

Feature

Though unit based feature (number of features = $3+6*38$):

- Overall features
 - Number of total thought units
 - Number of thought units of each annotation
 - Percentage of thought units of each annotation
- Wine features
 - Number of total thought units
 - Number of thought units of each annotation
 - Percentage of thought units of each annotation
- Grocery features
 - Number of total thought units
 - Number of thought units of each annotation
 - Percentage of thought units of each annotation

Meta data feature (number of features = 9):

mean_age, negative_experience, education, east.asian.time.in.us, cultural_intelligence, emotional.intelligence, IQ, extroversion, openness

Data conversion

1. Missing data, i.e. 'NA' in meta_fv is replaced with '?' for representing missing value in weka
2. In weka SimpleCLT, the following command would convert .csv file to .arff file:

```
java weka.core.converters.CSVLoader C:\Users\pengye\course\trunk\results\baseline_fv.csv > C:\Users\pengye\course\trunk\results\baseline_fv.arff
```

in weka, you may need to first remove, 'ID' and 'profit.diff' attributes and use the following attributes for regression and choose 'profit.join' to be the regression target

Regression Result

Method\metric	Correlation coefficient	Mean absolute error	Root mean squared error	Relative absolute error	Root relative squared error
Rules.M5Rules	0.5527	72.7324	91.944	81.4745 %	87.5159 %
meta.Bagging	0.6619	67.7539	81.4241	75.8977 %	77.5026 %
functions.LeastMedSq	0.7031	60.4641	75.6522	67.7317 %	72.0087 %
functions.LinearRegression	0.7114	64.3184	86.415	72.0492 %	82.2531 %

Running Information

=== Run information ===

Scheme: weka.classifiers.rules.M5Rules -M 4.0

Relation: baseline_fv-weka.filters.unsupervised.attribute.Remove-R228,238

Instances: 61

Attributes: 242

Test mode: 10-fold cross-validation

=== Classifier model (full training set) ===

M5 pruned model rules

(using smoothed linear models) :

Number of Rules : 2

Rule: 1

IF

percentage-of-(OM)-wine > 0.009

number-of-(IR)-overall > 4.5

number-of-(IR)-overall > 7.5

THEN

profit.joint =

695.462 * percentage-of-(QM)-overall

+ 478.7082 * percentage-of-(MIC)-wine

- 190.037 * percentage-of-(IR)-grocery

+ 131.1652 * percentage-of-(OM)-wine

+ 14.2952 * number-of-(IR)-overall

+ 307.5222 * percentage-of-(PP)-overall

- 2439.1847 * percentage-of-(SF)-overall

+ 16.0215 * openness

+ 1205.8784 [8/0%]

Rule: 2

profit.joint =

821.6545 * percentage-of-(QM)-overall

+ 330.9833 * percentage-of-(MIC)-wine

- 32.8251 * number-of-(SF)-overall

+ 18.8568 * number-of-(OM)-grocery

+ 1821.936 * percentage-of-(PO)-overall

+ 1193.0132 [53/63.704%]

Time taken to build model: 0.18 seconds

=== Cross-validation ===

=== Summary ===

Correlation coefficient	0.5527
Mean absolute error	72.7324
Root mean squared error	91.944
Relative absolute error	81.4745 %
Root relative squared error	87.5159 %
Total Number of Instances	61

=== Run information ===

Scheme: weka.classifiers.meta.Bagging -P 100 -S 1 -I 10 -W weka.classifiers.trees.REPTree -- -M 2 -V 0.0010 -N 3 -S 1 -L -1

Relation: baseline_fv-weka.filters.unsupervised.attribute.Remove-R228,238

Instances: 61

Attributes: 242

[list of attributes omitted]

Test mode: 10-fold cross-validation

=== Classifier model (full training set) ===

All the base classifiers:

