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SDRP DOMAIN NAME DISPUTES

OUTLINE OF PRESENTATION

- Objectives of Project
- Background Literature
- Methodology & Challenges
- Descriptive Analysis
- Modelling Analysis
- Conclusions

EXAMINATION AND EVALUATION OF THE SDRP FRAMEWORK IN SINGAPORE

- a) Compare and Contrast trends under the SDRP against other jurisdictions through descriptive statistics;
- b) Examine what are some of the salient factors (expressly stated or not in the SDRP) in affecting decisions under the SDRP (i.e which variable might have a greater weight in contributing to a domain name transfer);
- c) Evaluate some general criticisms against the UDRP framework and their relevance in the SDRP context
  - Identify if there are variables which might have operated on the minds of judges - that might not have been expressly stated in the judgment - that might have a huge correlation with the judgment: this has to do with the dummy variables

DOMAIN NAME SYSTEM

- Domain name is the textual address for a location on the Internet and correspond to IP addresses through the DNS (Domain Name system) which the computer recognsies.
- A domain like “nus.edu.sg" has three components.
  - .sg is a Top Level Domain or TLD (in this case it is the ccTLD for Singapore)
  - .edu is a Second Level Domain (reflecting the nature of the organisation)
  - nus is the Third level Domain and this is what the organisation registers with the “.sg” domain name registry

DOMAIN NAME SYSTEM GOVERNANCE

- Internet Corporation for Assigned Names and Numbers ("ICANN") was formed as a non-profit, private sector organisation in Oct 1998 take over the day-to-day administration of the DNS from Internet Assigned Numbers Authority (IANA)
  - ICANN also coordinates the operation of the root name server system and responsible for making policies concerning the DNS.
  - But the responsibility of administration of ccTLDs are delegated to individual country managers who assume the role of registry operators and have full control over the operation of DNS service for their responsive ccTLDs.
- In Singapore, this is under the charge of Singapore Network Information Centre Private limited (SGNIC), a subsidiary of Infocomm Media Development Authority (IMDA)

DOMAIN NAME DISPUTES

- The explosive growth of the Internet and its users (7 million gTLD domain names in 1999 to 154 million gTLD & 123 million ccTLDs) make it extremely difficult to find attractive, short and generic terms to register as domain names.
- Domain names play a critical role in the marketplace, acting as central components of web addresses and email addresses.
- But domain names are usually issued on a "first come, first served" basis and are "unique" - the unique nature means that disputes over who is entitled to a particular domain name may arise where there are two or more parties interested in using the same domain name.
  - This created a disjunction between domain names and real world identifiers (e.g. trademarks) in which people have rights over.
  - This also created a possibility for opportunists to profit from the business goodwill or reputation in real world identifiers - i.e. the problem of cybersquatting or otherwise known as cyberpiracy.
  - This prompted the need for an administrative procedure and policy to be developed - Uniform Domain Name Dispute Resolution Policy (UDRP) as an alternative to court proceedings - designed to cater for the cybersquatting scenario and other instances of registration of domain names in bad faith.

DOMAIN NAME DISPUTES

- Singapore has not adopted the UDRP.
- Singapore Dispute Resolution Policy (SDRP) is incepted in 2001 for resolving domain disputes in Singapore as adopted by SGNIC for the .sg ccTLD.
    - SGNIC domain name registration agreements in force specifically provide that “any dispute over the registration and use of the domain name, unless resolved by ADR (incl. SDRP), should be adjudicated upon by the Singapore courts.
- SDRP
    - Mediation as part of the dispute resolution mechanism
    - Three Main Elements that the Complainant must prove:
        - i) the Registrant’s domain name is identical or confusing similar to a name, trademark or service mark in which the Complainant has rights;
        - ii) the Registrant has no rights or legitimate interests in respect of the domain name; and
        - iii) the Registrant’s domain name has been registered or is being used in bad faith.
    - Remedy limited to requiring the cancellation of the Registrant’s domain name or the transfer of the Registrant’s domain name registration to the Complainant.

OVERCOMING CHALLENGES

METHODOLOGY

DATA

- SDRP decisions as main source of data
  - Obvious choice since we are analysing these decisions to spot patterns
  - Obtained from SDRP list of cases
    - 42 cases
  - Eliminated settled cases since they provided little room for analysis of how the SDRP panels made their decisions
    - 33 cases left – so we read 11 cases each

VARIABLES

- 63 variables – How can you possibly have 63 variables??
  - Many dependent variables
    - Variables that elaborated on other variables
    - Variables that were grounds of finding another variable
- Not all variables were relevant – “more is more”?
- Some overlaps in variables
  - E.g. “No response from Respondent” vs “Did Respondent respond?”

R-squared: 0.797

Dep. Variable:	Conclusion	Adj. R-squared:	0.730
Model:	OLS	F-statistic:	11.79
Method:	Least Squares	Prob (F-statistic):	1.19e-06
Date:	Mon, 03 Apr 2017	Log-Likelihood:	9.0164
Time:	14:19:22	AIC:	-0.03272
No. Observations:	33	BIC:	13.44
Df Residuals:	24		
Df Model:	8		
Covariance Type:	nonrobust		

Model 1: using "No Response from Respondent"

	coef	std err	t	P>|t|	[95.0% Conf.	Int.]
Intercept	0.0388	0.125	0.310	0.759	-0.220	0.297
No_response_from_respondent	0.1619	0.096	1.685	0.105	-0.036	0.360
Well_known_Foreign_Brand	0.3172	0.087	3.648	0.001	0.138	0.497
Usage_of_Domain_name	0.0759	0.040	1.877	0.073	-0.008	0.159
Respondent_Showed_Bona_Fide	-0.1472	0.067	-2.191	0.038	-0.286	-0.009
Evidence_of_Circumstances_of_registration_for_valuable_consideration	0.0761	0.065	1.162	0.257	-0.059	0.211
Evidence_of_Attracting_customers_for_commercial_gain_through_likelihood_of_confusion	0.3227	0.069	4.691	0.000	0.181	0.465
Evidence_of_bad_faith_on_other_grounds	0.1370	0.084	1.631	0.116	-0.036	0.310
Respondent_Attempt_to_sell	0.0035	0.080	0.043	0.966	-0.162	0.169

DATA CALIBRATION MATTERS

R-squared: 0.776

Dep. Variable:	Conclusion	Adj. R-squared:	0.702
Model:	OLS	F-statistic:	10.42
Method:	Least Squares	Prob (F-statistic):	3.54e-06
Date:	Mon, 03 Apr 2017	Log-Likelihood:	7.4151
Time:	14:19:22	AIC:	3.170
No. Observations:	33	BIC:	16.64
Df Residuals:	24		
Df Model:	8		
Covariance Type:	nonrobust		

Model 2: using "Did_Respondent_Respond"

	coef	std err	t	P>|t|	[95.0% Conf.	Int.]
Intercept	0.1516	0.120	1.264	0.218	-0.096	0.399
Did_Respondent_Respond	-0.0532	0.089	-0.597	0.556	-0.237	0.131
Well_known_Foreign_Brand	0.3072	0.092	3.350	0.003	0.118	0.496
Usage_of_Domain_name	0.0641	0.043	1.488	0.150	-0.025	0.153
Respondent_Showed_Bona_Fide	-0.1794	0.067	-2.671	0.013	-0.318	-0.041
Evidence_of_Circumstances_of_registration_for_valuable_consideration	0.0776	0.069	1.129	0.270	-0.064	0.219
Evidence_of_Attracting_customers_for_commercial_gain_through_likelihood_of_confusion	0.3240	0.073	4.461	0.000	0.174	0.474
Evidence_of_bad_faith_on_other_grounds	0.1526	0.088	1.740	0.095	-0.028	0.333
Respondent_Attempt_to_sell	0.0105	0.084	0.124	0.902	-0.163	0.184

KEY VARIABLES: ELEMENTS OF THE TEST

1. Whether the Registrant's domain name is identical or confusingly similar to a name, trademark or service mark in which the Complainant has rights;

   (a) Whether it was registered in other jurisdictions;

   (b) Whether it was registered in Singapore;

   (c) Number of years for which it has been registered both internationally and locally;

   (d) Whether the mark was well-known; and

   (e) The percentage similarity between the disputed domain name and the Complainant’s word mark (if in existence).

2. Whether the Registrant has rights or legitimate interests in respect of the domain name;

   (a) Whether the Respondent showed usage / demonstrable preparations to use the domain name or name with bona fide offering of goods or services;

   (b) Whether the Respondent showed that it was commonly known by the domain name;

   (c) Whether the Respondent showed that it was making legitimate non-commercial or fair use of the domain name;

   (d) The purpose for which the domain name was used; and

   (e) The period for which the Respondent had been using the domain name (in years).

