

PROJECT 3

HUMAN FREEDOM INDEX

Problem Statement:

To study the characteristics of the total 123 features provided in the dataset to analyse and improve India's low performance in HFI (Human Freedom Index). Based on the parameters available in the dataset visualizations and dashboard was created using Power BI. The hf-score for India is compared with top 5 world economies compared in the world to see India's Performance in 2018.

The workbook contains following table,

Human Freedom Index Data for 2018.

- Relationship was created between ef_legal integrity and pf_rol_civil which was the most significant feature by ML model.
- India's performance is compared with top 5 world economies.
- Interactive slicer in terms of Region.

The Dashboard highlights the following: -

- o hf_score by year wise.
- o ef_legal integrity and pf_rol_civil by countries
- o ef_legal integrity and pf_rol_civil by countries performance rate.
- o Interactive slicer in terms of Region.

Since, the data was well understood and developed through ML models only visualizations has been performed in Power BI.

Understanding Data:

Data was about the hf_score for the year 2018.

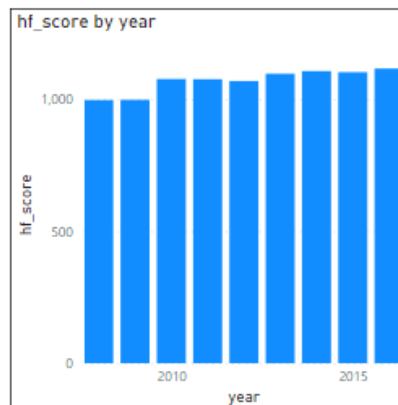
year	ISO_code	countries	region	pf_rol_procedural	pf_rol_civil	pf_rol_criminal	pf_ss_homicide	pf_ss_disappearances_disap	pf_ss_disappearances_vic
2016	ARM	Armenia	Caucasus & Central Asia				8.808749692		10
2016	AUS	Australia	Oceania	8.439109887	7.525648148	7.364078306	9.623537569		10
2016	AUT	Austria	Western Europe	8.969832378	7.872187541	7.673228526	9.73791214		10
2016	BHS	Bahamas	Latin America & the Caribbean	6.930834823	6.008696107	6.262839888	0		10
2016	BEL	Belgium	Western Europe	8.669066926	7.343871578	7.240364332	9.220406912		10
2016	BIZ	Belize	Latin America & the Caribbean	4.753382656	4.73776594	3.315467431	0		10
2016	BEN	Benin	Sub-Saharan Africa				7.526894608		10
2016	BOL	Bolivia	Latin America & the Caribbean	3.70286887	3.361330728	2.090005954	7.479923513		10
2016	BIH	Bosnia and Herzegovina	Eastern Europe	6.312217024	4.995851416	5.102172745	9.489854712		10
2016	BRN	Brunei Darussalam	South Asia				9.802817735		10
2016	BGR	Bulgaria	Eastern Europe	4.984199294	5.631896601	4.058020693	9.545583195		10
2016	CAN	Canada	North America	8.622614869	7.181645789	7.410711181	9.326358182		10
2016	CPV	Cape Verde	Sub-Saharan Africa				5.405668368		10
2016	CAF	Central Afr. Rep.	Sub-Saharan Africa				2.097049616		5
2016	CHL	Chile	Latin America & the Caribbean	7.706122271	6.291439181	5.55075071	8.614886879		10
2016	COG	Congo, Rep. Of	Sub-Saharan Africa				6.271019436		0
2016	CIV	Cote d'Ivoire	Sub-Saharan Africa	2.988533726	5.187529626	3.925204449	5.347790283		5
2016	HRV	Croatia	Eastern Europe	6.312658075	5.732319144	5.056636383	9.582146209		10
2016	CYP	Cyprus	Eastern Europe				9.555652932		10
2016	CZE	Czech Rep.	Eastern Europe	8.71149208	7.237187748	7.411396829	9.754941159		10
2016	DNK	Denmark	Western Europe	9.273487606	8.619285893	8.168528987	9.607727447		10
2016	DOM	Dominican Rep.	Latin America & the Caribbean	5.242038862	4.544210882	3.27003017	3.927318039		10
2016	ECU	Ecuador	Latin America & the Caribbean	4.369884473	4.566161005	3.613030335	3.666403333		10

16 cc 2018 (1,458 rows)

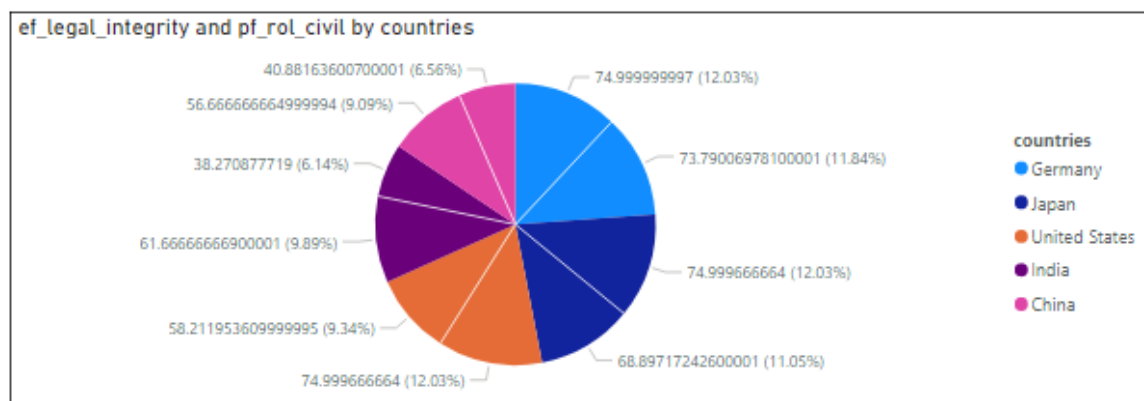
Visualization:

The Dashboard highlights the following: -

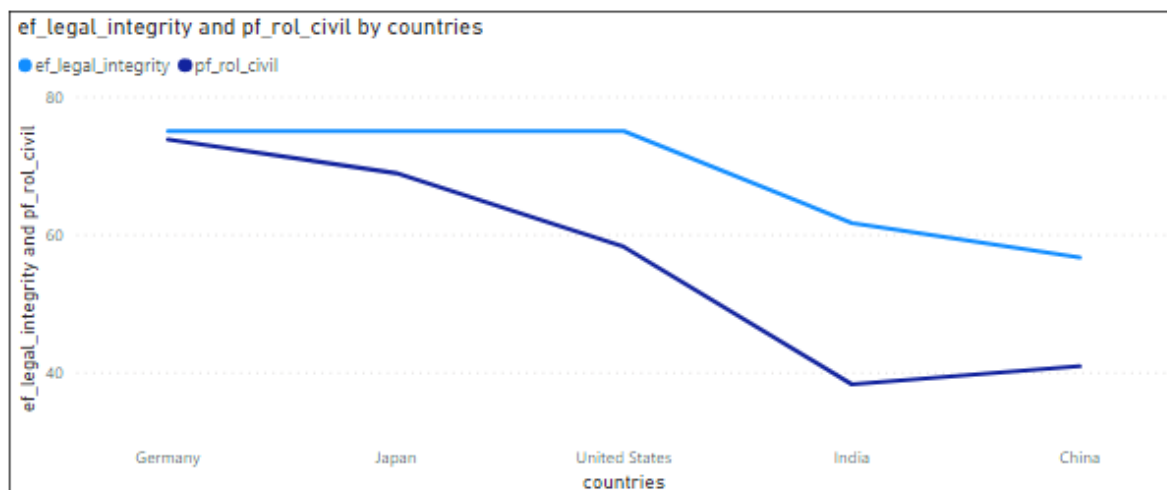
o hf_score by year wise using Clustered Column Chart



o ef_legal_integrity and pf_rol_civil by countries using Pie Chart



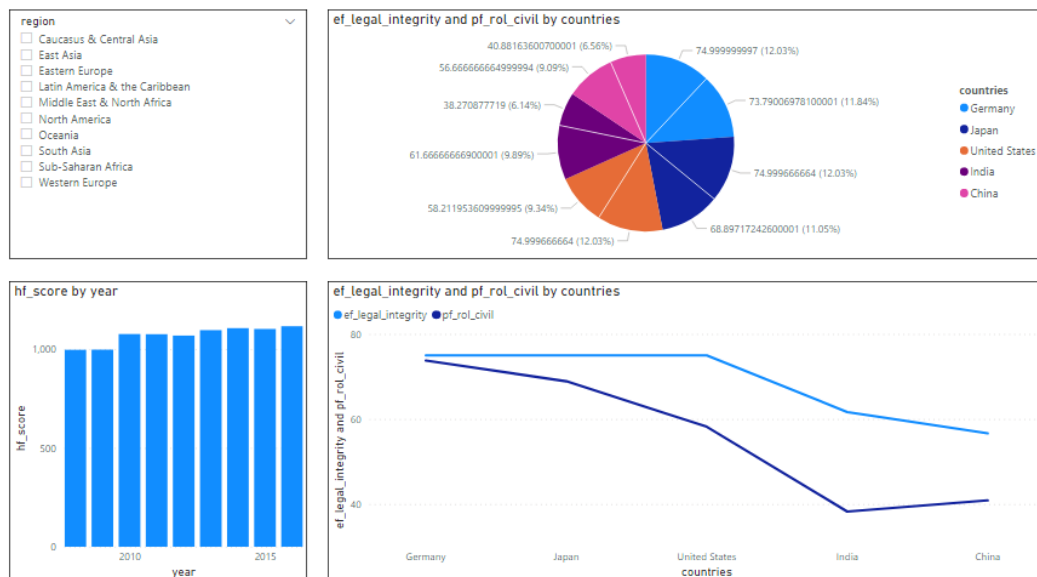
o ef_legal_integrity and pf_rol_civil by countries performance rate.



o Interactive slicer in terms of Region.



Dashboard:



Conclusion:

Finally, a full report is developed created on **Power Bi Desktop** with all the requirements in the problem statement.