

Отделили 250 строк

## ▲ Partition and Sample

Partition or sample mode

Head



Number of rows to select



250



Preprocess Text

Препроцессинг

Language

English



Remove by part of speech

False



Text column to clean

Selected columns:

Column names: review

Launch column selector



Remove stop words



Lemmatization



Detect sentences



Normalize case to low...



Remove numbers



Remove special chara...



Remove duplicate cha...



Remove email address...



Remove URLs



Expand verb contracti...



Normalize backslashe...



Split tokens on special...



Custom regular expression




Custom replacement string



## Extract N-Gram Features from...

Text column

**Selected columns:**  
**Column names:**  
Preprocessed review

Launch column selector

Vocabulary mode

Create

N-Grams size

1

K-Skip size

0

Weighting function

Binary Weight

Minimum word length

3

Maximum word length

25

Minimum n-gram doc...

5

Maximum n-gram doc...

1



Detect out-of-voc...



Mark begin-of-sen...



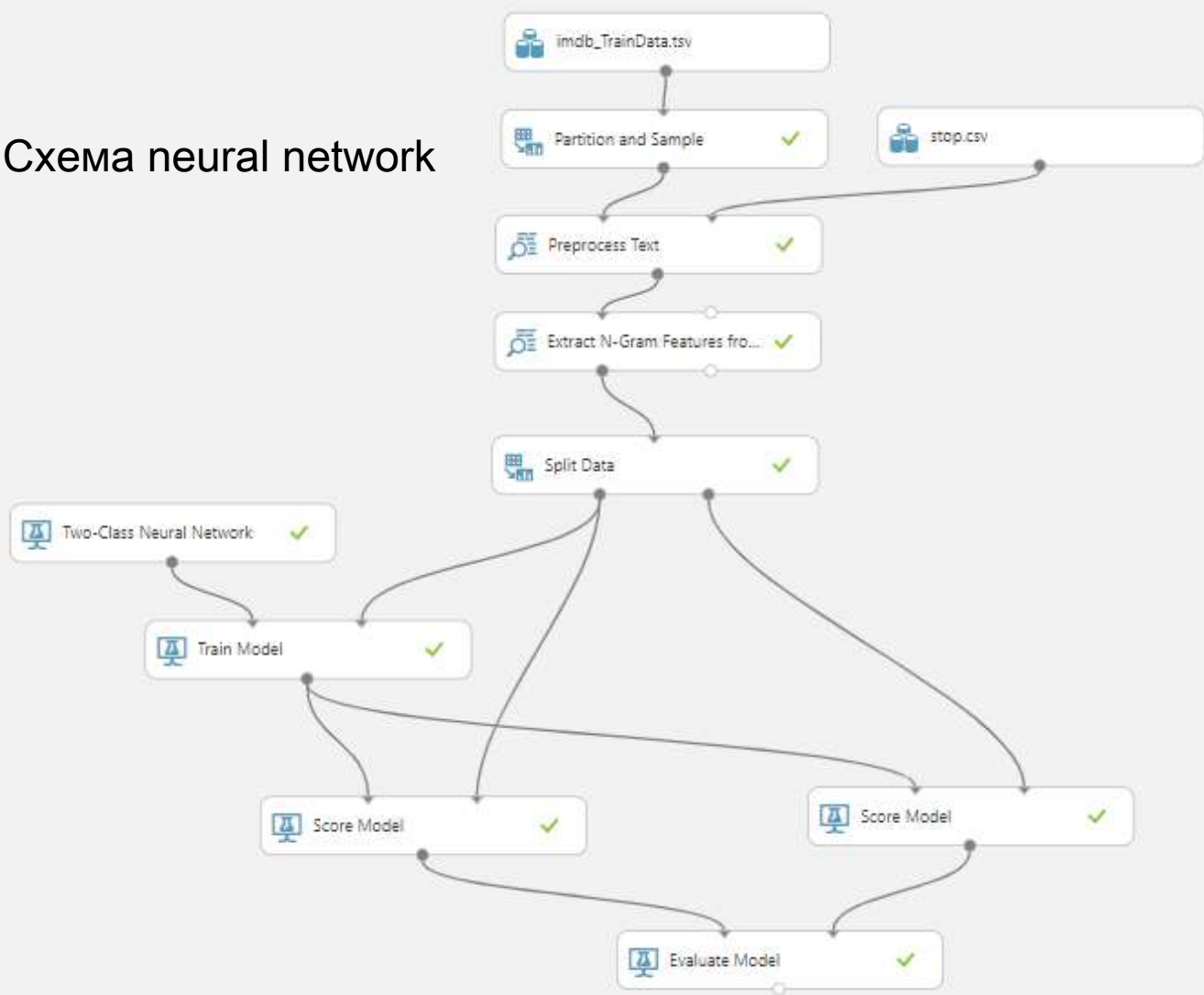
Normalize n-gram...