REPTree

=====

percentage-of-(IR)-overall < 0.02

| percentage-of-(PP)-overall < 0.01

| | percentage-of-(IP)-grocery < 0.09

| | | percentage-of-(PT)-overall < 0 : 1320 (2/0) [2/0]

| | | percentage-of-(PT)-overall >= 0 : 1240 (2/0) [1/0]

| | percentage-of-(IP)-grocery >= 0.09 : 1170 (7/0) [1/6400]

| percentage-of-(PP)-overall >= 0.01 : 1308.15 (12/766.67) [5/3140]

percentage-of-(IR)-overall >= 0.02

| number-of-(P1)-grocery < 3

| | number-of-(QR)-overall < 1.5 : 1385.95 (8/0) [3/8533.33]

- | | number-of-(QR)-overall >= 1.5 : 1462.46 (7/0) [9/6088.89]
- | number-of-(P1)-grocery >= 3 : 1240 (2/6400) [0/0]

Size of the tree : 13

REPTree

=====

number-of-(IR)-overall < 4.5

- | percentage-of-(PO)-overall < 0.03

- | | number-of-(PP)-grocery < 0.5 : 1193.86 (8/1200) [4/6000]

- | | number-of-(PP)-grocery >= 0.5 : 1299.66 (9/1580.25) [8/8375.31]

- | percentage-of-(PO)-overall >= 0.03 : 1350.41 (10/4736) [2/1744]

number-of-(IR)-overall >= 4.5

- | percentage-of-(QR)-overall < 0.01 : 1370 (7/0) [1/57600]

- | percentage-of-(QR)-overall >= 0.01 : 1472.8 (6/0) [6/1066.67]

Size of the tree : 9

REPTree

=====

number-of-(IR)-grocery < 1.5

- | percentage-of-(PP)-overall < 0.01
- | | percentage-of-(QS)-wine < 0.03 : 1269.94 (5/0) [4/8000]
- | | percentage-of-(QS)-wine >= 0.03 : 1160 (5/0) [1/0]
- | percentage-of-(PP)-overall >= 0.01
- | | percentage-of-(PP)-wine < 0.01 : 1430 (3/1422.22) [2/2844.44]
- | | percentage-of-(PP)-wine >= 0.01
- | | | emotional.intelligence < 3.73 : 1334.92 (8/0) [3/4266.67]
- | | | emotional.intelligence >= 3.73
- | | | | east.asian.time.in.us < 50.5 : 1290.37 (2/0) [3/2533.33]
- | | | | east.asian.time.in.us >= 50.5 : 1240 (4/0) [1/0]
- number-of-(IR)-grocery >= 1.5
- | percentage-of-(IR)-wine < 0.03 : 1364.38 (6/888.89) [4/3377.78]
- | percentage-of-(IR)-wine >= 0.03 : 1462.34 (7/783.67) [3/1654.42]

Size of the tree : 15

REPTree

=====

- percentage-of-(OS)-overall < 0.03
- | number-of-(IDN)-overall < 1.5 : 1373.2 (8/4075) [7/6739.29]
- | number-of-(IDN)-overall >= 1.5 : 1461.25 (7/0) [4/3200]
- percentage-of-(OS)-overall >= 0.03 : 1279.96 (25/5647.36) [10/9163.84]

Size of the tree : 5

REPTree

=====

number-of-(IR)-overall < 4.5

| number-of-(OM)-grocery < 1.5

| | percentage-of-(P1)-overall < 0.03

| | | percentage-of-(PP)-overall < 0 : 1160 (3/0) [1/0]

| | | percentage-of-(PP)-overall >= 0 : 1236.3 (8/43.75) [2/3556.25]

| | percentage-of-(P1)-overall >= 0.03 : 1308.57 (6/0) [1/6400]

| number-of-(OM)-grocery >= 1.5 : 1332.54 (11/2095.87) [9/4534.44]

number-of-(IR)-overall >= 4.5 : 1445.71 (12/1422.22) [8/1777.78]

Size of the tree : 9

REPTree

=====

percentage-of-(IR)-overall < 0.02 : 1278.02 (22/5044.63) [10/9653.55]

percentage-of-(IR)-overall >= 0.02 : 1401.85 (18/6577.78) [11/7729.29]

Size of the tree : 3

REPTree

=====

percentage-of-(OM)-overall < 0.01

| percentage-of-(PP)-overall < 0 : 1167.72 (5/0) [4/1600]

| percentage-of-(PP)-overall >= 0 : 1288.13 (7/1567.35) [3/5746.94]

percentage-of-(OM)-overall >= 0.01

| percentage-of-(SF)-grocery < 0.01

| | percentage-of-(IP)-overall < 0.11 : 1442.04 (11/1480.99) [7/3672.26]