3. Whether the Complainant shows that the Registrant's domain name has been registered or is being used in bad faith

(a) Whether circumstances indicated that the Registrant had registered or acquired the domain name primarily for valuable consideration in excess of the Registrant’s documented out-of-pocket costs directly related to the domain name;

(b) Whether the Registrant had registered the domain name in order to prevent the Complainant from reflecting the mark in a corresponding domain name, provided that the Registrant has engaged in a pattern of such conduct;

(c) Whether the Registrant had registered the domain name primarily for the purpose of disrupting the business of a competitor; and

(d) Whether the Registrant had intentionally attempted to attract, for commercial gain, Internet users to the Registrant’s website or other on-line location, by creating a likelihood of confusion with the Complainant’s name or mark using the domain name.

DUMMY VARIABLES

- Why include dummy variables?
  - Could possibly shed light on thought process of SDRP panels – possibility of factors not mentioned in decisions that do affect the conclusion
- Did the dummy variables actually help? – No
  - Often difficult to extract these variables
    - Not available from given facts
    - Legal findings on which we were unqualified to draw our own conclusions
- Where dummy variables could be extracted, rarely useful
  - So obvious that they could be derived from the key elements from before
  - So obvious that they returned the same results for most, if not all, of the dataset (see screenshot csv)

Attempts_to	Number_of_	Mediation_s	Mediaiton_F
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
1	1	0	0
1	2	0	0
1	1	0	0
0	0	0	0
0	0	0	0
1	0	0	1
1	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
1	2	0	0
0	0	0	0
	0	0	0
0	0	0	0
1	1	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	1	1
0	0	0	0
0	0	0	0

DUMMY VARIABLES

- Complainant's rights over domain name:
  - Made_up_word; English_word;
  - Length_of_word; Domain_a_variation_on_mark_or_brand;
  - Similar_words; Percentage_of_Similarity_of_Words; Pronounciation_Similarity;
  - Abandonment_by_Complainant
- Other grounds of bad faith:
  - Respondent_Attempt_to_sell;
  - Prior_Commercial_relationship_between_parties;
  - Attempts_to_settle; Number_of_settle_attempts;
  - Mediation_prior; Mediaiton_Prior_attempts

- Procedural aspect of decisions of decisions:
  - Length_of_Cases_in_months;
  - Country_of_Respondent; Country_of_Complainant; Industry_Complainant;
  - Industry_Registrant
- Others:
  - No_Cited_SG_Cases; No_Cited_SDRP_cases; No_Cited_UK_EU_cases; No_Cited_US_Cases; No_Cited WIPO_UDRP_cases;
  - Panelist; Panelist_Type;
  - No_response_from_respondent

ATTRIBUTING VALUES TO VARIABLES

- For binary variables:
  - Yes: `1`; No: `-1`; Not mentioned: `0`
- For quantitative variables
  - Attention to detail matters – e.g. months or years?
- What to do when data is unavailable? Esp. for dummy variables
  - Leaving out data point further reduces already scarce dataset
  - Where everything is ‘not mentioned’ in the large part of the dataset, little use for particular variable

DATA PROCESSING

- Categorical variables:

```
dataSet['Usage_of_Domain_name'] = dataSet['Usage_of_Domain_name'].astype('category')
dataSet['Panelist_Type'] = dataSet['Panelist_Type'].astype('category')
dataSet['Country_of_Respondent'] = dataSet['Country_of_Respondent'].astype('category')
dataSet['Country_of_Complainant'] = dataSet['Country_of_Complainant'].astype('category')
dataSet['Industry_Complainant'] = dataSet['Industry_Complainant'].astype('category')
dataSet['Industry_Registrant'] = dataSet['Industry_Registrant'].astype('category')
dataSet['Panelist'] = dataSet['Panelist'].astype('category')
dataSet['Year_of_Judgment'] = dataSet['Year_of_Judgment'].astype('category')
```

- Failure to change data type of categorical variables led to lower R-squared results
- Why? Equivalent of arbitrarily/poorly assigning values to ordinal variables

WORKING WITH 63 VARIABLES

- Was there a need for 63 variables?
- Did we use all 63 variables?
- Far messier and more tedious than probably necessary
  - Repeated / very similar variables
  - Inconsistent calibration of data
  - Re-reading of cases to fill up endlessly increasing columns

MODELLING

- At what point does more become too much?
- Trial and error – more variables, more trial, more error
- Because of the number of variables we had, we ended up modelling separately on overall models and sub-models based on each element of the test
  - What is the significance of this?
  - Do we need that many models?
  - Does it aid us in finding legally significant conclusions?

ERRORS

R-squared:	1.000
Adj. R-squared:	1.000
F-statistic:	6.108e+27
Prob (F-statistic):	3.84e-219
Log-Likelihood:	1005.5
AIC:	-1979.
BIC:	-1956.

OLS Regressi

Dep. Variable:	Conclusion
Model:	OLS
Method:	Least Squares
Date:	Sun, 02 Apr 2017
Time:	16:43:08
No. Observations:	32
Df Residuals:	16
Df Model:	15
Covariance Type:	nonrobust

	coef	std err	t	P>|t|	[95.0% Conf. Int.]
Intercept	-0.5000	1.12e-14	-4.48e+13	0.000	-0.500 -0.500
Made_up_word	1.61e-15	3.76e-15	0.428	0.674	-6.36e-15 9.58e-15
English_word	1.193e-15	4.33e-15	0.276	0.786	-7.98e-15 1.04e-14
Length_of_word	-1.513e-15	7.54e-16	-2.005	0.062	-3.11e-15 8.64e-17
Domain_a_variation_on_mark_or_brand	0	5.2e-15	0	1.000	-1.1e-14 1.1e-14
Existence_of_Trade_Mark	-1.0000	1.01e-14	-9.92e+13	0.000	-1.000 -1.000
Trade_Mark_Registered_in_Singapore	-1.096e-15	5.42e-15	-0.202	0.842	-1.26e-14 1.04e-14
Trade_Mark_Registered_in_other_Countries	1.429e-15	1.03e-14	0.138	0.892	-2.05e-14 2.33e-14
Length_of_Trade_Mark_SG	2.377e-16	1.74e-16	1.366	0.191	-1.31e-16 6.06e-16
Well_Known_Mark	-2.776e-16	4.15e-15	-0.067	0.947	-9.07e-15 8.52e-15
Foreign_brand	1.0000	2.29e-14	4.37e+13	0.000	1.000 1.000
Well_known_Foreign_Brand	3.469e-16	4.93e-15	0.070	0.945	-1.01e-14 1.08e-14
Identical_Confusing_Similarity	1.0000	9.02e-15	1.11e+14	0.000	1.000 1.000
Identical_Words	4.441e-16	1.34e-14	0.033	0.974	-2.8e-14 2.89e-14
Similar_words	1.0000	1.68e-14	5.97e+13	0.000	1.000 1.000
Percentage_of_Similarity_of_Words	1.292e-16	1.71e-16	0.754	0.462	-2.34e-16 4.93e-16
Pronounciation_Similarity	-0.5000	1.12e-14	-4.48e+13	0.000	-0.500 -0.500

Omnibus:	11.496	Durbin-Watson:	1.863
Prob(Omnibus):	0.003	Jarque-Bera (JB):	11.147
Skew:	1.104	Prob(JB):	0.00380
Kurtosis:	4.866	Cond. No.	1.83e+17

Warnings:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
[2] The smallest eigenvalue is 8.84e-30. This might indicate that there are
strong multicollinearity problems or that the design matrix is singular.