Use filter-based feature sel...

False

Векторная  
модель по  
униграммам

Cxema neural network



## Two-Class Neural Network

Create trainer mode Параметры neural network

Single Parameter



Hidden layer specification

Fully-connected case



Number of hidden nodes



100

Learning rate



0.001

Number of learning iterati...



1000

The initial learning weight...



0.1

The momentum



0

The type of normalizer



Min-Max normalizer



Shuffle examples



Random number seed



1

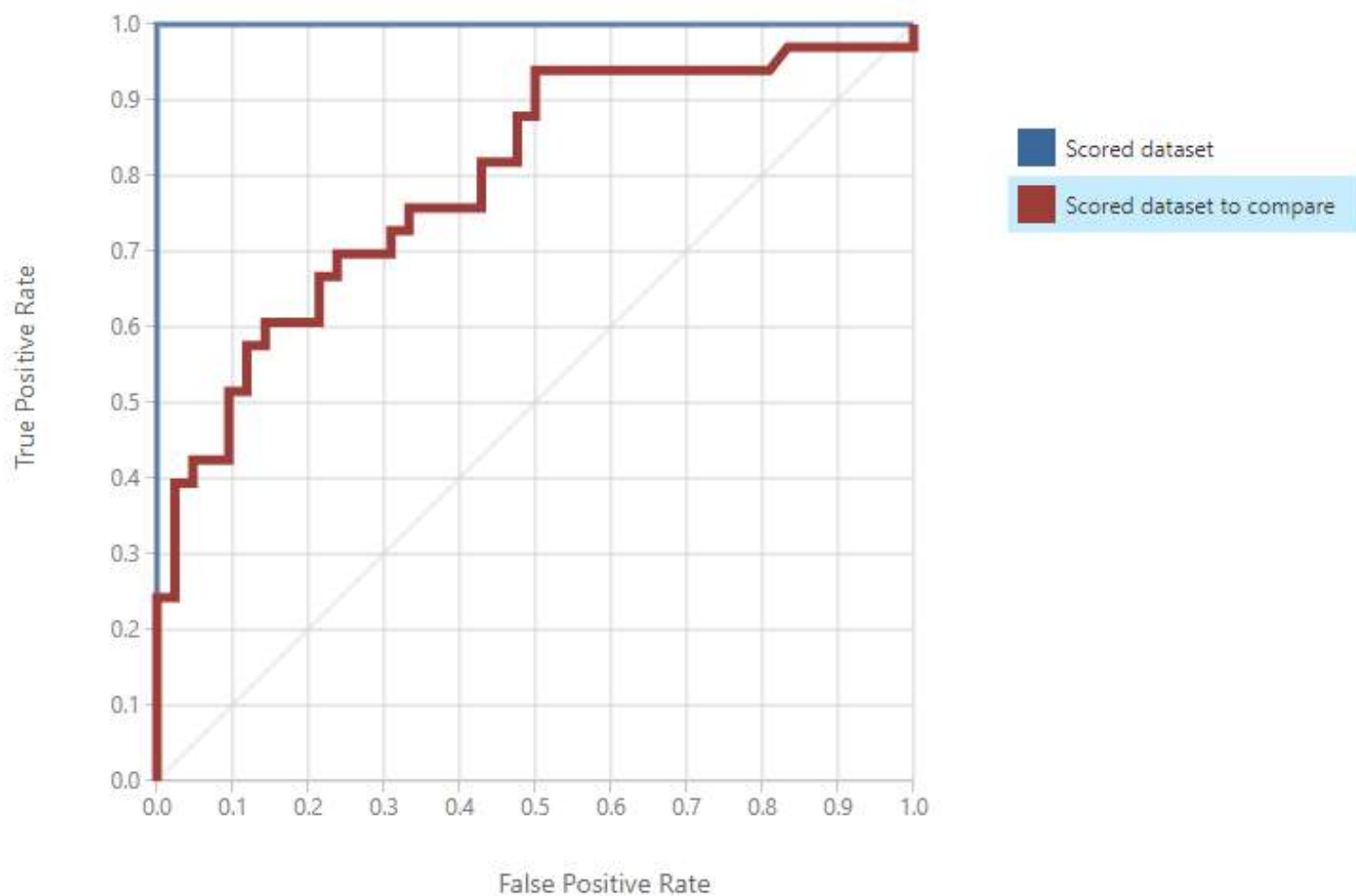


Allow unknown categ...