- | | percentage-of-(IP)-overall >= 0.11
- | | | percentage-of-(OT)-wine < 0.02 : 1341.22 (6/888.89) [2/2311.11]
- | | | percentage-of-(OT)-wine >= 0.02 : 1418.75 (7/783.67) [2/2416.33]
- | percentage-of-(SF)-grocery >= 0.01 : 1285.44 (4/1600) [3/22933.33]

Size of the tree : 11

REPTree

=====

percentage-of-(IR)-overall < 0.05 : 1329.29 (28/7128.57) [19/13152.63]

percentage-of-(IR)-overall >= 0.05

- | percentage-of-(RP)-overall < 0.04 : 1480 (9/0) [2/0]
- | percentage-of-(RP)-overall >= 0.04 : 1400 (3/0) [0/0]

Size of the tree : 5

REPTree

=====

percentage-of-(SBR)-wine < 0.07 : 1456.6 (7/1306.12) [4/1208.16]

percentage-of-(SBR)-wine >= 0.07

- | percentage-of-(RP)-wine < 0.02
- | | percentage-of-(INP)-overall < 0.02
- | | | number-of-(P1)-grocery < 0.5 : 1480 (2/0) [1/0]
- | | | number-of-(P1)-grocery >= 0.5 : 1352.65 (6/500) [3/10766.67]
- | | percentage-of-(INP)-overall >= 0.02 : 1280 (2/900) [1/900]
- | percentage-of-(RP)-wine >= 0.02
- | | number-of-(IP)-overall < 18.5
- | | | number-of-though-unit < 80.5 : 1220 (3/1422.22) [1/711.11]

- | | | number-of-though-unit >= 80.5 : 1310.85 (14/424.49) [7/8130.61]
- | | number-of-(IP)-overall >= 18.5
- | | | number-of-(PP)-grocery < 0.5 : 1160 (4/0) [2/0]
- | | | number-of-(PP)-grocery >= 0.5 : 1320 (2/0) [2/28800]

Size of the tree : 15

REPTree

=====

- percentage-of-(OM)-overall < 0.01 : 1248.94 (15/5518.22) [6/10055.11]
- percentage-of-(OM)-overall >= 0.01
 - | number-of-(PO)-overall < 4.5
 - | | percentage-of-(IR)-grocery < 0.02
 - | | | percentage-of-(QM)-overall < 0.03 : 1240 (2/0) [1/0]
 - | | | percentage-of-(QM)-overall >= 0.03 : 1318.75 (7/783.67) [2/4244.9]
 - | | percentage-of-(IR)-grocery >= 0.02 : 1389.46 (8/700) [7/2385.71]
 - | number-of-(PO)-overall >= 4.5 : 1468.9 (8/700) [5/1060]

Size of the tree : 9

Time taken to build model: 0.1 seconds

=== Cross-validation ===

=== Summary ===

Correlation coefficient 0.6619

Mean absolute error	67.7539
Root mean squared error	81.4241
Relative absolute error	75.8977 %
Root relative squared error	77.5026 %
Total Number of Instances	61

=== Run information ===

Scheme: weka.classifiers.functions.LeastMedSq -S 4 -G 0

Relation: baseline_fv-weka.filters.unsupervised.attribute.Remove-R228,238

Instances: 61

Attributes: 242

[list of attributes omitted]