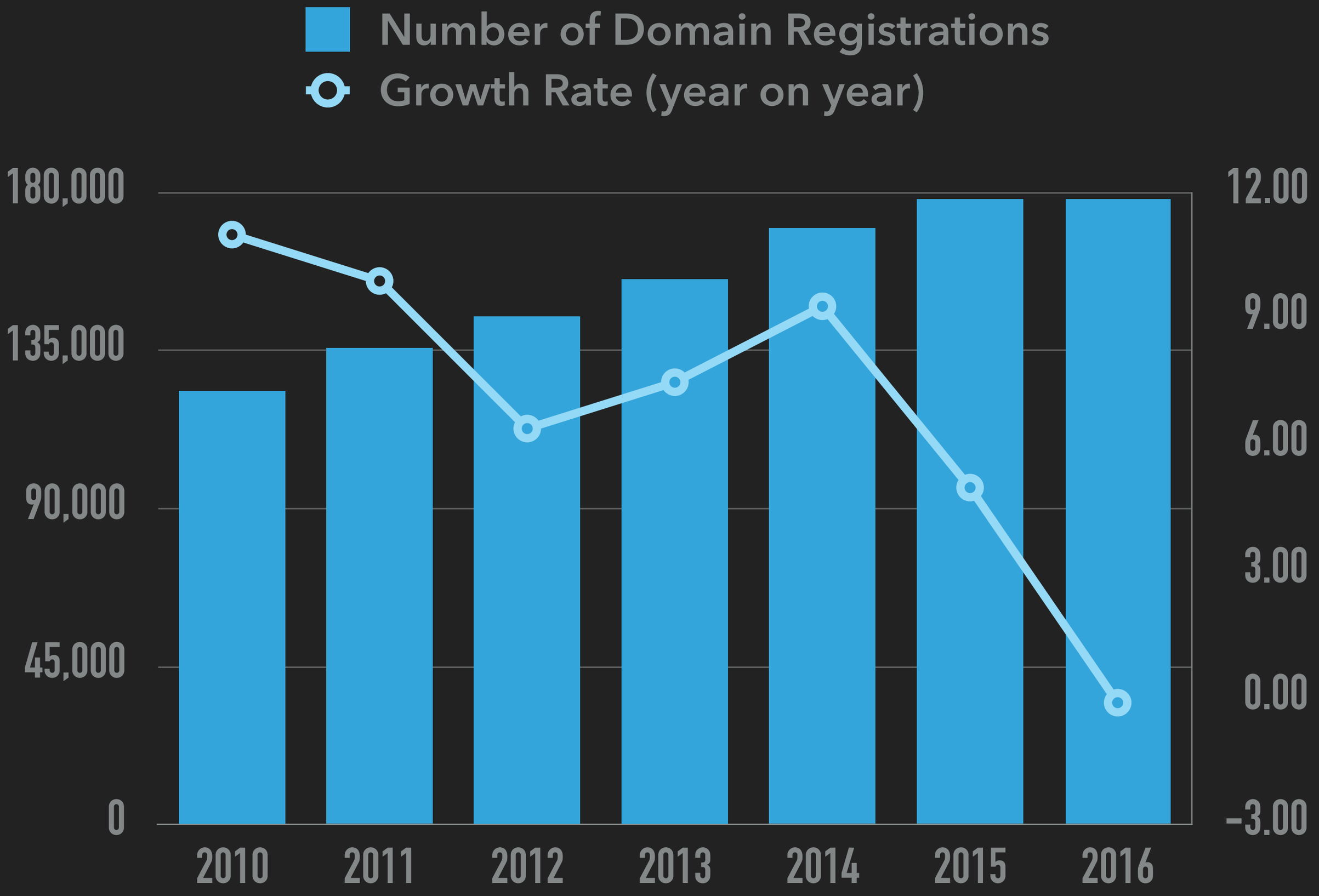
- Linear regression with 33 data points, 16 variables – **R =1**?

CHALLENGES

- Small dataset
  - Only 33 SDRP cases to work with
    - Dataset only available from 2002
- Foreign jurisdictions – How helpful?
  - WIPO
  - UK Nominet – rejected FOI request :(
  - Salient cases in guidebook? How helpful is this?

DESCRIPTIVE STATISTICS

"STATISTICS IS THE GRAMMAR OF SCIENCE"
– KARL PEARSON

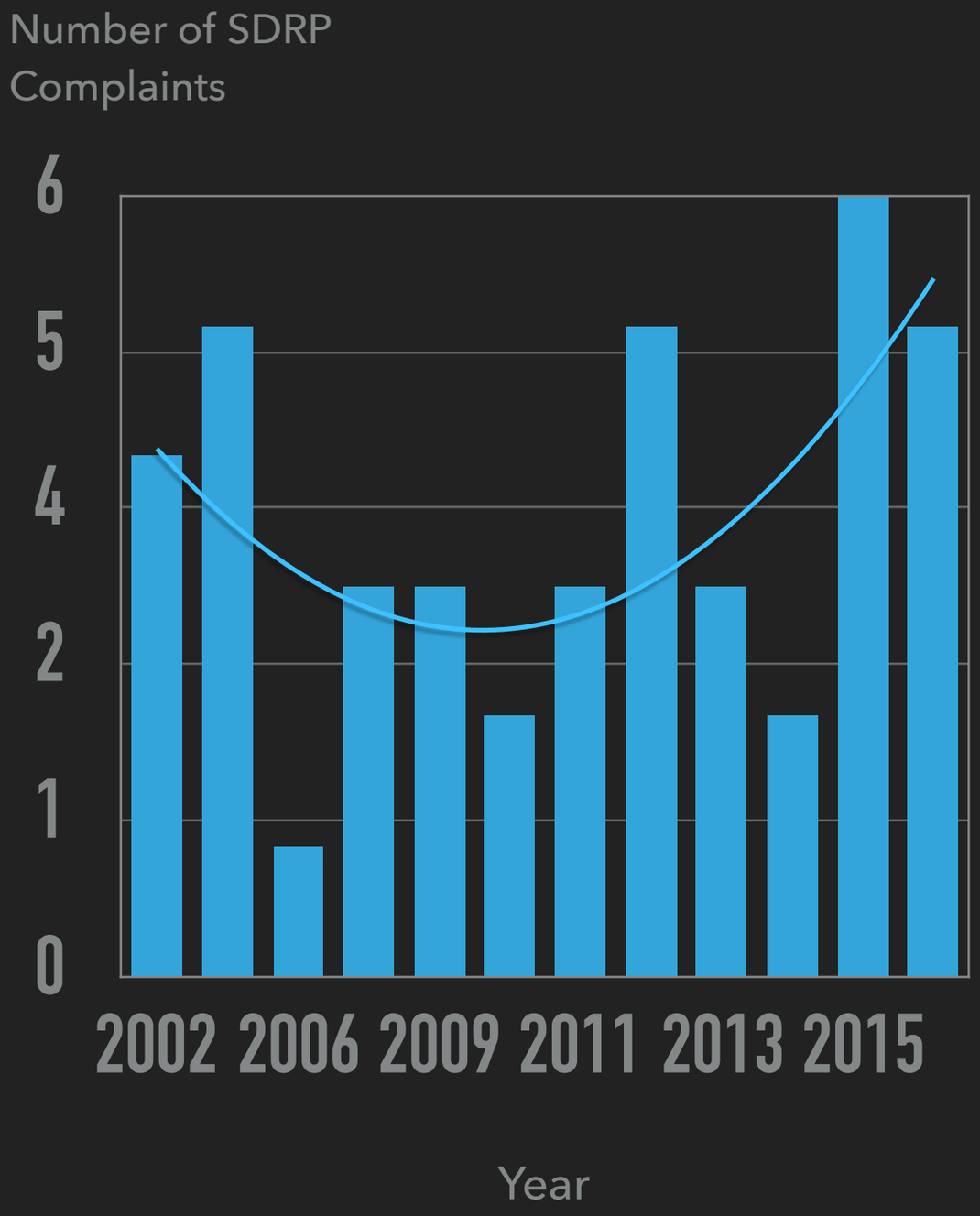

Number of Domain Registrations
Growth Rate (year on year)
180,000
135,000
90,000
45,000
0
12.00
9.00
6.00
3.00
0.00
-3.00
2010
2011
2012
2013
2014
2015
2016

DESCRIPTIVE ANALYSIS

1. Number of Cases over the years
2. CyberSquatting Ratio
3. Proportion of Cases decided in favour of Complainant
4. Default Rate
5. Number of Precedents Cited

1) NUMBER OF CASES OVER THE YEARS

- The histogram here tracks the number of cases (by decisions) against the year of judgment.
  - Note: This data includes the cases which are settled for calculation of Cybersquatting ratio later
- Evaluation:
  - The numbers of cases over the years since the adoption of SDRP in Singapore has been fairly constant although there has been a pickup in the last 2 years.
  - A few hypothesis may be made here:
    - a) The lack of cybersquatting in Singapore (which is more appropriately analysed using the cybersquatting ratio)
    - b) The reluctance to pursue a case under SDRP because of i) costs (i.e. cheaper to just buy the domain from the person), ii) lack of publicity, iii) availability of alternative TLDs to achieve the same purpose.