ROC PRECISION/RECALL LIFT

## Результаты neural network



True Positive

20

False Negative

13

Accuracy

0.707

Precision

0.690

Threshold

0.5

AUC

0.795

False Positive

9

True Negative

33

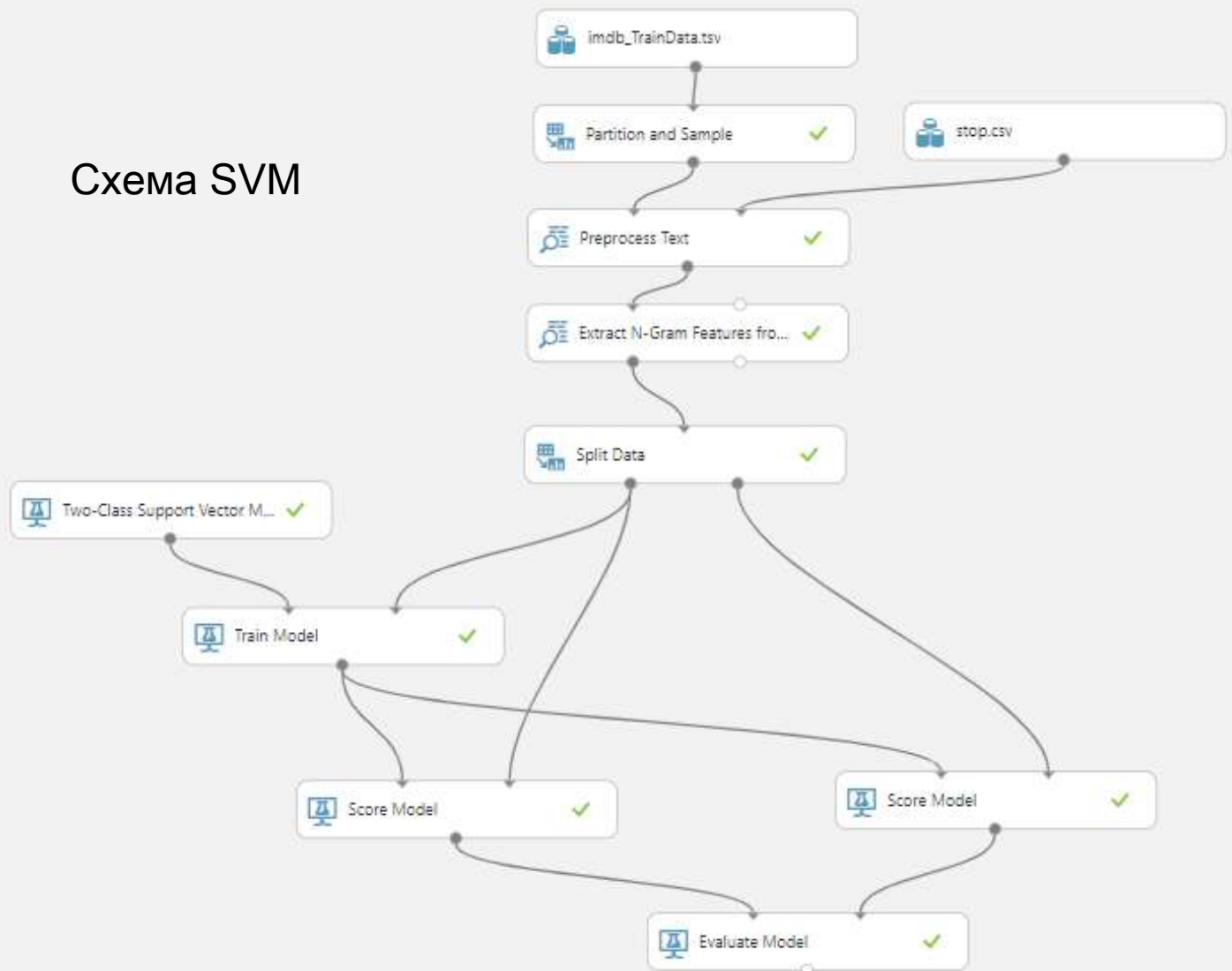
Recall

0.606

F1 Score

0.645

## Cxema SVM



## Two-Class Support Vector Mac...

Параметры  
SVM

Create trainer mode

Parameter Range



Number of iterations

☐

Use Range Builder

1, 10, 100, 1000

Lambda

☐

Use Range Builder

0.00001,0.0001,0.001,0.01

☒

Normalize features

☐

Project to the unit-sp...