Test mode: 10-fold cross-validation

=== Classifier model (full training set) ===

Linear Regression Model

profit.joint =

-173.5464 * percentage-of-(PT)-overall +

217.7137 * percentage-of-(QM)-overall +

-32.3662 * percentage-of-(MIC)-wine +

-0.27 * number-of-(P1)-grocery +
0.0618 * east.asian.time.in.us +
83.2547 * percentage-of-(SBE)-grocery +
-140.2839 * percentage-of-(MINEG)-grocery +
132.2925 * percentage-of-(INN)-grocery +
189.5474 * percentage-of-(IR)-grocery +
4.1769 * number-of-(IDN)-overall +
561.7718 * percentage-of-(RT)-overall +
-28.2785 * percentage-of-(MIN)-overall +
0.5052 * number-of-(QM)-overall +
-0.0456 * number-of-(MIN)-overall +
9.2351 * percentage-of-(QS)-wine +
-1.2373 * number-of-(SF)-overall +
-879.0015 * percentage-of-(IS)-wine +
110.4433 * percentage-of-(QM)-grocery +
5.2548 * number-of-(IB)-grocery +
-2.8285 * number-of-(RT)-grocery +
229.1256 * percentage-of-(PX)-overall +
0.7782 * number-of-(PP)-grocery +
0.0138 * number-of-(IDP)-wine +
2.356 * number-of-(GD)-grocery +
106.7925 * percentage-of-(OM)-overall +
5.9535 * percentage-of-(OT)-wine +
348.8161 * percentage-of-(RT)-wine +
-113.8841 * percentage-of-(QS)-overall +

-42.2851 * percentage-of-(RP)-overall +
-221.5859 * percentage-of-(RN)-grocery +
-4.8508 * number-of-(IDP)-grocery +
-309.0324 * percentage-of-(IDP)-overall +
-2.6809 * number-of-(MINEG)-wine +
-3.5826 * number-of-(PX)-grocery +
-96.4165 * percentage-of-(IS)-grocery +
260.0278 * percentage-of-(IB)-grocery +
122.4678 * percentage-of-(QM)-wine +
-9.3466 * cultural_intelligence +
-0.0052 * number-of-thought-unit +
-4.8261 * number-of-(CS)-grocery +
-0.3962 * number-of-(GD)-overall +
6.1007 * percentage-of-(MIN)-wine +
-141.4858 * percentage-of-(INP)-overall +
-0.9177 * number-of-(OS)-grocery +
4.1867 * number-of-(INP)-wine +
-1.832 * number-of-(RN)-wine +
-79.0086 * percentage-of-(RT)-grocery +
-31.1461 * percentage-of-(MIN)-grocery +
-134.7309 * percentage-of-(INP)-grocery +
2.2164 * number-of-(IR)-wine +
-0.1789 * number-of-(QR)-overall +
-16.3505 * number-of-(IS)-grocery +
4.416 * number-of-(IDN)-wine +

-0.1515 * number-of-(QP)-overall +
0.5785 * extroversion +
1.0668 * number-of-(OM)-grocery +
-164.4584 * percentage-of-(IS)-overall +
-0.5524 * number-of-(QP)-wine +
-0.8423 * number-of-(IB)-wine +
-200.9335 * percentage-of-(RN)-overall +
2.3169 * number-of-(IR)-grocery +
87.8855 * percentage-of-(QR)-overall +
1.0858 * number-of-(IB)-overall +
-0.7252 * number-of-(QS)-overall +
125.8823 * percentage-of-(PC)-wine +
-0.953 * number-of-(MINEG)-overall +
224.3451 * percentage-of-(PM)-wine +
-4.214 * number-of-(PW)-grocery +
3.4566 * number-of-(PM)-grocery +
-337.1085 * percentage-of-(GD)-overall +
256.5542 * percentage-of-(PO)-overall +
2.684 * number-of-(SBE)-overall +
2.6982 * number-of-(PX)-wine +
70.6297 * percentage-of-(PW)-grocery +
-3.057 * number-of-(SF)-grocery +
54.0504 * percentage-of-(RP)-grocery +
0.132 * number-of-(QR)-wine +
-347.5125 * percentage-of-(MU)-overall +

