2018年11月2日星期五

下午3时58分

上午确定了针对用户的关系特征进行Kmeans聚类的方案，然后一个中午写好了程序，首先对Insiders\_2的30个用户进行了实验，得到聚类的基本信息如下：

['BYO1846', 0, 31] ['CHP1711', 8, 31]

['CIF1430', 5, 31] ['CKP0630', 1, 814]

['DCC1119', 6, 31] ['GWG0497', 9, 35]

['HIS1394', 8, 184] ['HMS1658', 3, 31]

['HSN0675', 5, 123] ['HXP0976', 6, 43]

['ICB1354', 0, 814] ['ITA0159', 4, 26]

['JAL0811', 7, 28] ['KSS1005', 6, 29]

['LVF1626', 0, 123] ['MCP0611', 8, 27]

['MDS0680', 4, 262] ['MGB1235', 6, 32]

['NAH1366', 8, 28] ['OKM1092', 9, 30]

['OSS1463', 7, 20] ['RRS0056', 9, 239]

['SIS0042', 6, 37] ['SNK1280', 7, 137]

['TMT0851', 6, 134] ['TNB1616', 4, 239]

['TRC1838', 5, 31] ['VCF1602', 0, 115]

['WDT1634', 0, 31] ['ZIE0741', 3, 38]

上述信息中，第一个参数为用户ID，第二个参数为所在其关系聚类中群簇标号，然后是该群簇拥有的用户人数。

接下来，我们试着对上述结果进行以下粗浅的分析。

（1）

RRS0056拥有239个朋友，而NAH1336只有30个朋友，那么我们看看他们的OCEAN如何？

RRS0056,30,44,15,17,38

NAH1366,46,45,19,13,29

人格特质E外倾性的表示不明确，似乎表明全体用户中低外倾性的人比较多，因此更容易聚成一类。我们的基本假设是：人格特质相同的更容易成为朋友；

（2）

而上述得到的Relationship与离职用户的比较表明：结果十分差，几乎所有的用户都没有匹配到离职用户

0 BYO1846

3 [3, 'RMB1821', 'FDS1841', 'TRC1838']

1 CHP1711

2 [2, 'KDP1706', 'SCO1719']

2 CIF1430

1 [1, 'PTM1432']

3 CKP0630

38 [38, 'JAT1218', 'KSW0708', 'WMH1300', 'LAS0256', 'GWO1660', 'CBC1504', 'JSB0860', 'CDO0684', 'KDP1706', 'CDG0770', 'FKH0864', 'CLL0306', 'JRC1963', 'QSG1150', 'QAP0266', 'BAR1328', 'OCW1127', 'PKS1187', 'GER0350', 'OCD1985', 'MPF0690', 'USM0703', 'RKW1936', 'RDP1751', 'BMR0865', 'CRD0272', 'AWW0718', 'EJO0236', 'DAS1320', 'HKK0881', 'ESP1198', 'SCO1719', 'ZJN1492', 'SAF1942', 'ZIE0741', 'DTB0722', 'CEW1960', 'EPG1196']

4 DCC1119

5 [5, 'OCW1127', 'ELM1123', 'ACA1126', 'KJG1121', 'GKW0043']

5 GWG0497

0 [0]

6 HIS1394

19 [19, 'JBG1375', 'GMM1037', 'TCP0380', 'CDG0770', 'OCW1127', 'GER0350', 'FKS1696', 'BMR0865', 'CRD0272', 'SAF1942', 'NBL1190', 'WFV0687', 'CHP1711', 'JKB0287', 'DNJ0740', 'SCI0778', 'ISW0738', 'LMW0837', 'NTG1667']

7 HMS1658

3 [3, 'JHP1654', 'WDT1634', 'DDR1649']

8 HSN0675

8 [8, 'DCC1119', 'MBW1149', 'CIM1095', 'ICB1354', 'DPK0954', 'CKL0652', 'IJM0603', 'LMM0167']

9 HXP0976

2 [2, 'KBC1390', 'NBL1190']