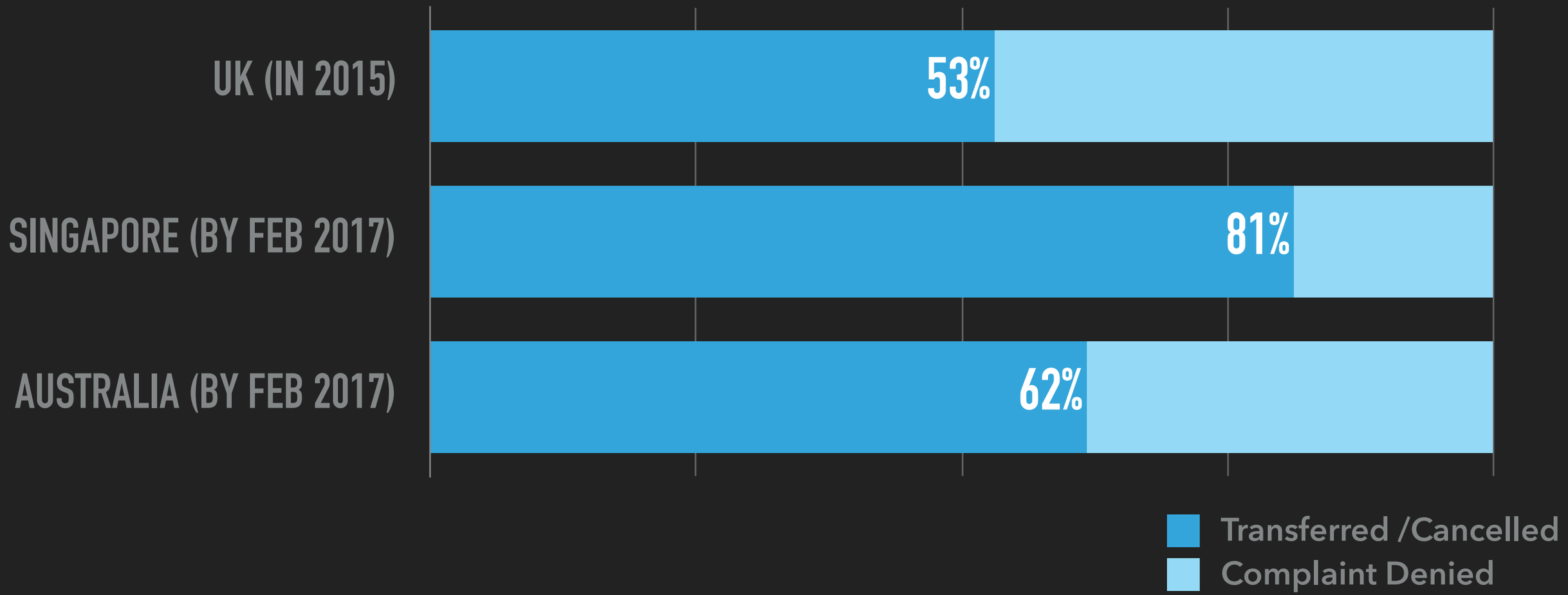
2) CYBERSQUATTING RATIO

- Cybersquatting ratio is defined as total number of disputed domain names with the respective registration yields

Country	Australia (by Feb 2017)	Canada (by Dec 2014)	Singapore (by Feb 2017)	UK (by Dec 2015)
Complaints (By Jan 2017)	539	274	42	11,124
Total Number of Registrations	6,167,996	2,134,590	175,869	10,140,436
CyberSquatting Ratio	0.00874%	0.01284%	0.02389%	0.10970%

- Evaluation: WIPO in its report uses CyberSquatting Ratio to examine the level of abusive registrations.
  - In the present case, it would appear that Singapore has the highest CyberSquatting Ratio amongst the three jurisdictions/systems.
    - (Although it ought to be noted that the data from the other two jurisdictions are not up-to-date and recent statistics may indicate otherwise)

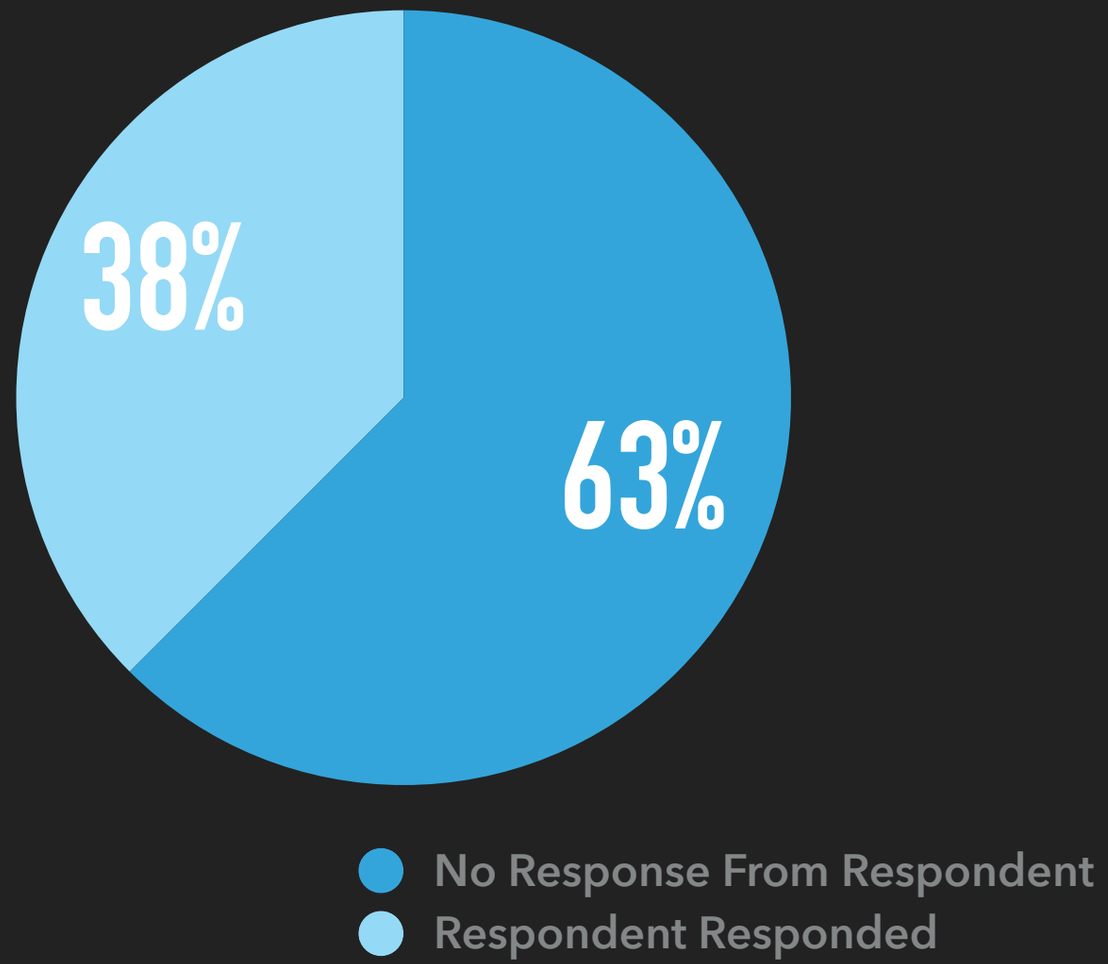
3) PROPORTION OF CASES DECIDED IN FAVOUR OF COMPLAINANT



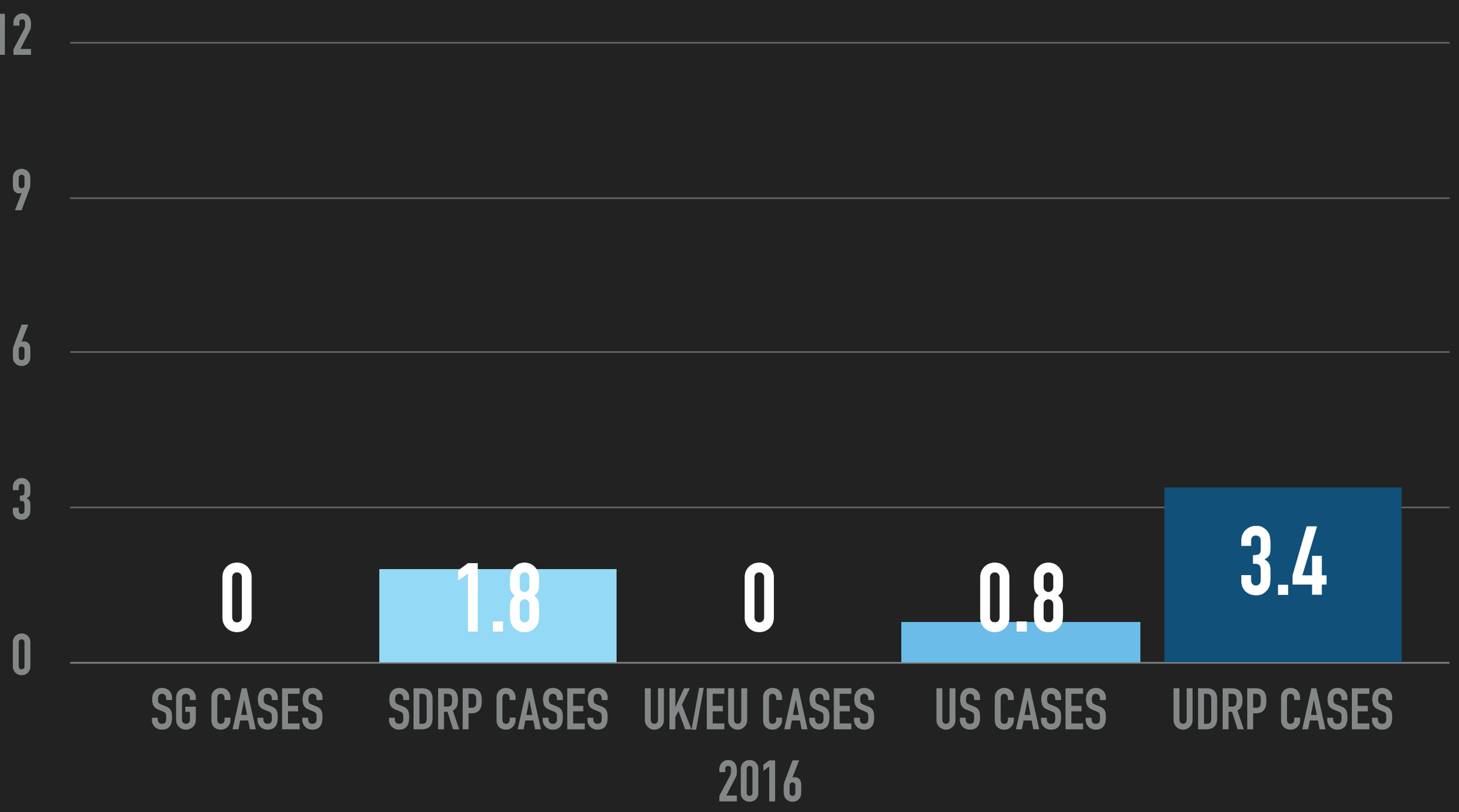
- Evaluation: According to WIPO (based on their report), the higher success rate of the Complainants may indicate a higher level of abusive registrations.
  - In line with the CyberSquatting Ratio statistic earlier, the high rate of successful cases in Singapore will seem to similarly indicate a higher incidence of abusive registration in Singapore.