99.0207 * percentage-of-(OM)-wine +
2.2505 * number-of-(PM)-overall +
-0.272 * number-of-(OS)-overall +
-0.002 * number-of-(MIC)-wine +
79.8113 * percentage-of-(QP)-grocery +
6.9051 * IQ +
616.3585 * percentage-of-(PM)-overall +
1.5333 * number-of-(IR)-overall +
2.1574 * number-of-(PO)-wine +
-241.9598 * percentage-of-(QB)-grocery +
-1.622 * number-of-(IDP)-overall +
-6.6492 * number-of-(IS)-wine +
151.6068 * percentage-of-(PX)-wine +
45.1799 * percentage-of-(PP)-overall +
-1.4614 * number-of-(RN)-grocery +
-0.6693 * number-of-(PC)-overall +
860.4863 * percentage-of-(PT)-wine +
-157.3599 * percentage-of-(IP)-overall +
-0.8725 * number-of-(MINEG)-grocery +
3.7909 * number-of-(IDN)-grocery +
-0.1283 * number-of-(OT)-grocery +
-77.8799 * percentage-of-(PC)-overall +
26.4119 * percentage-of-(QR)-grocery +
-1.0626 * number-of-(RN)-overall +
-534.9968 * percentage-of-(CS)-grocery +

226.3534 * percentage-of-(CS)-wine +
-194.5415 * percentage-of-(MU)-grocery +
1899.937 * percentage-of-(QB)-wine +
-485.5453 * percentage-of-(SF)-overall +
1.9988 * number-of-(PO)-overall +
3.2364 * number-of-(PM)-wine +
-0.0381 * number-of-(SBR)-overall +
-98.2699 * percentage-of-(SF)-wine +
-1.6504 * number-of-(MU)-wine +
-46.5578 * percentage-of-(P1)-grocery +
0.118 * number-of-(QP)-grocery +
-1.5641 * number-of-(P1)-wine +
-152.5227 * percentage-of-(QS)-grocery +
0.4042 * number-of-(OM)-overall +
-356.2242 * percentage-of-(PC)-grocery +
1.1936 * number-of-(PX)-overall +
-110.8848 * percentage-of-(P1)-wine +
720.5628 * percentage-of-(SBE)-overall +
0.3869 * number-of-(OS)-wine +
-4.2139 * number-of-(PW)-overall +
-0.0162 * openness +
-0.9174 * number-of-(IP)-overall +
-0.2996 * number-of-(OT)-wine +
2.8026 * number-of-(PO)-grocery +
2.8458 * number-of-(RT)-overall +

0.4033 * mean_age +
-1.4649 * number-of-(IP)-wine +
3.9558 * number-of-(INN)-grocery +
-0.1326 * number-of-(OT)-overall +
-95.0467 * percentage-of-(OS)-overall +
-0.4109 * negative_experience=yes +
-0.6813 * number-of-(QR)-grocery +
-0.5583 * number-of-(QS)-wine +
-9.1846 * number-of-(IS)-overall +
-8.807 * percentage-of-(SBR)-grocery +
-0.2206 * number-of-(MIN)-wine +
-134.1199 * percentage-of-(IP)-wine +
2.6586 * number-of-(PC)-wine +
-0.9628 * number-of-(IP)-grocery +
0.4212 * number-of-(INP)-overall +
-103.7701 * percentage-of-(MU)-wine +
4.5054 * number-of-(CS)-wine +
-0.0096 * number-of-(PT)-overall +
-0.8519 * number-of-(P1)-overall +
0.0493 * number-of-thought-unit-grocery +
-14.9106 * percentage-of-(SBR)-overall +
-3.3794 * number-of-(GD)-wine +
1.8031 * number-of-(CS)-overall +
0.3025 * number-of-(MIC)-overall +
256.0975 * percentage-of-(IDN)-grocery +

-164.5841 * percentage-of-(OS)-grocery +
-407.9288 * percentage-of-(IDP)-grocery +
473.3398 * percentage-of-(PM)-grocery +
-0.8242 * number-of-(INP)-grocery +
-4.07 * number-of-(PC)-grocery +
180.3227 * percentage-of-(PW)-overall +
-1.3347 * number-of-(PP)-wine +
20.3426 * number-of-(QB)-wine +
1.2753 * number-of-(INN)-wine +
0.1736 * number-of-(MIN)-grocery +
177.1842 * percentage-of-(IR)-wine +
0.0419 * number-of-(SBR)-grocery +
76.9913 * percentage-of-(OM)-grocery +
160.003 * percentage-of-(PO)-wine +
113.2008 * percentage-of-(QR)-wine +
-108.9238 * percentage-of-(P1)-overall +
95.7531 * percentage-of-(MIC)-grocery +
149.1806 * percentage-of-(PO)-grocery +
381.9857 * percentage-of-(IDN)-wine +
-8.0727 * percentage-of-(RP)-wine +
9.5248 * percentage-of-(PP)-grocery +
0.2417 * number-of-(QM)-wine +
246.3466 * percentage-of-(IB)-overall +
-121.1723 * percentage-of-(PP)-wine +
-2.2793 * number-of-(PT)-grocery +

