



MBTI大揭秘

队伍：数据可食化 **E**



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The background features two thick, expressive yellow brushstrokes. One stroke starts from the left edge and extends towards the center, while the other starts from the center and extends towards the right edge, creating a dynamic, abstract composition.

01

主题引入

I人和E人的区别



能量获取方式



- 问题一：刚刚经过劳累的一周，你打算放松一下。你会选择：
问题二：公共场合成为关注讨论焦点，你是否会感到尴尬不适？
问题三：你平时对待结交新朋友的態度是？

I人

1 “在家自己玩”

2 “我想找个地缝钻进去”

3 “防人之心不可无”

自我相处

E人

“出去High一下”

“完全没有，还很享受”

“四海之内皆兄弟”

谈笑风生

N人和S人的区别



信息获取方式



- 问题一：你在吵嘴的时候，主要论据是？
问题二：你是否会经常想远离实际的抽象问题？
问题三：当你审阅文件时，你一般会？

N人

1 “抓住感觉攻击”

2 “经常会想”

3 “先大概看框架”

探索未知

S人

“抓住细节攻击”

“跟我有什么关系”

“不放过每一个细节”

注重细节

MBTI !!

新的流量密码

研究主题：

1. 十六型人格的语库有何特征？
2. 哪种人格自恋指数最高？
3. 世界各国的性格分布有何规律？
4. 各种人格的关注类型如何？

数据主要来源：[Kaggle](#)

F人和T人的区别



决策方式



- 问题一：好友遇到问题向你倾诉，你通常会更多的？
问题二：当你和别人看法有一些不同意见肯冲突，你会更倾向？
问题三：认为自己是不是一个有野心的人？

F人

1 “安慰TA”

2 “尽量少提，避免冲突”

3 “基本没有”

感性

T人

“尝试帮TA解决问题”

“提出来，就事论事”

“是”

理性

P人和J人的区别



行事方式



- 问题一：你在做一件事情之前，更倾向于？
问题二：你很注重准时吗？你丢三落四吗？
问题三：是否保持家里整洁？

P人

1 “走一步看一步”

2 “很随性”

3 “我很随性”

比较灵活

J人

“尽量提前计划好”

“注重准时，不丢三落四”

“是”