4) DEFAULT RATE

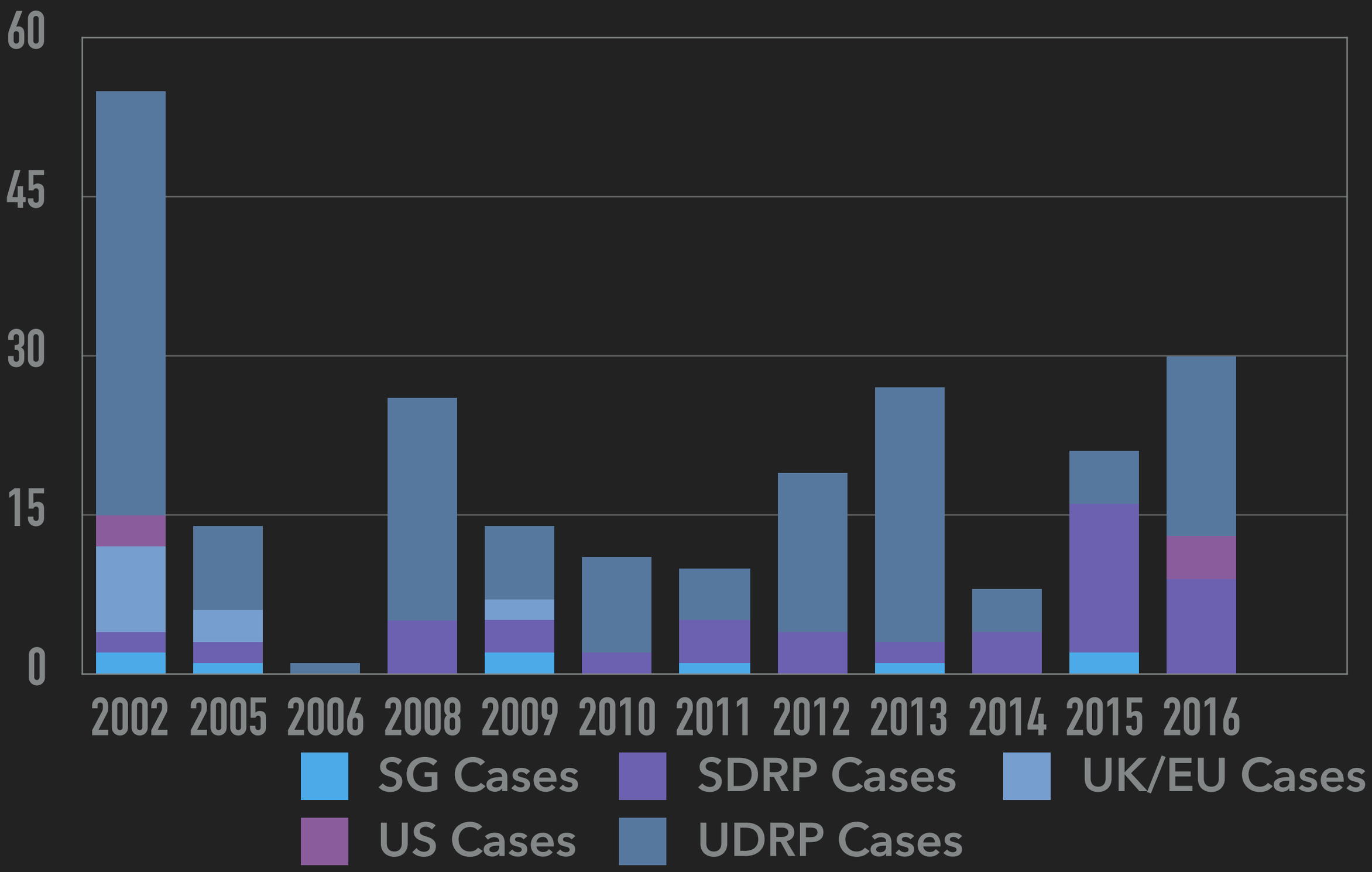
- Evaluation:
  - When a Respondent does not provide a response, it usually infers that the Respondent did not see any point in defending the domain name.
    - The alternative possibility that the respondent did not receive notice is highly unlikely.
- Therefore, the high default rate seems to similarly indicate the high incidence of cybersquatting in Singapore as well.
- Side Note: The high rate of default is consistent across other jurisdictions with a similar *ex post* system (i.e. UK with about 70% default rate) as compared to jurisdictions with an *ex ante* system (i.e. Australia with about 24.6%)
  - Ex Ante: Restrictive Registration System
  - Ex Post: Unrestrictive Registration System

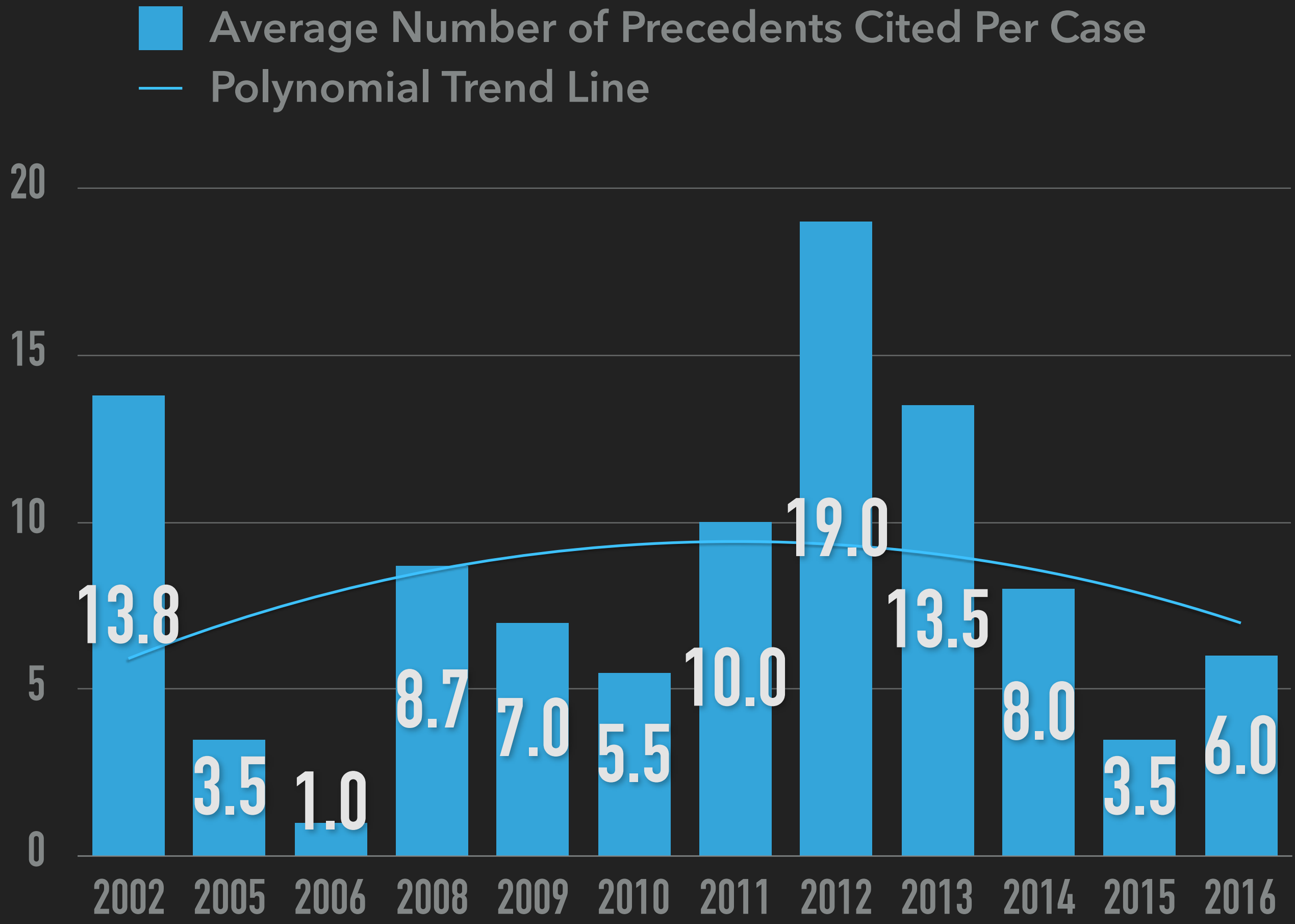


5) NUMBER OF PRECEDENTS CITED PER CASE



5) NUMBER OF PRECEDENTS CITED




Average Number of Precedents Cited Per Case
Polynomial Trend Line
20
15
10
5
0
13.8
3.5
1.0
8.7
7.0
5.5
10.0
19.0
13.5
8.0
3.5
6.0
2002
2005
2006
2008
2009
2010
2011
2012
2013
2014
2015
2016