-0.61 * education=Graduate +
-3.054 * number-of-(RP)-wine +
260.4049 * percentage-of-(INN)-overall +
-19.5579 * percentage-of-(SBR)-wine +
2.2774 * number-of-(MU)-grocery +
-0.7 * wine-is-East-Asian=True +
3.7709 * number-of-(RT)-wine +
-68.1962 * percentage-of-(RN)-wine +
46.1015 * percentage-of-(MIC)-overall +
0.6154 * number-of-(MU)-overall +
194.7331 * percentage-of-(SBE)-wine +
-9.2071 * percentage-of-(QP)-overall +
0.2089 * number-of-(OM)-wine +
63.0058 * percentage-of-(INN)-wine +
17.6659 * percentage-of-(OS)-wine +
474.5013 * percentage-of-(IDN)-overall +
1.3224 * number-of-(RP)-grocery +
-5.8279 * percentage-of-(OT)-grocery +
-36.893 * percentage-of-(IDP)-wine +
15.3692 * percentage-of-(IB)-wine +
1.6561 * number-of-(SF)-wine +
-68.4876 * percentage-of-(MINEG)-overall +
0.7524 * number-of-(MIC)-grocery +
-0.0635 * number-of-though-unit-wine +
-193.9636 * percentage-of-(GD)-grocery +

-497.5344 * percentage-of-(PT)-grocery +
0.1074 * number-of-(PP)-overall +
2.9926 * number-of-(SBE)-grocery +
-74.1375 * percentage-of-(PX)-grocery +
-40.1755 * percentage-of-(QP)-wine +
7.7681 * number-of-(PT)-wine +
88.5856 * percentage-of-(MINEG)-wine +
-1.8545 * number-of-(QB)-grocery +
4.8917 * percentage-of-(OT)-overall +
1.0693 * number-of-(QM)-grocery +
1.7385 * number-of-(SBE)-wine +
-261.0498 * percentage-of-(GD)-wine +
252.0829 * percentage-of-(IR)-overall +
9.3348 * emotional.intelligence +
-76.174 * percentage-of-(IP)-grocery +
-334.8881 * percentage-of-(SF)-grocery +
-206.7198 * percentage-of-(CS)-overall +
-0.7349 * number-of-(RP)-overall +
-1.1956 * number-of-(QS)-grocery +
310.7852 * percentage-of-(QB)-overall +
2.3099 * number-of-(QB)-overall +
2.4663 * number-of-(INN)-overall +
-0.1404 * number-of-(SBR)-wine +
175.1724 * percentage-of-(INP)-wine +
1355.7526

Time taken to build model: 16.92 seconds

=== Cross-validation ===

=== Summary ===

Correlation coefficient	0.7031
Mean absolute error	60.4641
Root mean squared error	75.6522
Relative absolute error	67.7317 %
Root relative squared error	72.0087 %
Total Number of Instances	61

=== Run information ===

Scheme: weka.classifiers.functions.LinearRegression -S 0 -R 1.0E-8

Relation: baseline_fv-weka.filters.unsupervised.attribute.Remove-R228,238

Instances: 61

Attributes: 242

[list of attributes omitted]