有计划性

数据描述

```
final > map > countries.csv > data
1 Country,ESTJ-A,ESFJ-A,INFJ-T,ESFJ-T,ENFP-T,ENFP-A,ESTJ-T,ISFJ-T,ENFJ-A,ESTP-A,ISTJ-A,INTP-T,INFJ-T,ISFP-T,A
2 Afghanistan,0.0798,0.0594,0.0482,0.0412,0.0406,0.039,0.039,0.0377,0.0364,0.0361,0.0348,0.0316,0.0313,0.0291,
3 Albania,0.0469,0.0399,0.0836,0.0266,0.0647,0.0398,0.01979999999999999,0.0286,0.0361,0.0239,0.0223,0.0481,0.0
4 Algeria,0.021,0.0275,0.12179999999999999,0.0165,0.0525,0.0334,0.0097,0.0222,0.0202,0.0194,0.0162,0.0851,0.0
5 Andorra,0.0512,0.0372,0.1013,0.0279,0.093,0.0837,0.0893,0.0279,0.0605,0.01399999999999999,0.0185,0.0279,0.0
6 Angola,0.0484,0.0905,0.0771,0.0287,0.0475,0.0323,0.0108,0.0394,0.0475,0.026,0.0323,0.0349,0.0457,0.0224,0.0
7 Antigua and Barbuda,0.0323,0.0661,0.10679999999999999,0.0279,0.06589999999999999,0.0441,0.0898,0.0451,0.0377,0
8 Argentina,0.0159,0.027,0.151,0.0206,0.0822,0.0516,0.0886,0.0282,0.0275,0.0113,0.0177,0.0703,0.0689,0.0270,0
9 Armenia,0.05429999999999999,0.0481,0.0839,0.02279999999999999,0.0611,0.0446,0.0197,0.0254,0.0362,0.0176,0.03
10 Australia,0.0210,0.0643,0.1222,0.0395,0.092,0.05629999999999999,0.00989999999999999,0.05139999999999999,0.0364
11 Austria,0.0286,0.0333,0.1414,0.022,0.08439999999999999,0.0593,0.0898,0.0289,0.0305,0.0158,0.01929999999999999
12 Azerbaijan,0.0581,0.0412,0.08839999999999999,0.0323,0.05589999999999999,0.0305,0.0276,0.0372,0.0325,0.0174,0
13 Bahamas,0.0371,0.0649,0.0981,0.02569999999999999,0.0574,0.0503,0.0098,0.0387,0.0433,0.01419999999999999,0.03
14 Bahrain,0.0347,0.0549,0.10069999999999999,0.0349,0.0838,0.0501,0.0166,0.0385,0.03759999999999999,0.0186,0.01
15 Bangladesh,0.02889999999999999,0.0473,0.1189,0.0366,0.0713,0.03179999999999999,0.0191,0.03669999999999999,0.02
16 Barbados,0.0308,0.06,0.1127,0.0236,0.040,0.0474,0.0074,0.0449,0.0405,0.0146,0.0305,0.0356,0.0602,0.028999999
17 Belarus,0.0417,0.0306,0.1007,0.0274,0.0662,0.0275,0.0213,0.0319,0.02289999999999999,0.0279,0.0345,0.0272,0.0
18 Belgium,0.0265,0.0383,0.130,0.0308,0.0965,0.0635,0.0095,0.0383,0.0278,0.0169,0.0159,0.0449,0.06859999999999999
19 Belize,0.0288,0.05769999999999999,0.1085,0.0348,0.0661,0.0523,0.08819999999999999,0.0382,0.0387,0.0192,0.0237
20 Bhutan,0.0435,0.0913,0.1292,0.04559999999999999,0.0969,0.0421,0.0162,0.04199999999999999,0.03089999999999999,0
21 Bosnia and Herzegovina,0.0359,0.0323,0.1099,0.016,0.0665,0.0478,0.012,0.0216,0.035,0.0199,0.0182,0.0665,0.0
22 Botswana,0.0313,0.0587,0.1108,0.02509999999999999,0.072,0.0479,0.0118,0.0361,0.0418,0.0127,0.0184,0.0462,0.0
23 Brazil,0.0183,0.0275,0.1598,0.0223,0.0932,0.0484,0.0095,0.032,0.025,0.011,0.0283,0.0664,0.0742,0.0269,0.015
```

```
1 ,infj,intj,intp,infp,estj,esfj,entj,enfj,estp,esfp,entp,enfp,isfj,isfp,istj,istp
2 infj,42.61655370712672,11.11111111111111,5.647976997330048,15.762990347093858,0.72
3 intj,23.355041545025827,20.121266561868403,7.927240062878958,15.944307208623401,1.
4 intp,16.575121163166397,9.693053311793214,24.394184168012924,13.957996768982229,1.
5 infp,25.870389520854875,11.099620820406757,7.96277145811789,25.611857980006896,0.7
6 estj,15.983606557377051,10.245901639344263,5.532786885245901,12.09016393442623,5.1
7 esfj,11.22244488977956,6.613226452905812,7.214428857715431,9.418837675350701,4.008
8 entj,17.161290322580644,12.774193548387098,8.193548387096774,9.161290322580646,2.7
9 enfj,16.797778806108283,9.30124942156409,7.172605275335493,13.373438223044886,2.45
10 estp,5.150214592274678,7.296137339055794,8.15450643776824,10.72961373390558,1.7167
11 esfp,13.471502590673575,6.7357512953367875,8.031088082901555,8.549222797927461,2.0
12 entp,12.901631240731588,6.870983687592684,10.084033613445378,9.49085516559565,1.82
13 enfp,18.174431202600218,9.642470205850486,6.933911159263271,14.409534127843987,1.4
14 isfj,19.265033407572382,10.801781737193764,6.45879732739421,16.14699331848552,1.78
15 isfp,13.08562197092084,5.008077544426494,6.623586429725363,11.954765751211632,0.80
16 istj,18.4,10.4,7.6,12.8,2.4,2.4,6.2,6.2,1.0,1.6,6.6000000000000005,10.0,3.0,1.7999
17 istp,8.206686930091186,4.86322188449848,9.72644376899696,10.33434650455927,1.82370
```

世界各国的MBTI种类及对应十六型人格比例

```
{
  "ISTP": [
    {
      "text": "istp",
      "size": 400
    },
    {
      "text": "understand",
      "size": 338
    },
    {
      "text": "play",
      "size": 306
    },
    {
      "text": "problem",
      "size": 300
    }
  ]
}
```

数据处理后的词频统计

```
{group: "ENTP", character: 0.92321851321543214,
{group: "ESTP", character: 0.91321543514992431,
{group: "ENFJ", character: 0.82434782608695654,
{group: "ENTJ", character: 0.8082926829268293,
{group: "ENFP", character: 0.77414634146341465,
{group: "ESFP", character: 0.65354156124621310,
{group: "ESFJ", character: 0.62049164124531541,
{group: "INTJ", character: 0.53242146161215460,
{group: "ESTJ", character: 0.51692307692307693,
{group: "INFJ", character: 0.43258351893095768,
{group: "INTP", character: 0.39322033898305085,
{group: "INFP", character: 0.3644642857142857,
{group: "ISTP", character: 0.302988505747126436,
{group: "ISTJ", character: 0.25818181818181818,
{group: "ISFJ", character: 0.2281122421011220,
{group: "ISFP", character: 0.20666666666666667,
```

计算后的自恋指数（后文介绍）

各个MBTI关注类型及百分比

```
0.18543046357615894,
0.2024793388429752,
0.18333333333333332,
0.04516129032258064,
0.17277486910994763,
0.09844559585492228,
0.029197080291970802,
0.65354156124621310,
0.04032258064516129,
0.35877862595419846,
0.10215053763440861,
-0.014925373134328358,
0.5494505494505495,
0.4625,
0.2236842105263158,
-0.03125
```