10 ICB1354

68 [68, 'JAT1218', 'KSW0708', 'WMH1300', 'LAS0256', 'GWO1660', 'CBC1504', 'JSB0860', 'CDO0684', 'KDP1706', 'CDG0770', 'FKH0864', 'CLL0306', 'JRC1963', 'QSG1150', 'QAP0266', 'BAR1328', 'OCW1127', 'PKS1187', 'GER0350', 'OCD1985', 'MPF0690', 'USM0703', 'RKW1936', 'RDP1751', 'BMR0865', 'CRD0272', 'AWW0718', 'EJO0236', 'DAS1320', 'HKK0881', 'ESP1198', 'SCO1719', 'ZJN1492', 'SAF1942', 'ZIE0741', 'DTB0722', 'CEW1960', 'EPG1196', 'ILG0879', 'DMP0344', 'DEO1964', 'MDS0680', 'CNM0787', 'NBL1190', 'WHG1669', 'SMS0432', 'WFV0687', 'STH0353', 'RPJ1159', 'CHP1711', 'JKB0287', 'DNJ0740', 'ELM1123', 'DXF1662', 'NAO1281', 'SCI0778', 'ISW0738', 'ICB1890', 'NTG1667', 'REF1924', 'PCK0271', 'DHR1157', 'BRG0728', 'HPM0360', 'ACA1126', 'KJG1121', 'JOE1672', 'KVF1143']

11 ITA0159

2 [2, 'MCP0611', 'VVG0624']

12 JAL0811

2 [2, 'GER0350', 'STH0353']

13 KSS1005

1 [1, 'GPO1020']

14 LVF1626

9 [9, 'MIB0203', 'KBC0818', 'GWH0961', 'MMB0556', 'VVG0624', 'GCB0118', 'CHP1711', 'JDB1163', 'NEG0281']

15 MCP0611

1 [1, 'CKP0630']

16 MDS0680

13 [13, 'NWP1609', 'XMG1579', 'KBC0818', 'WBP0828', 'NWH0960', 'JXH1061', 'UAM1108', 'VCF1602', 'PTV0067', 'OJC0930', 'TNB1616', 'WDT1634', 'DHS0204']

17 MGB1235

0 [0]

18 NAH1366

0 [0]

19 OKM1092

3 [3, 'HSF1115', 'UAM1108', 'ZHB1104']

20 OSS1463

0 [0]

21 RRS0056

23 [23, 'LAS0256', 'TCP0380', 'JSB0860', 'CDG0770', 'QSG1150', 'BAR1328', 'OCW1127', 'RKW1936', 'FKS1696', 'BMR0865', 'JIB1258', 'SAF1942', 'ILG0879', 'DMP0344', 'DEO1964', 'WHG1669', 'WFV0687', 'DNJ0740', 'LMW0837', 'NTG1667', 'ZVW1475', 'BRG0728', 'KJG1121']

22 SIS0042

2 [2, 'MAF0467', 'ESP1198']

23 SNK1280

10 [10, 'VSB1317', 'EGM1222', 'BNS0484', 'IHC0561', 'IVS1411', 'NAH1366', 'ZKP0542', 'KFS1029', 'LCB1869', 'ELT1370']

24 TMT0851

13 [13, 'ZJN1492', 'JIP1503', 'ESP1198', 'HPM0360', 'WWW0701', 'TTR1792', 'GWG0497', 'HMK0653', 'GCB0118', 'LJM1807', 'PTH0005', 'SQC1072', 'JKB1843']

25 TNB1616

11 [11, 'WMH1300', 'CLL0306', 'QAP0266', 'BSS0847', 'OCD1985', 'RFP1918', 'HKK0881', 'ZIE0741', 'DTB0722', 'EPG1196', 'MDS0680']

26 TRC1838

2 [2, 'RMB1821', 'FDS1841']

27 VCF1602

0 [0]

28 WDT1634

1 [1, 'JHP1654']

29 ZIE0741

1 [1, 'CDO0684']