Random number seed



1

☒

Allow unknown categ...



START TIME

11/24/2021...

END TIME

11/24/2021...

ELAPSED TIME

0:00:02.031

STATUS CODE

Finished

STATUS DETAILS

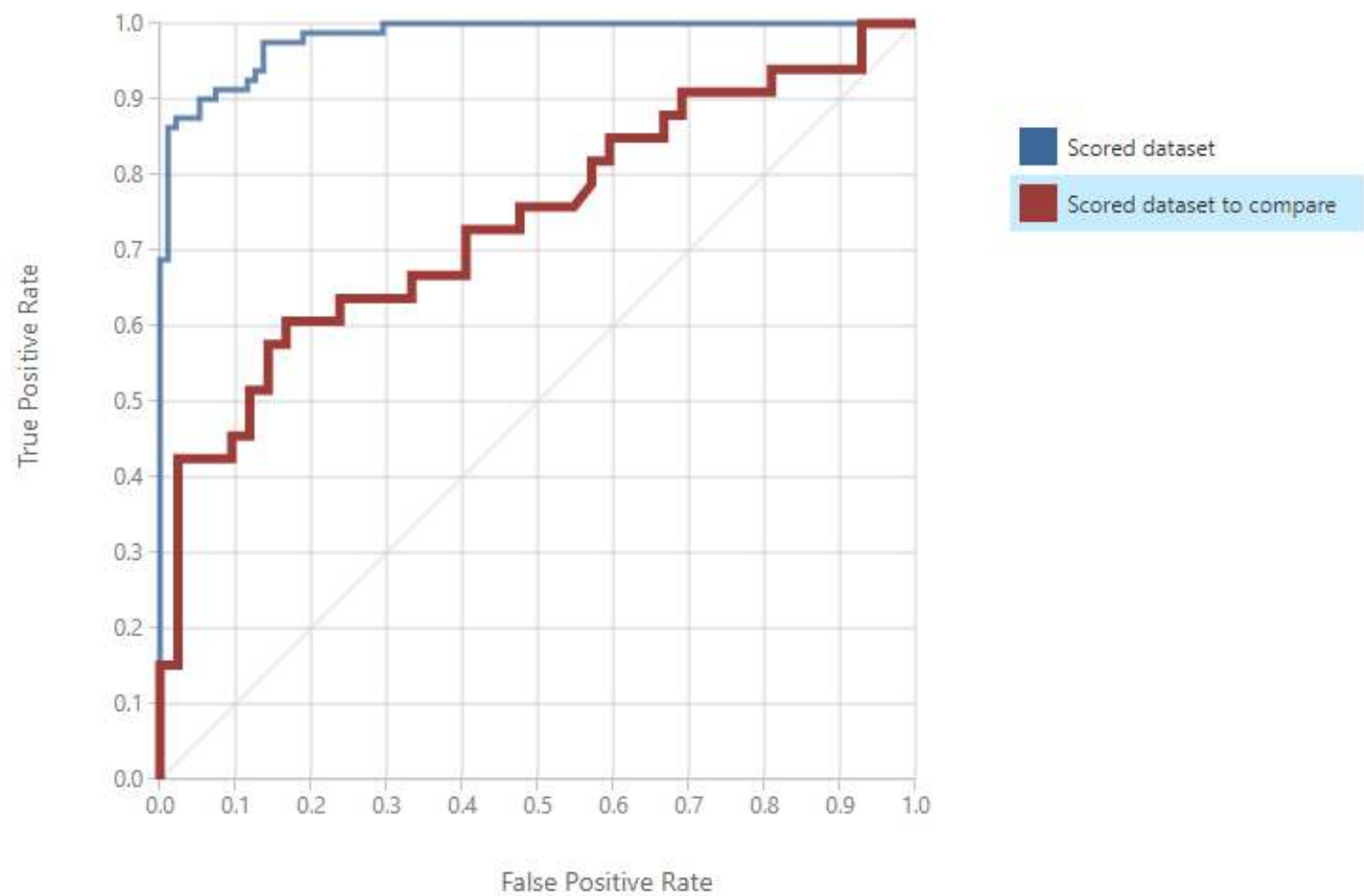
None

[View output log](#)



