=== Run information ===

Scheme: weka.classifiers.functions.LibSVM -S 0 -K 2 -D 3 -G 0.0 -R 0.0 -N 0.5 -M 40.0 -C 1.0 -E 0.001 -P 0.1 -model "C:\\Program Files\\Weka-3-7" -seed 1

Relation: businessandtip\_task1\_with15categories-weka.filters.unsupervised.attribute.NominalToString-C1-2-weka.filters.unsupervised.attribute.StringToWordVector-R1,2-W2500-prune-rate-1.0-C-T-I-N1-L-S-stemmerweka.core.stemmers.NullStemmer-M1-tokenizerweka.core.tokenizers.NGramTokenizer -max 2 -min 2 -delimiters " \r\n\t.,;:\'\"()?!"-weka.filters.unsupervised.attribute.Reorder-R2-last,1-weka.filters.supervised.attribute.AttributeSelection-Eweka.attributeSelection.InfoGainAttributeEval-Sweka.attributeSelection.Ranker -T 0.0 -N -1

Instances: 7217

Attributes: 1014

[list of attributes omitted]

Test mode: 5-fold cross-validation

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

LibSVM wrapper, original code by Yasser EL-Manzalawy (= WLSVM)

Time taken to build model: 34.1 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances 4421 61.2581 %

Incorrectly Classified Instances 2796 38.7419 %

Kappa statistic 0.2974

Mean absolute error 0.0517

Root mean squared error 0.2273

Relative absolute error 55.0881 %

Root relative squared error 105.0094 %

Coverage of cases (0.95 level) 61.2581 %

Mean rel. region size (0.95 level) 6.6667 %

Total Number of Instances 7217

=== Detailed Accuracy By Class ===

TP Rate FP Rate Precision Recall F-Measure MCC ROC Area PRC Area Class

0.000 0.000 0.000 0.000 0.000 0.000 0.500 0.047 Doctors

0.301 0.006 0.915 0.301 0.453 0.482 0.648 0.398 Active Life

0.493 0.000 0.990 0.493 0.658 0.682 0.746 0.531 Beauty and Spas

0.998 0.754 0.565 0.998 0.721 0.368 0.622 0.564 Food

0.000 0.000 0.000 0.000 0.000 0.000 0.500 0.008 Adult Entertainment

0.228 0.001 0.945 0.228 0.368 0.445 0.613 0.288 Arts and Entertainment

0.056 0.000 0.960 0.056 0.105 0.224 0.528 0.110 Auto Repair

0.000 0.000 0.000 0.000 0.000 0.000 0.500 0.008 Professional Services

0.000 0.000 0.000 0.000 0.000 0.000 0.500 0.008 Tattoo

0.000 0.000 0.000 0.000 0.000 0.000 0.500 0.007 Electronics

0.000 0.000 0.000 0.000 0.000 0.000 0.500 0.003 Grocery

0.000 0.000 0.000 0.000 0.000 0.000 0.500 0.010 Wine Bars

0.000 0.000 0.000 0.000 0.000 0.000 0.500 0.001 Real Estate

0.000 0.000 0.000 0.000 0.000 0.000 0.500 0.000 Adult Education

0.000 0.000 0.000 0.000 0.000 0.000 0.500 0.000 Tours

Weighted Avg. 0.613 0.374 0.669 0.613 0.532 0.379 0.619 0.430

=== Confusion Matrix ===

a b c d e f g h i j k l m n o <-- classified as

0 0 0 339 0 1 0 0 0 0 0 0 0 0 0 | a = Doctors

0 379 1 872 0 6 0 0 0 0 0 0 0 0 0 | b = Active Life

0 3 300 306 0 0 0 0 0 0 0 0 0 0 0 | c = Beauty and Spas

0 6 0 3563 0 1 1 0 0 0 0 0 0 0 0 | d = Food

0 0 0 54 0 1 0 0 0 0 0 0 0 0 0 | e = Adult Entertainment

0 24 1 499 0 155 0 0 0 0 0 0 0 0 0 | f = Arts and Entertainment

0 1 0 406 0 0 24 0 0 0 0 0 0 0 0 | g = Auto Repair

0 0 0 58 0 0 0 0 0 0 0 0 0 0 0 | h = Professional Services

0 0 1 59 0 0 0 0 0 0 0 0 0 0 0 | i = Tattoo

0 1 0 48 0 0 0 0 0 0 0 0 0 0 0 | j = Electronics

0 0 0 23 0 0 0 0 0 0 0 0 0 0 0 | k = Grocery

0 0 0 74 0 0 0 0 0 0 0 0 0 0 0 | l = Wine Bars

0 0 0 6 0 0 0 0 0 0 0 0 0 0 0 | m = Real Estate

0 0 0 2 0 0 0 0 0 0 0 0 0 0 0 | n = Adult Education

0 0 0 2 0 0 0 0 0 0 0 0 0 0 0 | o = Tours