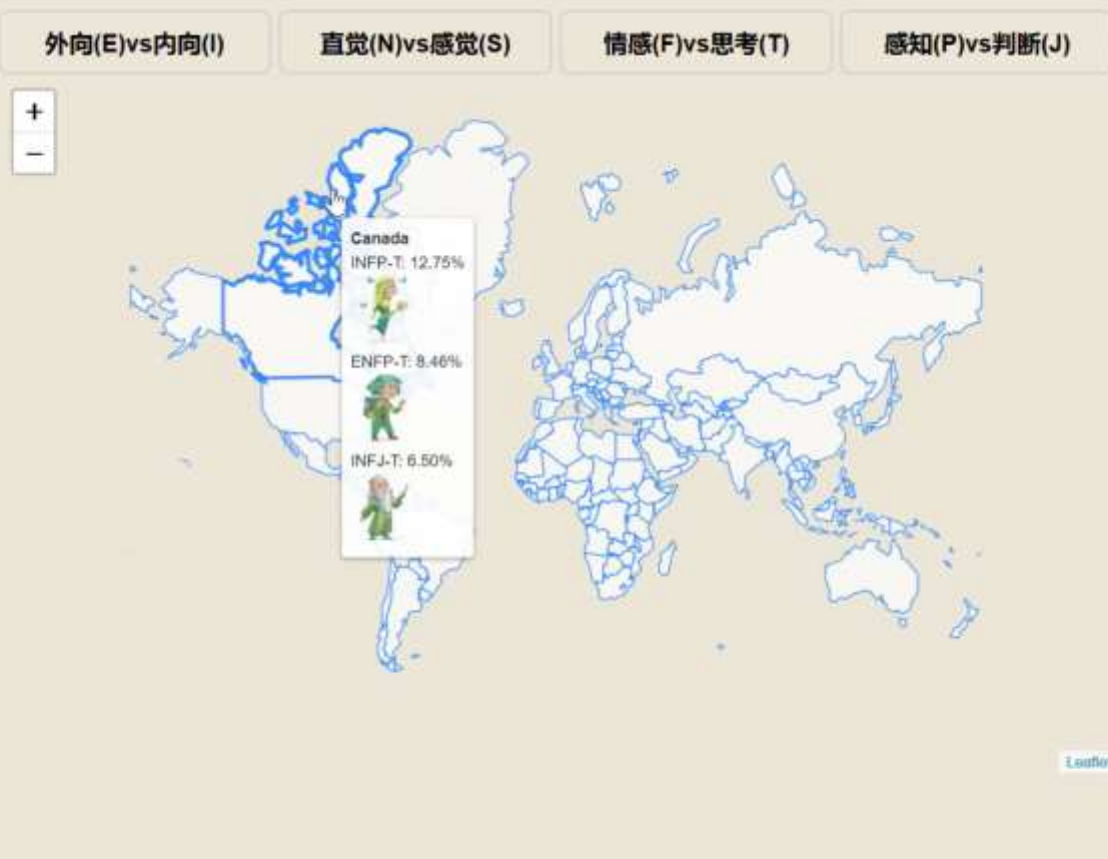
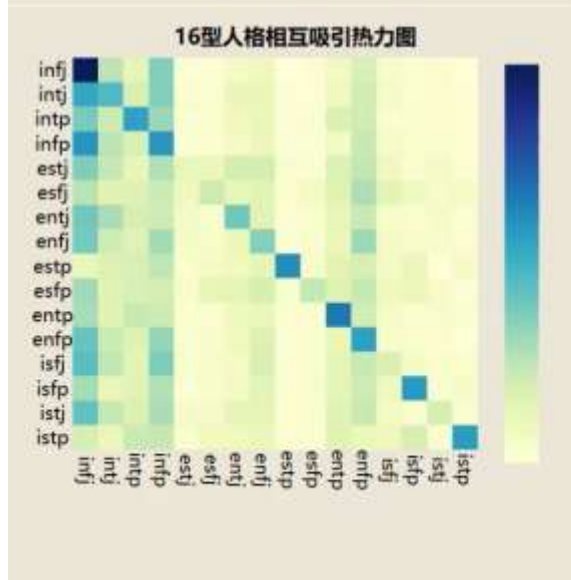
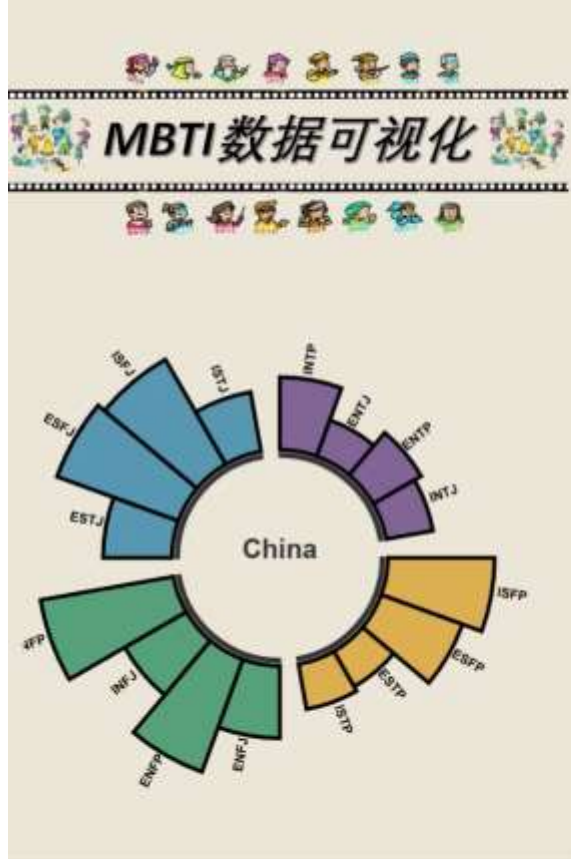
计算后的情感得分（在后文详细介绍）

The background of the slide features two thick, expressive red brushstrokes. One stroke starts from the left edge and extends diagonally upwards towards the top right. The second stroke starts from the bottom left and extends horizontally towards the right edge, slightly overlapping the first stroke. Both strokes have a textured, painterly appearance with visible brush marks.