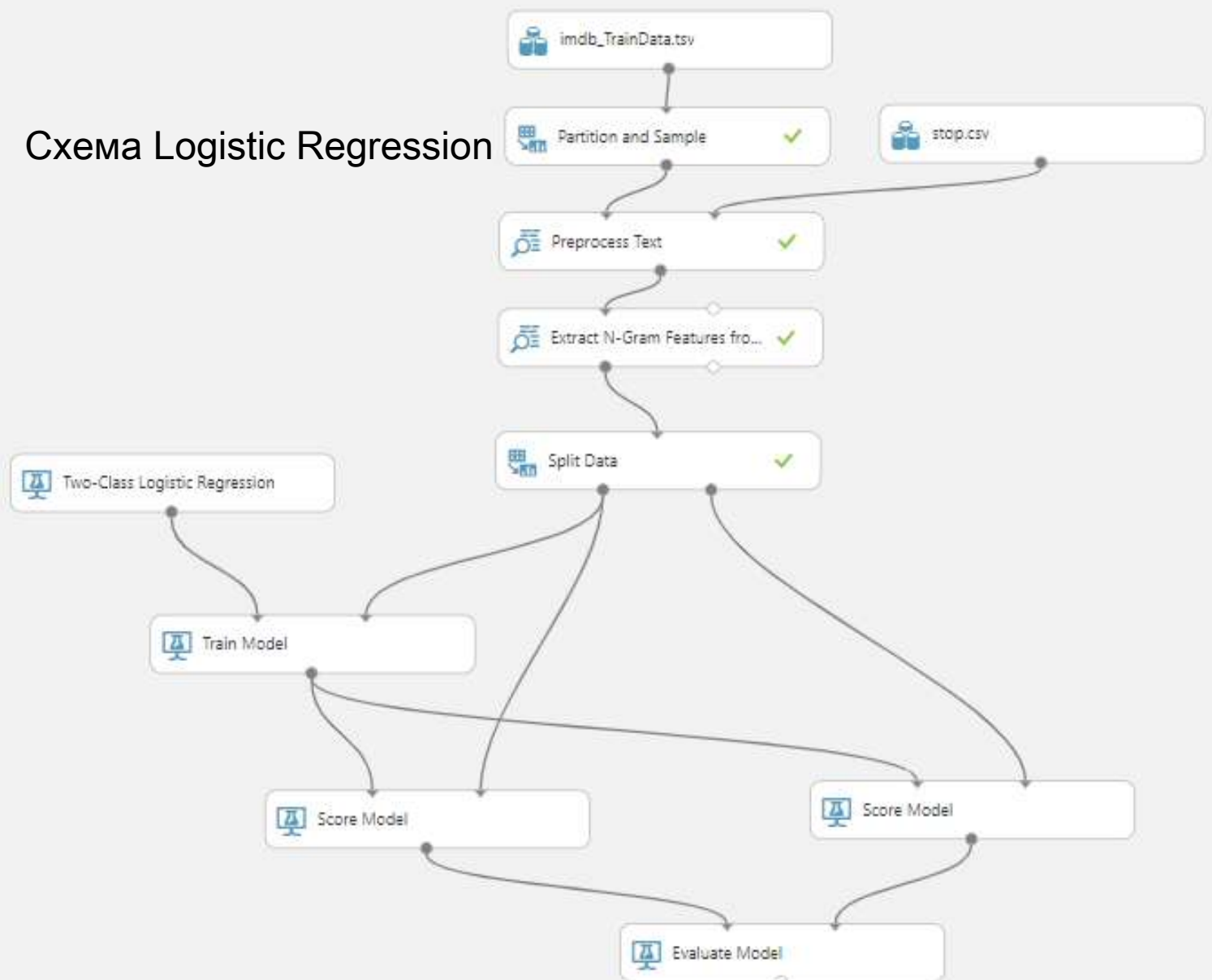
# Результаты SVM

ROC PRECISION/RECALL LIFT



True Positive	False Negative	Accuracy	Precision	Threshold	AUC
21	12	0.653	0.600	0.5	0.739
False Positive	True Negative	Recall	F1 Score		
14	28	0.636	0.618		