5) NUMBER OF PRECEDENTS CITED

- Observations:
  - A consistent observation throughout is the huge influence by UDRP cases which is to be well-expected given the similarity between SDRP and the huge body of case-law in UDRP cases
  - Secondly, the number of SDRP cases cited as precedents have also risen in absolute numbers over the years given that the body of case law in Singapore is growing as well, although the average number has remained consistently low.
  - The increasing usage of precedents is perhaps one healthy indicator of the consistency amongst cases decided under the SDRP given that a major criticism of the UDRP/SDRP system is the lack of consistency amongst cases. This criticism is based very much on the non-adoption of the stare decisis principle in the UDRP/SDRP system where some of the SDRP cases did not refer to any case precedents in coming to the decision.

INTERIM CONCLUSIONS

- 1) There appears to be a growing number of cases in Singapore in the recent years and this may be attributed to the increasing usage of the Internet in Singapore by SMEs.
- 2) The small number of cases under the SDRP does not mean that there is small incidence of CyberSquatting in Singapore. On the contrary, the other statistics (i.e. default rate, cybersquatting ratio and proportion of cases decided in favour of complainant) suggest that Singapore has a relatively high number of CyberSquatting.
- 3) The growing number of case precedents in Singapore seem to be a healthy indicator of consistency amongst SDRP cases even though there is no strict requirement for stare decisis under the SDRP.

MODELS:

A SEARCH FOR THE PERFECT FIT

MAIN OBJECTIVES:

- identify which variables might have a greater weight in contributing to a domain name transfer
- which variables may contribute to a finding of each element
- Identify if there are variables which might have operated on the minds of judges - that might not have been expressly stated in the judgment - that might have a huge correlation with the judgment: this has to do with the dummy variables we created

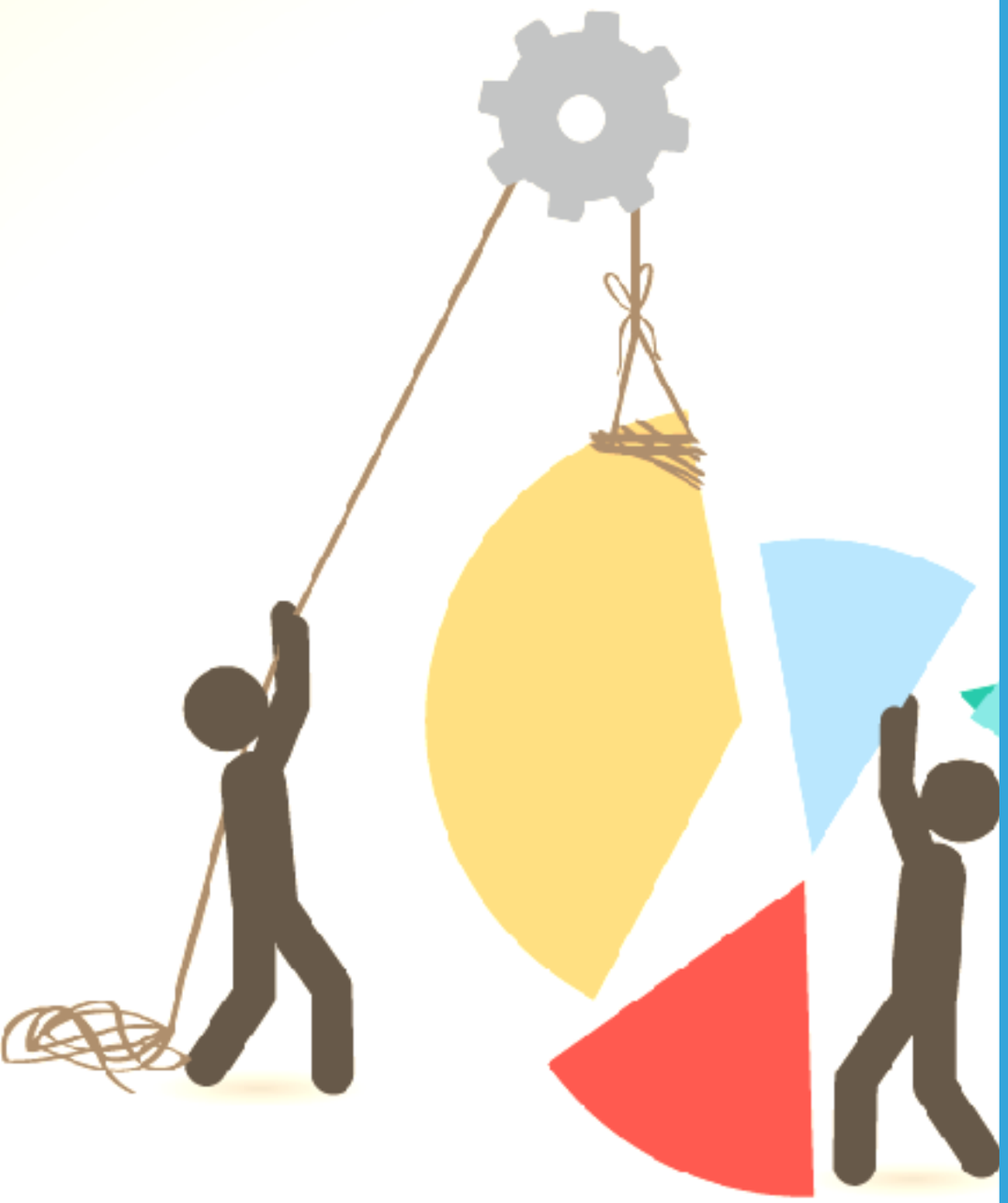
OBJECTIVES:

CHALLENGES

- Small Data Set:
  - Affects the ability to create a model that makes sensible predictions (e.g. Model against Panelists)
- Logistic Regression:
  - technically, categorical variables, logistic regression should work
  - BUT: we faced these errors:
    - *“perfect separation” // “ConvergenceWarning: Maximum Likelihood optimization failed to converge. Check mle_retvals”*
    - *Endog must be in unit interval -> we had to recalibrate data (as will be explained when the model comes)*

MODELLING ANALYSIS – 4 TYPES OF MODELS

- Sub-Models for Each of the 3 Sub-Elements:
  - Sub-Model 1: Similarity / Confusing Similarity of Domain Name & Mark
  - Sub-Model 2: Complainant has proven that Respondent has no Legitimate Interest in the Domain Name
  - Sub-Model 3: Complainant has proven that Respondent has registered or used the Domain Name in Bad Faith
- General Model: Modelling the Conclusion against variables under each of the 3 sub-elements



SUB-MODEL 1: IDENTICAL / CONFUSING SIMILARITY

- CHOICE OF VARIABLES
- LINEAR MODEL
- LOGISTIC MODEL

(1) IDENTICAL/CONFUSING SIMILARITY: VARIABLES TO CHOOSE FROM

"NATURE OF THE DOMAIN NAME"

MADE-UP WORD | LENGTH OF WORD | ENGLISH WORD

DOMAIN A VARIATION OF THE TRADEMARK OR BRAND

"NATURE OF THE MARK"

EXISTENCE OF TRADEMARK

SINGAPORE | TM REGISTERED IN | OTHER COUNTRIES

LENGTH OF TRADEMARK REGISTERED IN SINGAPORE

WELL-KNOWN MARK | FOREIGN BRAND | WELL-KNOWN FOREIGN BRAND

—— IDENTICAL || CONFUSINGLY SIMILAR——

% SIMILARITY | IDENTICAL / SIMILAR | SIMILARITY OF PRONUNCIATION

——————COMPLAINANT GOODWILL——————

SALES | COST / DURATION | ADVERTISING

(1) IDENTICAL / CONFUSING SIMILARITY: LINEAR

OLS Regression Results

Dep. Variable:	Identical_Confusing_Similarity	R-squared:	0.723
Model:	OLS	Adj. R-squared:	0.671
Method:	Least Squares	F-statistic:	14.08
Date:	Tue, 04 Apr 2017	Prob (F-statistic):	8.19e-07
Time:	19:58:04	Log-Likelihood:	-6.0568
No. Observations:	33	AIC:	24.11
Df Residuals:	27	BIC:	33.09
Df Model:	5		
Covariance Type:	nonrobust		

	coef	std err	t	P>|t|	[95.0% Conf.	Int.]
Intercept	-0.1950	0.192	-1.017	0.318	-0.589	0.198
Length_of_word	0.0478	0.020	2.416	0.023	0.007	0.088
English_word	-0.0133	0.126	-0.105	0.917	-0.272	0.245
Trade_Mark_Registered_in_Singapore	0.3292	0.115	2.851	0.008	0.092	0.566
Trade_Mark_Registered_in_other_Countries	0.1672	0.105	1.599	0.122	-0.047	0.382
Well_Known_Mark	0.4104	0.100	4.117	0.000	0.206	0.615