Test mode: 10-fold cross-validation

=== Classifier model (full training set) ===

Linear Regression Model

profit.joint =

698.3489 * percentage-of-(PT)-overall +
179.6349 * percentage-of-(QM)-overall +
-428.8862 * percentage-of-(MINEG)-grocery +
-487.3816 * percentage-of-(INN)-grocery +
379.7967 * percentage-of-(IR)-grocery +
-37.6389 * percentage-of-(MIN)-overall +
0.5892 * number-of-(QM)-overall +
-3.5138 * number-of-(SF)-overall +
-583.6628 * percentage-of-(IS)-wine +
11.0055 * number-of-(IB)-grocery +
1.4636 * number-of-(PP)-grocery +
6.6772 * number-of-(IDP)-wine +
204.0384 * percentage-of-(OM)-overall +
260.9179 * percentage-of-(RT)-wine +
-150.7677 * percentage-of-(QS)-overall +
-309.2214 * percentage-of-(RP)-overall +
-197.8737 * percentage-of-(RN)-grocery +
732.794 * percentage-of-(IDP)-overall +
-286.8839 * percentage-of-(IS)-grocery +
193.8253 * percentage-of-(QM)-wine +
-21.2369 * cultural_intelligence +
-2.6687 * number-of-(CS)-grocery +

68.8972 * percentage-of-(MIN)-wine +
-518.5202 * percentage-of-(INP)-overall +
0.4945 * number-of-(OS)-grocery +
-4.4475 * number-of-(INP)-wine +
-2.668 * number-of-(RN)-wine +
-881.2606 * percentage-of-(RT)-grocery +
-116.9806 * percentage-of-(MIN)-grocery +
-437.6143 * percentage-of-(INP)-grocery +
2.7227 * number-of-(IR)-wine +
-36.1579 * number-of-(IS)-grocery +
-6.2386 * number-of-(IDN)-wine +
-0.4896 * number-of-(QP)-overall +
-6.2912 * extroversion +
3.1525 * number-of-(OM)-grocery +
-280.4933 * percentage-of-(IS)-overall +
-2.286 * number-of-(QP)-wine +
-3.0472 * number-of-(IB)-wine +
-234.2862 * percentage-of-(RN)-overall +
6.1911 * number-of-(IR)-grocery +
1.4269 * number-of-(IB)-overall +
-1.3215 * number-of-(QS)-overall +
210.1676 * percentage-of-(PC)-wine +
-2.0089 * number-of-(MINEG)-overall +
343.9494 * percentage-of-(PM)-wine +
7.4612 * number-of-(PM)-grocery +

-2.4827 * number-of-(PX)-wine +
-4.8219 * number-of-(SF)-grocery +
3.7376 * number-of-(PM)-overall +
129.1117 * percentage-of-(QP)-grocery +
598.4612 * percentage-of-(PM)-overall +
3.2611 * number-of-(IR)-overall +
4.9223 * number-of-(PO)-wine +
5.4329 * number-of-(IDP)-overall +
-162.4383 * percentage-of-(PX)-wine +
-2.2489 * number-of-(RN)-grocery +
1.2812 * number-of-(PC)-overall +
-71.3132 * percentage-of-(IP)-overall +
-4.231 * number-of-(MINEG)-grocery +
5.471 * number-of-(IDN)-grocery +
0.4667 * number-of-(OT)-grocery +
-139.6436 * percentage-of-(QR)-grocery +
-1.5749 * number-of-(RN)-overall +
-264.4807 * percentage-of-(CS)-grocery +
524.7429 * percentage-of-(CS)-wine +
-1843.9615 * percentage-of-(SF)-overall +
2.7642 * number-of-(PO)-overall +
2.8813 * number-of-(PM)-wine +
35.6727 * number-of-(ESBR)-grocery +
-0.0857 * number-of-(SBR)-overall +
-1031.97 * percentage-of-(SF)-wine +

-5.1814 * number-of-(MU)-wine +
201.3503 * percentage-of-(P1)-grocery +
0.7205 * number-of-(QP)-grocery +
-160.058 * percentage-of-(QS)-grocery +
1.4226 * number-of-(OM)-overall +
6742.1039 * percentage-of-(ESBR)-overall +
-489.8153 * percentage-of-(PC)-grocery +
-2.2418 * number-of-(PX)-overall +
124.4 * percentage-of-(P1)-wine +
970.153 * percentage-of-(SBE)-overall +
12.0163 * openness +
-0.9321 * number-of-(IP)-overall +
0.5938 * number-of-(OT)-wine +
2.2389 * number-of-(PO)-grocery +
3.167 * number-of-(RT)-overall +
-1.1521 * number-of-(IP)-wine +
2.7025 * number-of-(INN)-grocery +
0.314 * number-of-(OT)-overall +
-4.1581 * negative_experience=yes +
-1.7659 * number-of-(QS)-wine +
-14.5876 * number-of-(IS)-overall +
-0.198 * number-of-(MIN)-wine +
-165.6113 * percentage-of-(IP)-wine +
7.9547 * number-of-(PC)-wine +
-1.4413 * number-of-(IP)-grocery +

