different skill sets or from a range of departments and geographies often end up producing the most innovative and impactful projects. You'll never see your people as eager and energized as when they're given the freedom to solve hard problems the way the want to.

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THE GRAND PRIX

GOALS
Encourage analytics adoption
Reward speed + mastery

FORMAT
Tournament style, culminating in an on-stage final round.
Fastest to finish wins

TIME COMMITMENT
Minimum: 3 Hours
Maximum: 1 Month

RESOURCES NEEDED
Challenges
(like the academy.alteryx.com weekly challenges)

The Inspire Grand Prix has been an Alteryx tradition for over a decade. Taking place each year at our Inspire user conference(s), the best Alteryxers from around the world compete on stage to show off their problem-solving skills.

This type of competition rewards those that take the time to hone their craft, and therefore encourages your workforce to:

.01 Take advantage of learning opportunities, including Alteryx Academy & Certifications.

.02 Think outside the box by solving problems in novel ways with new tools.

.03 Always improve by making workflows faster and optimizing existing processes.

Depending on the size of the field of entrants, this competition could take place in an hour or two (up to five participants), or over the course of a month (16+ participants). As an example, Alteryx recently ran an internal Grand Prix to determine the employee with the best Alteryx skill. Each department – from HR to Legal to Product Development – selected their representative. A March Madness -style bracket of 16 was created to narrow the field through two rounds to 8, then to the final 4. Those final four faced off on stage in front of the entire company.

In each round, participants are presented with a brand new (to them) data challenge. Datasets are provided, and a desired result is explained. Whoever reaches the answer first wins the round. 150+ such data challenges are available on the Alteryx Academy as Weekly Challenges.

On stage, the pressure is intense, but the payoff is sweet, just ask US Grand Prix 2018 winner Nicole Johnson. In her words, the event itself was "exhilarating, terrifying, thrilling, stunning." But it was in preparing for the event that "I was creating more organized, streamlined workflows, and I was even starting to surprise myself with how quickly I was able to create innovative solutions for problems with a program that I really hadn't been using all that long."

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THE KAGGLE

GOALS

Challenge analysts to become citizen data scientists

Improve the bottomline

FORMAT

Participants jockey for position on a leaderboard. The frontrunner at the end of the competition period wins

TIME COMMITMENT

Minimum: 1 Day
Maximum: 3 Months

RESOURCES NEEDED

Historical data with known outcome

Measurable KPI to optimize

Popularized by Kaggle, the data scientist community now owned by Google, this format typically revolves around a prediction problem – either predicting a number like total sales or average rainfall (regression); or predicting a category like loan default (yes/no) or churn (classification).

For this challenge, you'll need historical data that contains the target variable of interest (e.g., loan default – yes/no) as well as a multitude of independent variables that may influence the outcome (e.g., loan amount, loan type, borrower age, etc.). Split this data in two data sets; the first chunk of data is provided to the challenge participants as a training data set. With the remaining data, give the participants everything except the target variable (outcome). This holdout dataset is used to power the leaderboard. Participants will use what they have of the holdout set to make predictions using the model they've fitted with the training set. You'll measure the model's accuracy using the hidden known outcomes, and then update the leaderboard.

The Kaggle can take place as an in-person all day-event (hackathon-style), or it can run for weeks or months, like a Kaggle.com competition, so that participants can refine their model over time, and jockey for position on the leaderboard throughout. Whoever is at the top of the leaderboard at the end of the competition period wins a well-deserved prize and eternal glory.

This challenge is perfect for when you have a stubborn KPI that just won't budge in the direction you want, and you need your best machine learning experts from across teams and departments to try something new. This type of competition will also push your analysts to take their skills to the next level and learn predictive techniques so that they, too, can feel the thrill of moving up the public leaderboard.