## Cxema Logistic Regression



## Two-Class Logistic Regression

Параметры  
Logistic  
Regression

Create trainer mode

Parameter Range



Optimization tolerance



☐ Use Range Builder

0.0001, 0.00000001

L1 regularization weight



☐ Use Range Builder

0.0, 0.01, 0.1, 1.0

L2 regularization weight



☐ Use Range Builder

0.01, 0.1, 1.0

Memory size for L-BFGS



☐ Use Range Builder

5, 20, 50

Random number seed

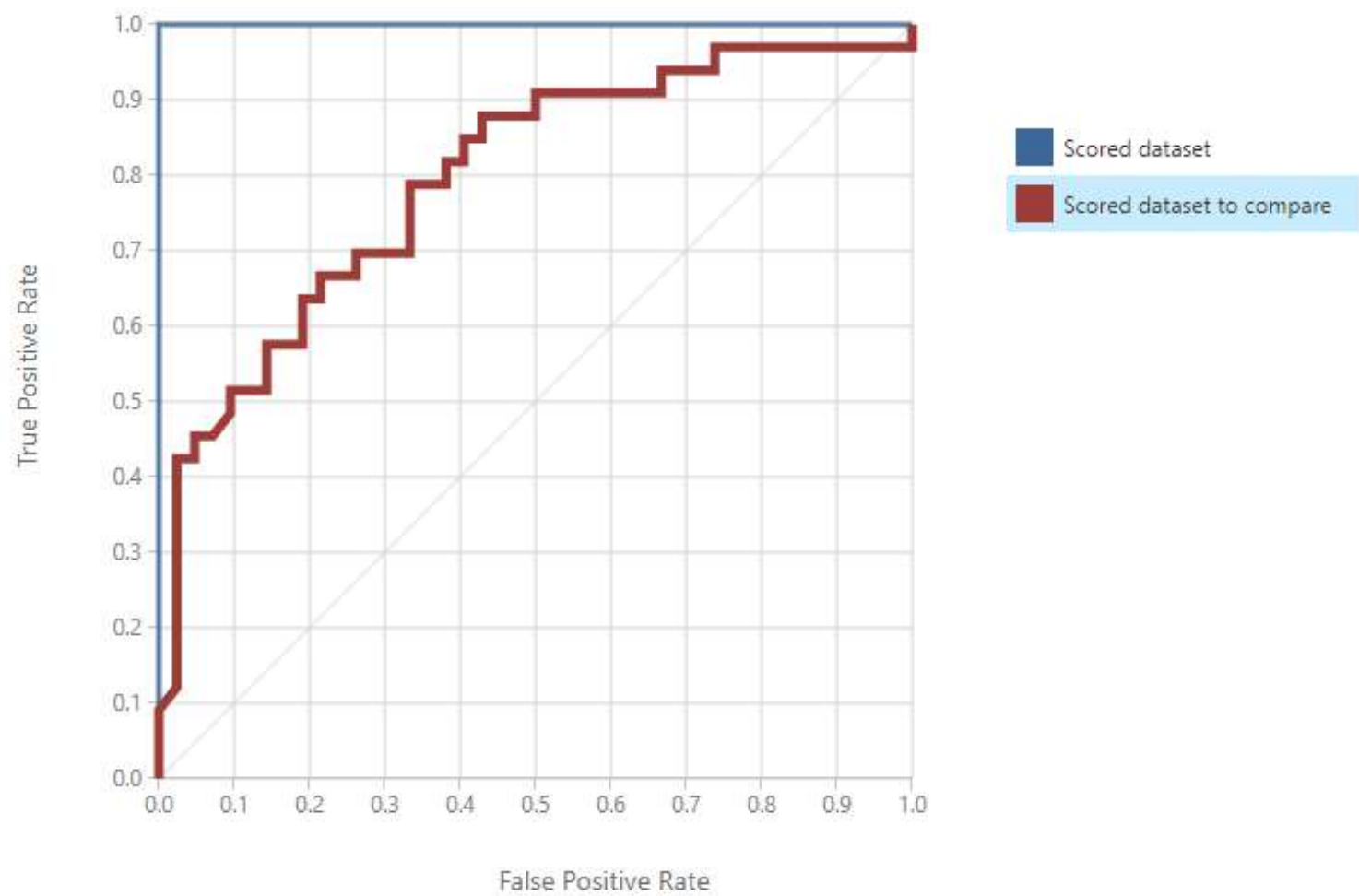


☒ Allow unknown categ...



ROC PRECISION/RECALL LIFT

# Результаты Logistic Regression



True Positive	False Negative	Accuracy	Precision	Threshold	AUC
22	11	0.733	0.710	0.5	0.797
False Positive	True Negative	Recall	F1 Score		
9	33	0.667	0.688		