Omnibus:	1.659	Durbin-Watson:	2.041
Prob(Omnibus):	0.436	Jarque-Bera (JB):	1.087
Skew:	0.444	Prob(JB):	0.581
Kurtosis:	3.021	Cond. No.	34.3

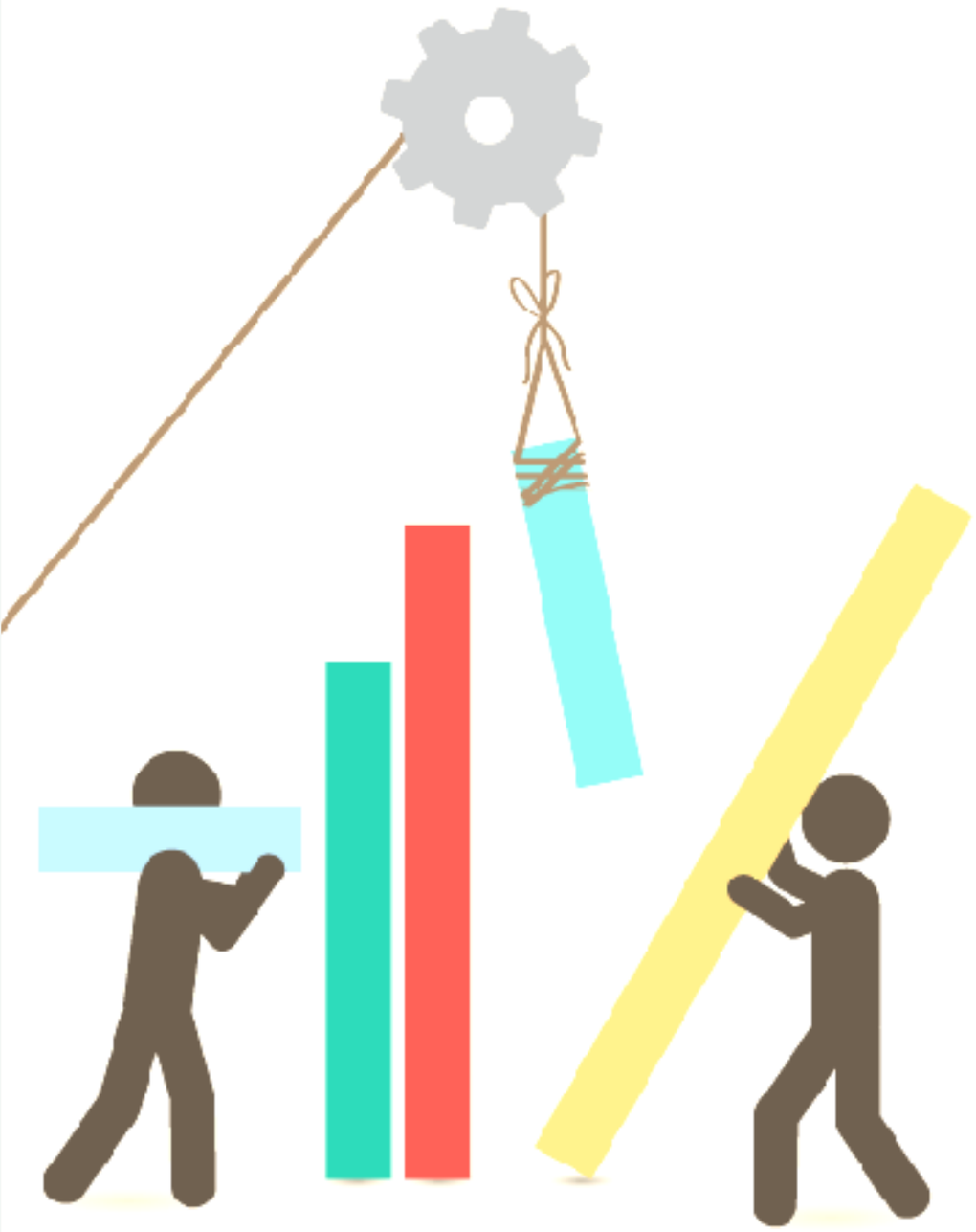
Warnings:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
The Accuracy of this Linear Regression Model is : 87.8787878788%

(1) IDENTICAL/CONFUSING SIMILARITY: LOGIT

LOGIT MODEL FOR EXACT SAME PARAMETERS: FAILED: ERROR!
"PERFECT SEPARATION"

IDENTICAL_CONFUSING_SIMILARITY ~ LENGTH_OF_WORD + ENGLISH_WORD+TRADE_MARK_REGISTERED_IN_SINGAPORE + TRADE_MARK_REGISTERED_IN_OTHER_COUNTRIES + WELL_KNOWN_MARK

```
         Current function value: 0.287542
         Iterations 8
                           Logit Regression Results
==============================================================================
Dep. Variable:                Conclusion   No. Observations:                   33
Model:                           Logit   Df Residuals:                       29
Method:                            MLE   Df Model:                            3
Date:                 Mon, 03 Apr 2017   Pseudo R-squ.:                  0.4436
Time:                         02:06:33   Log-Likelihood:                -9.4889
converged:                       True   LL-Null:                       -17.053
                                        LLR p-value:                  0.001710
================================================================================================
                                   coef    std err          z      P>|z|      [95.0% Conf. Int.]
------------------------------------------------------------------------------------------------
Intercept                       -0.9334      0.885     -1.055      0.292      -2.668       0.801
Trade_Mark_Registered_in_Singapore  0.7301      0.896      0.815      0.415      -1.026       2.486
Length_of_Trade_Mark_SG          0.3084      0.154      2.007      0.045       0.007       0.610
Well_Known_Mark                  0.7573      0.846      0.895      0.371      -0.900       2.415
================================================================================================
The Accuracy of this Logistic Regression Model is : 90.9090909091%
The Precision of this Logistic Regression Model is : 92.5925925926%
The Recall of this Logistic Regression Model is: 96.1538461538%
The F1 Score of this Logistic Regression Model is: 0.943396226415
```



SUB-MODEL 2: RESPONDENT HAD LEGITIMATE USE OF DOMAIN NAME

- CHOICE OF VARIABLES
- LINEAR MODEL
- LOGISTIC MODEL

(2) NO LEGITIMATE INTERESTS: VARIABLES TO CHOOSE FROM

RESPONDENT NO LEGITIMATE INTERESTS IN DOMAIN NAME

COMPLAINANT HAS PRIOR OWNERSHIP			RESPONDENT'S GOODWILL?		
RESPONDENT HAS BONA FIDE USAGE	ABANDONMENT?	RESPONDENT USED DOMAIN NAME FAIRLY	KNOWN BY A SECTOR?	GROUP OF PERSONS W GOODWILL?	LOCALISED GOODWILL?

RESPONDENT'S USAGE OF DOMAIN NAME

0 – DID NOT USE / WEBSITE WAS BLANK / NOT MENTIONED

USED FOR SALE/RENT / ADVERTISEMENT	REDIRECT TO ANOTHER SITE / OWN SITE	LEGITIMATE USAGE

LENGTH OF USAGE

(2) RESPONDENT HAD NO LEGITIMATE INTERESTS: LINEAR

OLS Regression Results

Dep. Variable:	Complainant_Showed_Registrant_No_Legitimate_Interests	R-squared:	0.469
Model:	OLS	Adj. R-squared:	0.347
Method:	Least Squares	F-statistic:	3.828
Date:	Tue, 04 Apr 2017	Prob (F-statistic):	0.00723
Time:	15:49:26	Log-Likelihood:	-23.336
No. Observations:	33	AIC:	60.67
Df Residuals:	26	BIC:	71.15
Df Model:	6		
Covariance Type:	nonrobust		

	coef	std err	t	P>|t|	[95.0% Conf.	Int.]
Intercept	0.3665	0.223	1.647	0.112	-0.091	0.824
Usage_of_Domain_name[T.1]	0.1582	0.294	0.539	0.595	-0.446	0.762
Usage_of_Domain_name[T.2]	0.2769	0.301	0.920	0.366	-0.342	0.896
Usage_of_Domain_name[T.3]	-0.0707	0.301	-0.235	0.816	-0.689	0.548
Respondent_Showed_Bona_Fide	0.0055	0.301	0.018	0.986	-0.613	0.624
Respondent_Showed_Commonly_Known	-0.3785	0.235	-1.609	0.120	-0.862	0.105
Respondent_showed_fair_use	-0.3470	0.255	-1.361	0.185	-0.871	0.177

