NStack   Workflows

All   Models   Transformatio

Retention Workflow
Churn bucketing email workflow

▶ Start   ⇅ Update

✓ Finished 20 hours ago

🗎 6 Outputs

"Attribution Mod

This model is used to answer t
several marketing channels des
customer converts, after poten
sequence of touch points. It wo
progression of users through t
process, and then evaluating th
touch point in turn.

Inputs

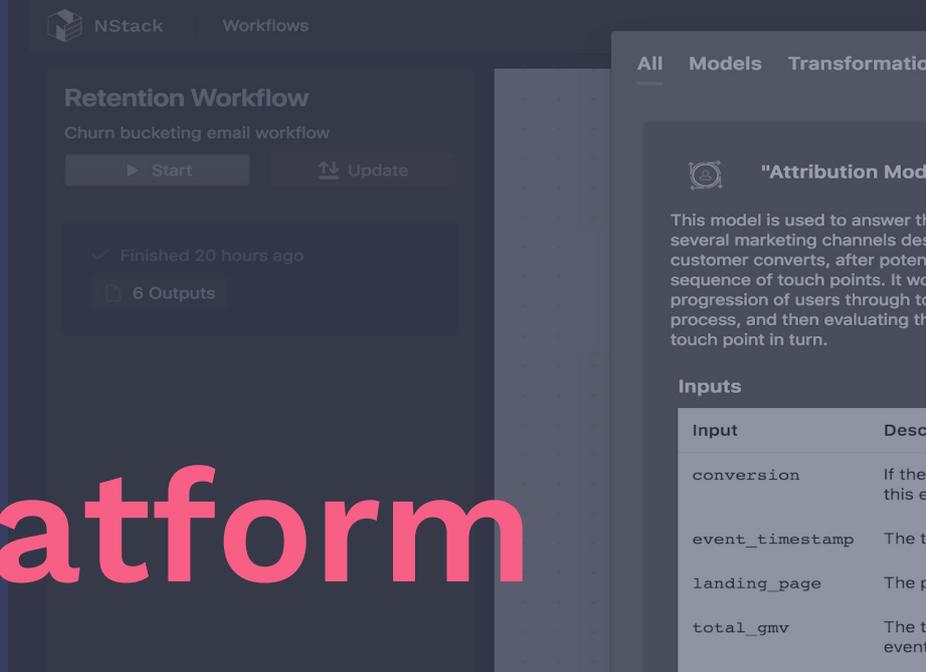| Input	Desc
conversion	If the this e
event_timestamp	The t
landing_page	The p
total_gmv	The t event

NStack

NStack
Data Platform

NStack is a **data science automation platform** which provides a suite of predictive models and integrations into data sources and tools. Using NStack's web interface, analysts visually create data science workflows which run in the cloud and integrate into their existing tools and solutions.

DATA SOURCES   MODELS   TOOLS

Data Science Model Suite

NStack provides a suite of predictive data science models. These models include best of class implementations of modern machine learning and statistical algorithms, customised for specific verticals and business models. NStack's platform provides features such as model selection, monitoring, reporting, introspection, and optimisation to ensure correct, actionable results which work with your data. Additionally, data scientists can deploy their own custom models in Python and R.

Data Science Model Examples

Subscription Churn Prediction

Subscription business models introduce unique challenges for predicting churn. The retention module lets you predict which subscribers have a high propensity to churn, by integrating usage data and subscription information.

Survival Analysis

Input Data	Predictions
Usage Data	Churn Score
Subs Data	Churn Indicators

Transactional Churn Prediction

Customer cohorts purchase with different frequencies, so setting a universal lapse period (e.g. 30 or 60 days) is not an optimal strategy. Statistical models can predict an accurate lapse period for each user based on historical purchasing patterns.

Hierarchical Model

Input Data	Predictions
Purchase Data	Lifetime Value
	Churn Score

Recommendations

Historical information on browsing or purchasing patterns can be used to suggest relevant products to users, or find which products or brands are similar. Compared to black box recommendation engines, NStack's recommender is flexible and powerful.