02

整体概览

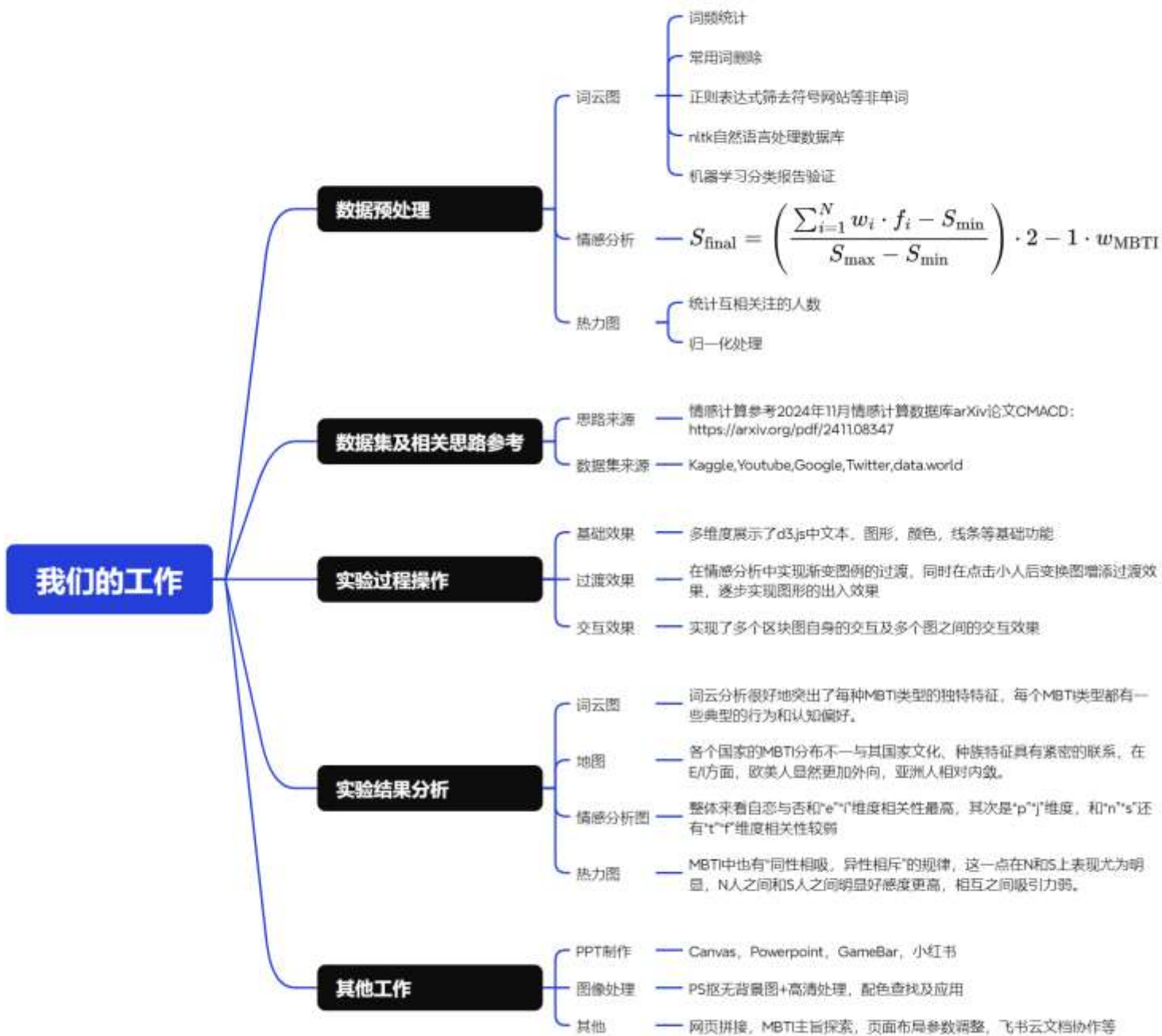
视频介绍



A large, expressive blue brushstroke that starts from the left, curves upwards and to the right, then loops back down and to the right, creating a dynamic, abstract shape. The stroke has a textured, painterly quality with visible brush marks.