-1.8269 * number-of-(INP)-overall +
-339.6168 * percentage-of-(MU)-wine +
5.8812 * number-of-(CS)-wine +
2.4458 * number-of-(PT)-overall +
0.0939 * number-of-thought-unit-grocery +
3.2179 * number-of-(CS)-overall +
0.5462 * number-of-(MIC)-overall +
226.2379 * percentage-of-(PM)-grocery +
-5.353 * number-of-(PC)-grocery +
5.8972 * number-of-(INN)-wine +
0.238 * number-of-(MIN)-grocery +
35.6727 * number-of-(ESBR)-overall +
-170.8721 * percentage-of-(IR)-wine +
271.0393 * percentage-of-(OM)-grocery +
111.3242 * percentage-of-(PO)-wine +
255.8113 * percentage-of-(QR)-wine +
274.7723 * percentage-of-(P1)-overall +
101.5481 * percentage-of-(MIC)-grocery +
-143.5959 * percentage-of-(PO)-grocery +
-592.2078 * percentage-of-(IDN)-wine +
-72.245 * percentage-of-(RP)-wine +
-115.5263 * percentage-of-(PP)-grocery +
279.2444 * percentage-of-(IB)-overall +
-194.4369 * percentage-of-(PP)-wine +
3.6372 * number-of-(PT)-grocery +

-18.1916 * education=Graduate +
-8.4499 * number-of-(RP)-wine +
-17.3838 * percentage-of-(SBR)-wine +
9.0437 * number-of-(MU)-grocery +
-5.2279 * wine-is-East-Asian=True +
3.7703 * number-of-(RT)-wine +
109.1648 * percentage-of-(MIC)-overall +
2.962 * number-of-(MU)-overall +
2155.5005 * percentage-of-(SBE)-wine +
1.4033 * number-of-(OM)-wine +
804.9037 * percentage-of-(INN)-wine +
-114.023 * percentage-of-(OS)-wine +
3.5147 * number-of-(RP)-grocery +
-98.4863 * percentage-of-(OT)-grocery +
3710.1114 * percentage-of-(ESBR)-grocery +
416.6729 * percentage-of-(IDP)-wine +
164.9079 * percentage-of-(IB)-wine +
-176.0814 * percentage-of-(MINEG)-overall +
1.3236 * number-of-(MIC)-grocery +
-0.053 * number-of-thought-unit-wine +
624.7117 * percentage-of-(PT)-grocery +
1.0641 * number-of-(PP)-overall +
-111.6252 * percentage-of-(QP)-wine +
3.5412 * number-of-(PT)-wine +
207.0168 * percentage-of-(MINEG)-wine +

$$\begin{aligned}
& 1.5514 * \text{number-of-(QM)-grocery} + \\
& 19.2465 * \text{number-of-(SBE)-wine} + \\
& 278.0538 * \text{percentage-of-(IR)-overall} + \\
& 36.8699 * \text{percentage-of-(IP)-grocery} + \\
& -1147.3231 * \text{percentage-of-(SF)-grocery} + \\
& 413.7494 * \text{percentage-of-(CS)-overall} + \\
& -1.8438 * \text{number-of-(RP)-overall} + \\
& -1.36 * \text{number-of-(QS)-grocery} + \\
& 5.7859 * \text{number-of-(QB)-overall} + \\
& 3.5409 * \text{number-of-(INN)-overall} + \\
& -0.1587 * \text{number-of-(SBR)-wine} + \\
& -313.152 * \text{percentage-of-(INP)-wine} + \\
& 1415.2972
\end{aligned}$$

Time taken to build model: 1.03 seconds

=== Cross-validation ===

=== Summary ===

Correlation coefficient	0.7114
Mean absolute error	64.3184
Root mean squared error	86.415
Relative absolute error	72.0492 %
Root relative squared error	82.2531 %
Total Number of Instances	61