Recommender System

Input Data	Predictions
Usage Data	Similar Products
Purchase Data	Relevant Products

Multi-Touch Attribution

Understanding the series of touch points which lead to conversion can help marketing teams assign spend more effectively across channels. The NStack attribution model takes in historical data to score traffic sources based on their performance.
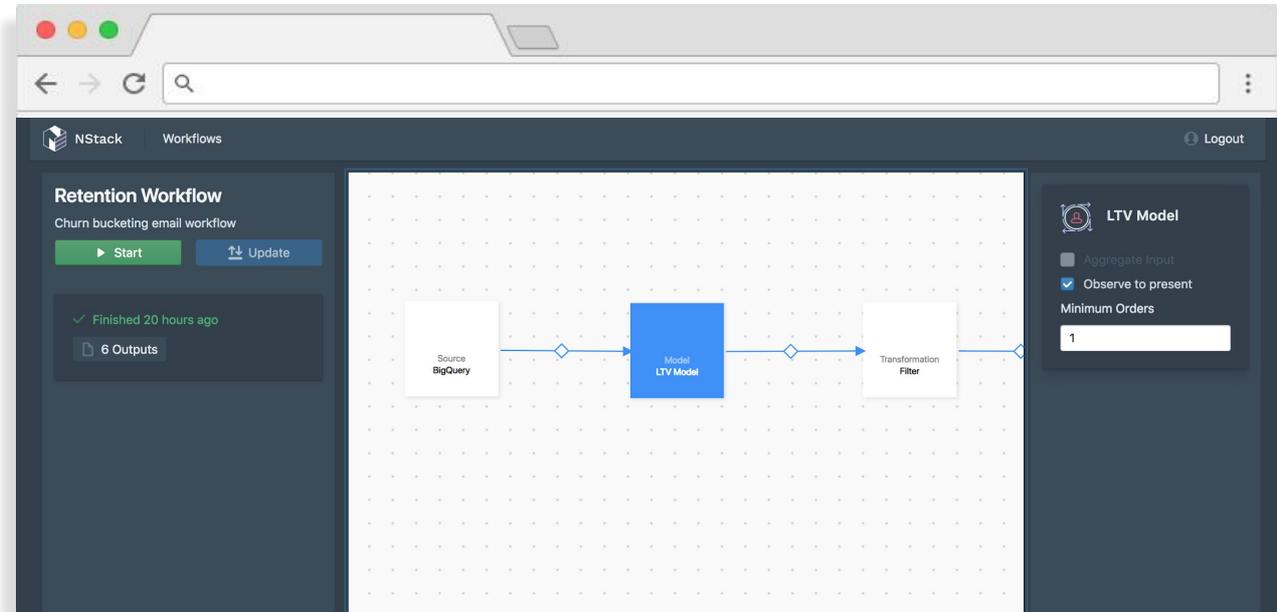
Markov-Chain Model

Input Data	Predictions
Conversion Data	Channel score
UTM Data	

Data Science Automation

Analysts use NStack's web interface to build workflows which connect models into data sources (such as warehouses or databases) or internal tools (such as CRMs and email marketing platforms).

Example Workflow

Data Warehouse
Select transactional data from Amazon Redshift using SQL.

Model
Run data through Transactional Churn Model to predict which customers have lapsed.

Filter
Select all users in the 'At Risk' category from the results of the model.

Email Marketing Platform
Subscribe all these users to an email campaign on Sailthru to offer them a discount.

- ○ **Simple drag-and-drop workflow builder**

- ○ **Scheduler to run workflows on a timer**

- ○ **Processing steps to filter, prep, and clean data**

- ○ **Write custom steps in SQL or Python**

- ○ **CSV upload and download**

Frequently Asked Questions

How much technical resource does NStack require?

NStack automatically connects to data sources, or you can upload a CSV using the web interface. You can get started in minutes, and there are rarely technical integrations required.

If you need integrations into other existing tools, such as your CRM or email marketing platform, we have a large catalogue of plugins.

How do I validate the efficacy of NStack models?

NStack models come with a validation step which holds out test data to ensure results are correct, and uses other statistical validation techniques to ensure efficacy.

Who owns the output of a model?

The customer owns the outputs of an NStack model.

What if we have data scientists, want to hire a data science team, or want to bring in a data science consultancy?

NStack often complements an internal data science team, and we provide a building toolkit which allows your internal teams to rapidly deploy any existing models and integrate them using the NStack Integration Platform.

Can I trial NStack to make sure it's right for my team?

We run 1-2 week POCs where you can send data through the platform and analyse results. Please contact us for details.

About NStack

NStack is based in London and San Francisco and offers a platform which allows every organisation to use modern data science to turn data into value.

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