03

我们的工作

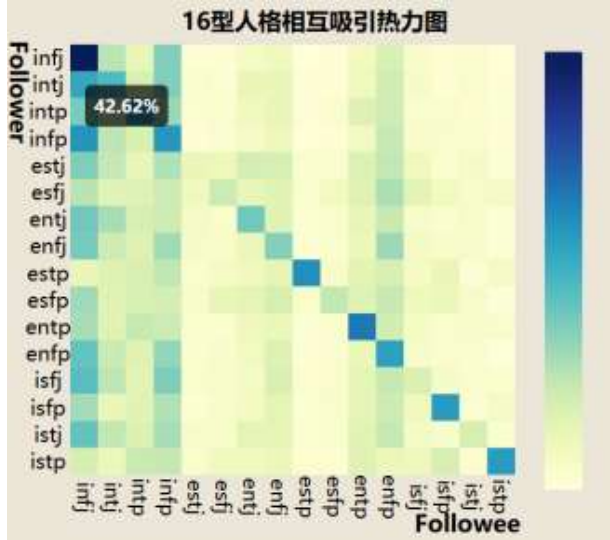
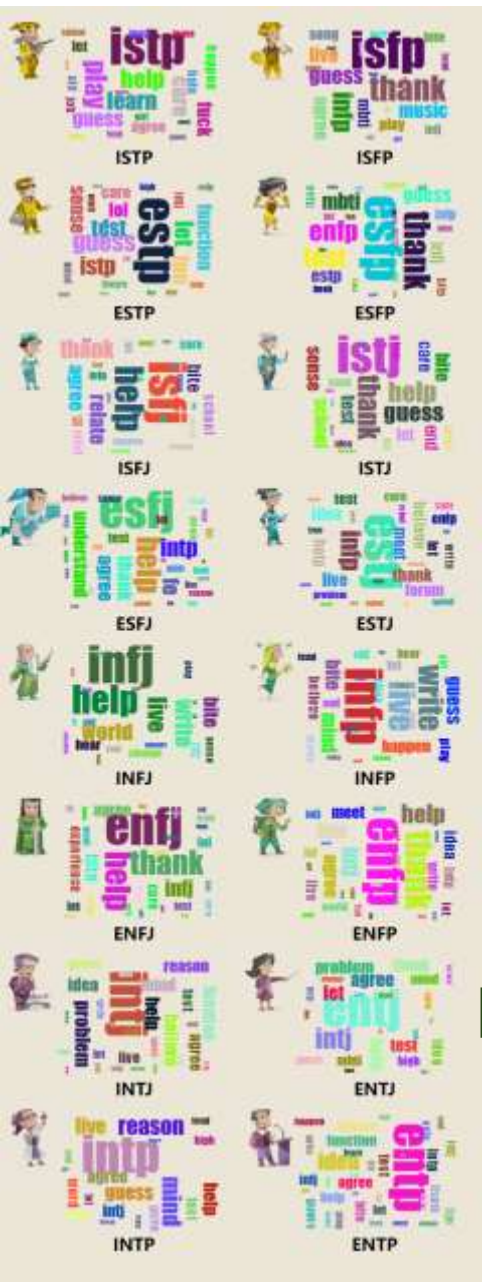


The background of the slide features two broad, overlapping yellow brushstrokes. The top stroke is angled downwards from left to right, while the bottom stroke is more horizontal. Both strokes have a textured, painterly appearance with visible brush marks.

04

具体描述

词云图/热力图



热力图每个小正方形上都显示了两两之间的百分比关系

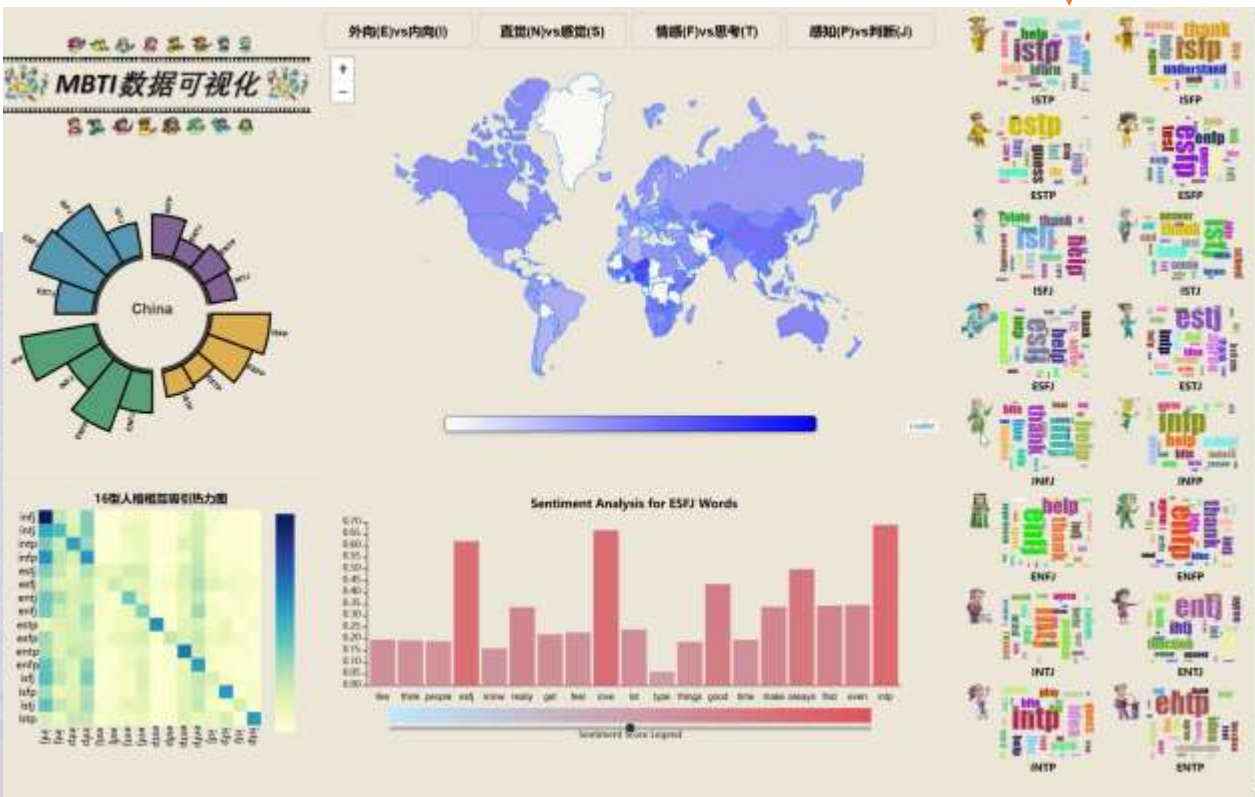
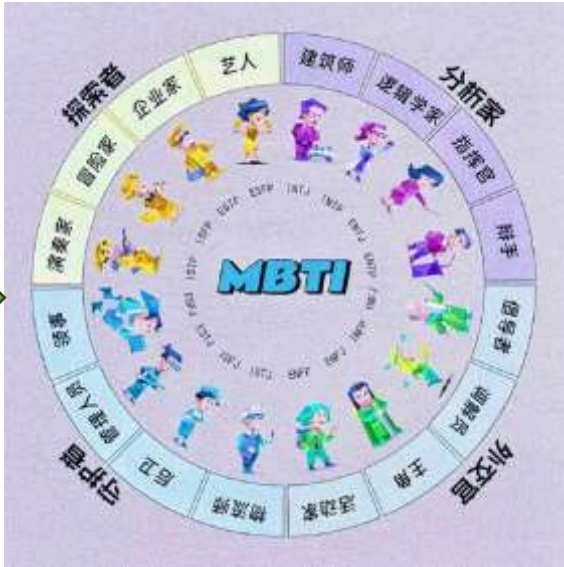
鼠标悬停在MBTI的小人上面时，会出现高亮效果

点击小人之后，会和地图，情感分析图出现交互效果

交互过程很好地实现了过渡效果



交互效果 视频录制



情感分析图



第*i*个情感词的权重
(正值表示正向情感,
负值表示负向情感)

第*i*个情感词在
文本中的频率 (或权重)

$$S_{\text{final}} = \left(\frac{\sum_{i=1}^N \underbrace{w_i}_{\text{权重}} \cdot \underbrace{f_i}_{\text{频率}} - S_{\text{min}}}{S_{\text{max}} - S_{\text{min}}} \right) \cdot 2 - 1 \cdot \underbrace{w_{\text{MBTI}}}_{\text{权重}}$$

最终的情感得分
映射在[-1,1]之间

最大值 最小值

根据MBTI类型对情感
得分的加权调整因子



(一)

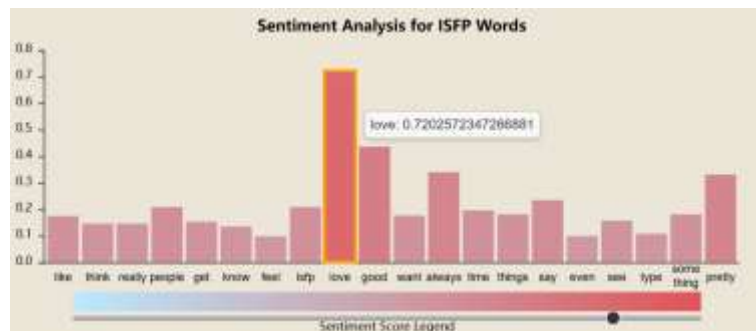
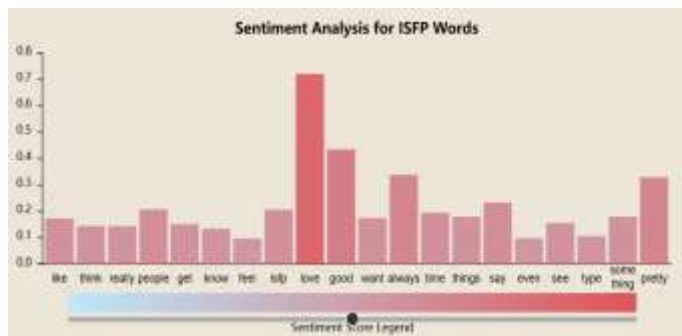


1. 横轴代表情感得分情况, 纵轴代表16型人格, 颜色对应MBTI的四种分组: 黄人组, 绿人组, 蓝人组, 紫人组。

2. 柱状图按照从大到小展示了情感得分, 其中保留两位小数之后的平均值为0.55。

3. 点击对应柱形图会出现每个人格的高频词情感得分。

(二)



1. 横轴对应高频词, 纵轴对应情感分数, 渐变色从浅蓝到红色对应 [-1,1]

2. 鼠标悬浮显示对应情感分数, 加黄色边框

3. 图例上拖动条的位置会随情感得分变化

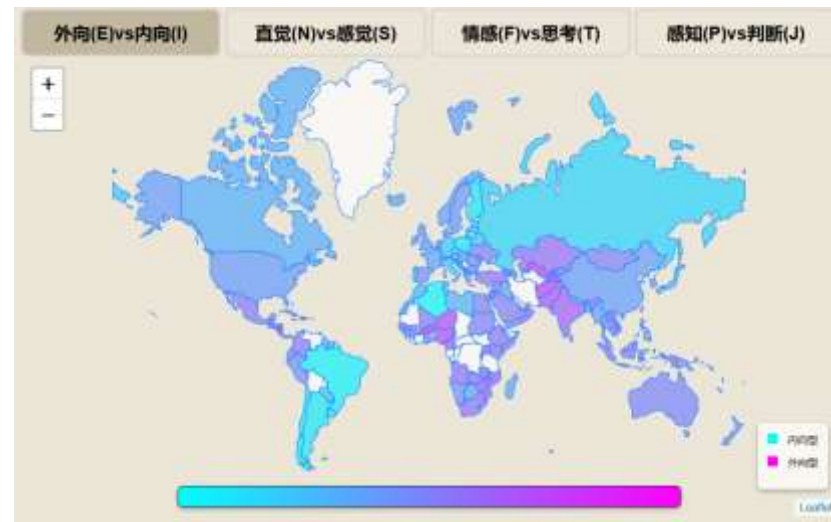
4. 设置过渡效果, 拖动条的恢复与变化丝滑

地图/径向图

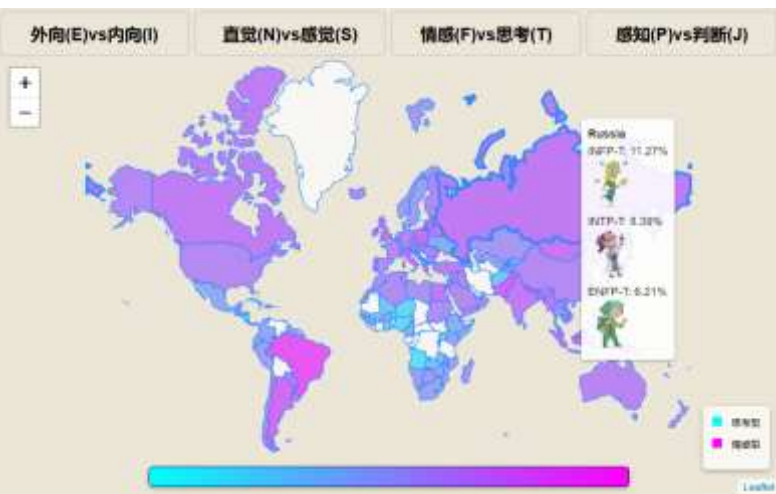
地图初始化



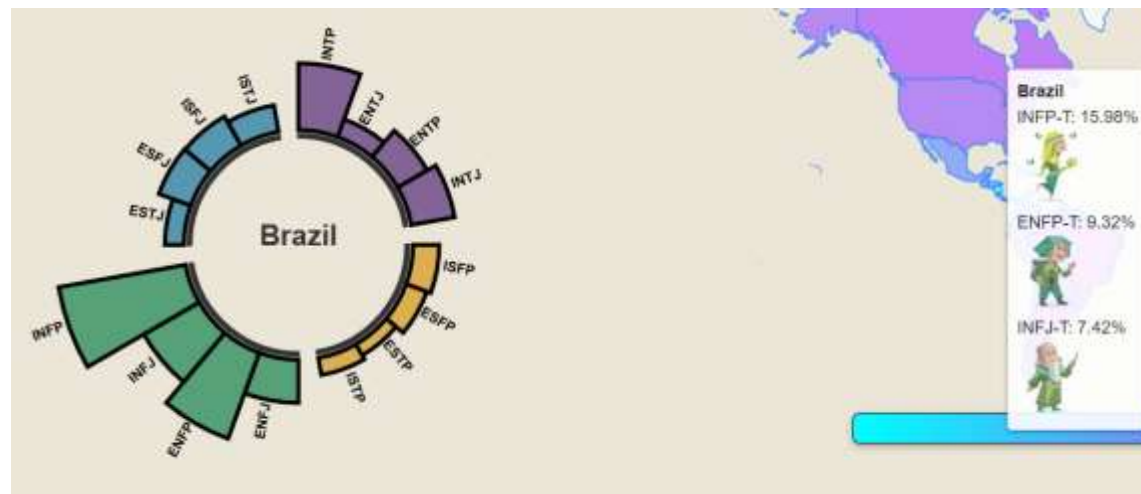
根据八维设置四个按钮，点击之后会显示世界上两种相对属性的比例情况



鼠标悬停在地图上时，会出现该国排名前三的MBTI及比例



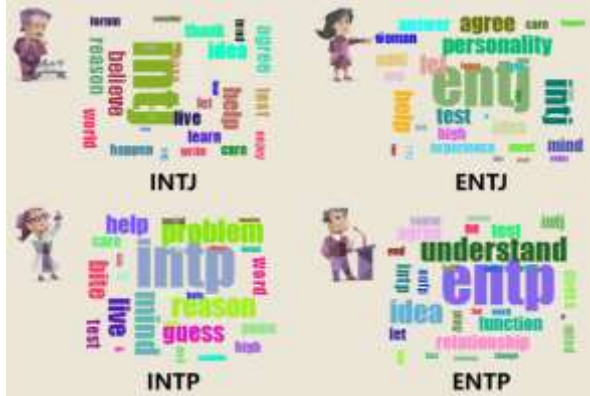
鼠标点击之后，会和旁边的径向图实现交互效果，显示该国十六型人格的占比情况



The background of the slide features two thick, expressive red brushstrokes. One stroke starts from the left edge and extends diagonally upwards towards the top right. The second stroke starts from the bottom left and extends horizontally towards the right edge, partially overlapping the first stroke. The brushstrokes have a textured, slightly grainy appearance.

05

结果分析



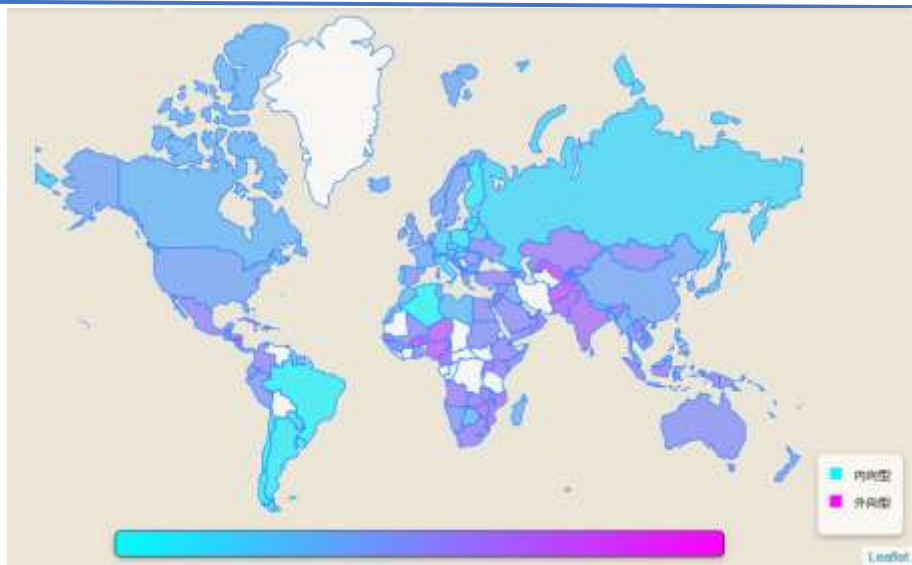
词云图反映了每种MBTI类型的**独特特征**，每个MBTI类型都有一些典型的**行为和认知偏好**。

词云图



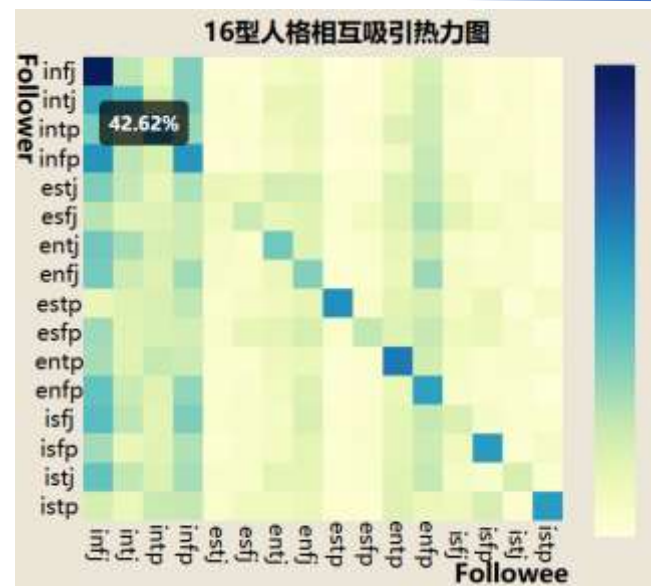
经情感计算后，各人格对同人格的情感指数一定程度上反映了自恋程度，经柱状图绘制之后，我们发现：整体来看自恋与否和**“E/I”**维度相关性最高，其次是**“P/J”**维度，和**“N/S”**还有**“F/T”**维度相关性较弱。

情感分析图



地图

各个国家的MBTI分布不一与其国家文化、种族特征具有紧密的联系，例如在**E/I**方面，欧美人显然更加**外向**，而亚洲人一定程度上比较**内敛**。



热力图

MBTI中也有**“同性相吸，异性相斥”**的规律，这一点在N和S上表现尤为明显，**N人之间和S人之间明显好感度更高，相互之间吸引力弱**。

A large, expressive blue brushstroke that sweeps across the upper half of the slide, creating a dynamic, textured background.

06

研究意义

我们做这个可视化的终极意义何在？



正在阅读：MBTI爆火 这样贴“标签”真的好吗？



MBTI这种贴标签的行为的背后，映射出的却是当代年轻人的社交困境。这几个字母不单单是人格类型，更是为年轻人提供自我认同感与归属感的避风港。MBTI是一座连接内心与外界的桥梁。当我们不知道如何表达自己时，这座桥梁就是出口。苏格拉底说：“认识你自己，是世界上最难的问题，也是人类探索的终极目标之一。”人是无法被四个字母所简单定义的。只有自己定义自己，才是更鲜活、更立体的人。愿我们都能不被定义，愿我们都能成为定义自己的人。



Please vote
for us!

感谢聆听!

第6组

队伍：数据可食化

TASTY