Omnibus:	7.523	Durbin-Watson:	2.268
Prob(Omnibus):	0.023	Jarque-Bera (JB):	5.930
Skew:	-0.905	Prob(JB):	0.0516
Kurtosis:	4.017	Cond. No.	6.86

The Accuracy of this Linear Regression Model is : 78.7878787879%

(2) RESPONDENT HAD NO LEGITIMATE INTERESTS: LOGISTIC

DATA RECALIBRATION FOR LOGIT

```
dataSet['Complainant_Showed_Registrant_No_Legitimate_Interests'] = dataSet["Complainant_Showed_Registrant_No_Legitimate_Interests"].map({-1:0, 0:0, 1:1})
dataSet['Respondent_Showed_Bona_Fide'] = dataSet["Respondent_Showed_Bona_Fide"].map({-1:0, 0:0, 1:1})
dataSet['Respondent_showed_fair_use'] = dataSet["Respondent_showed_fair_use"].map({-1:0, 0:0, 1:1})
dataSet['Usage_of_Domain_name'] = dataSet["Usage_of_Domain_name"].map({0:0, 1:0, 2:0, 3:1})
```

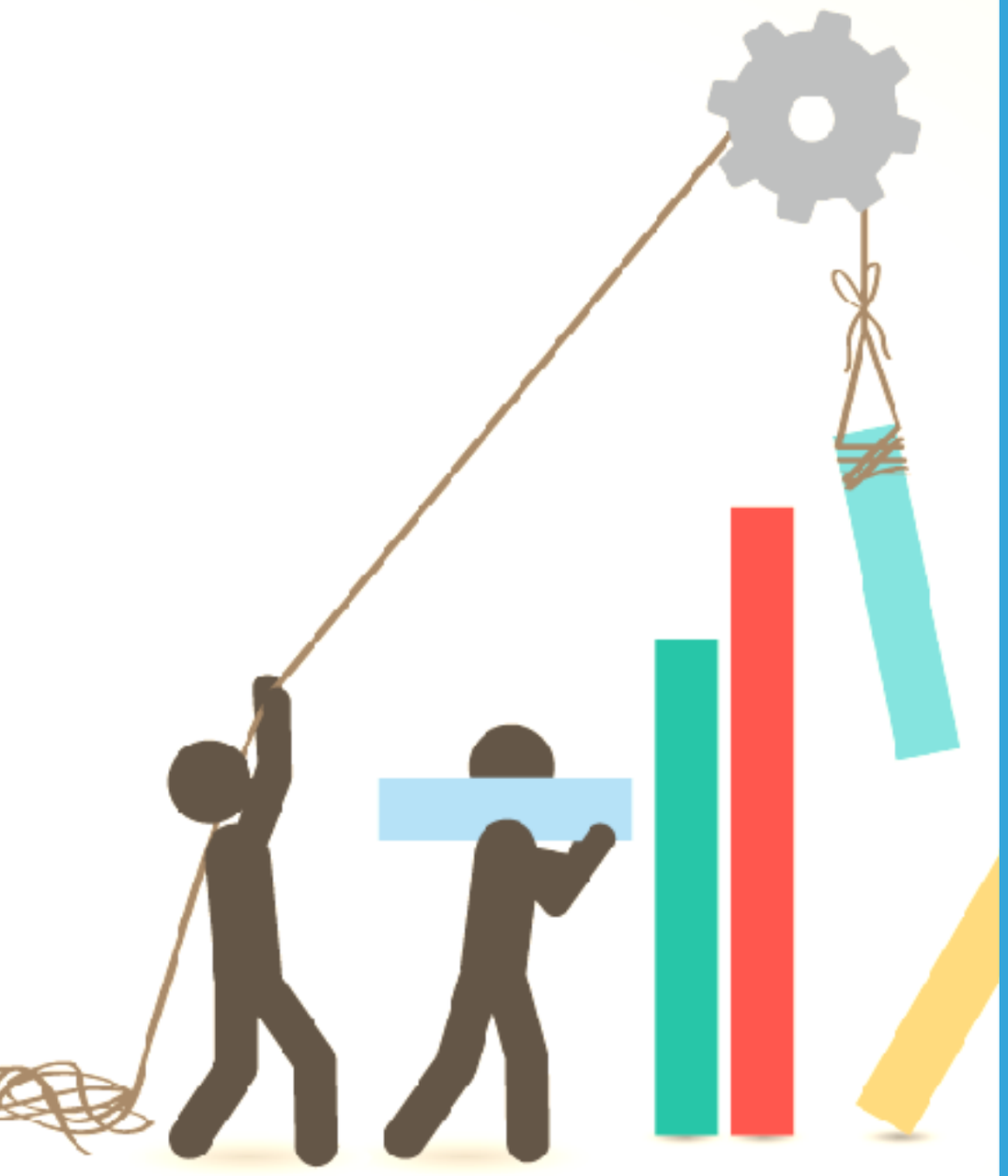
LOGIT RESULTS

Logit Regression Results

Dep. Variable:	Complainant_Showed_Registrant_No_Legitimate_Interests	No. Observations:	33
Model:	Logit	Df Residuals:	28
Method:	MLE	Df Model:	4
Date:	Tue, 04 Apr 2017	Pseudo R-squ.:	0.3991
Time:	21:02:50	Log-Likelihood:	-9.4021
converged:	False	LL-Null:	-15.647
		LLR p-value:	0.01406

	coef	std err	z	P>|z|	[95.0% Conf.	Int.]
Intercept	2.5382	0.887	2.862	0.004	0.800	4.276
Respondent_Showed_Bona_Fide	17.9918	1.91e+04	0.001	0.999	-3.75e+04	3.75e+04
Respondent_showed_fair_use	-64.5427	3.39e+09	-1.9e-08	1.000	-6.65e+09	6.65e+09
Usage_of_Domain_name	-0.8117	1.340	-0.606	0.545	-3.439	1.816
Complainant_Prior_ownership	-0.6001	1.332	-0.450	0.652	-3.211	2.011

The Accuracy of this Logistic Regression Model is : 87.8787878788%
The Precision of this Logistic Regression Model is : 86.6666666667%
The Recall of this Logistic Regression Model is: 100.0%
The F1 Score of this Logistic Regression Model is: 0.928571428571



SUB-MODEL 3: REGISTERED / USED DOMAIN NAME IN BAD FAITH

- CHOICE OF VARIABLES
- LINEAR MODEL
- LOGISTIC MODEL

(3) BAD FAITH: VARIABLES TO CHOOSE FROM

NO RESPONSE FROM RESPONDENT

RESPONDENT ATTEMPTED TO SELL DOMAIN NAME?

PRIOR COMMERCIAL RELATIONSHIP BETWEEN PARTIES?

EVIDENCE OF REGISTRATION FOR

- VALUABLE CONSIDERATION
- TO PREVENT TRADEMARK OWNER USAGE
- ATTRACTING CUSTOMERS FOR COMMERCIAL GAIN THROUGH LIKELIHOOD OF CONFUSION
- TO DISRUPT THE BUSINESS OF THE TRADEMARK PROPRIETOR

EVIDENCE OF BAD FAITH ON OTHER GROUNDS

(3) BAD FAITH: LINEAR

OLS Regression Results

Dep. Variable:	Conclusion	R-squared:	0.623
Model:	OLS	Adj. R-squared:	0.569
Method:	Least Squares	F-statistic:	11.55
Date:	Tue, 04 Apr 2017	Prob (F-statistic):	1.15e-05
Time:	14:51:55	Log-Likelihood:	-1.2237
No. Observations:	33	AIC:	12.45
Df Residuals:	28	BIC:	19.93
Df Model:	4		
Covariance Type:	nonrobust		

The number of true positives is 26
The number of true negatives is 6
The number of false positives is 1
The number of false negatives is 0
The accuracy is 0.969696969697
The precision is 0.962962962963
The recall is 1.0
The F1 score is 0.981132075472

	coef	std err	t	P>|t|	[95.0% Conf.	Int.]
Intercept	0.3521	0.084	4.326	0.000	0.191	0.534
No_response_from_respondent	0.1981	0.103	1.921	0.065	-0.013	0.409
Evidence_of_Attracting_customers_for_commercial_gain_through_likelihood_of_confusion	0.3348	0.084	4.580	0.000	0.213	0.557
Evidence_of_bad_faith_on_other_grounds	0.1534	0.104	1.566	0.129	-0.050	0.377
Respondent_Attempt_to_sell	0.1175	0.092	1.278	0.212	-0.071	0.306

Omnibus:	0.593	Durbin-Watson:	1.987
Prob(Omnibus):	0.743	Jarque-Bera (JB):	0.668
Skew:	-0.114	Prob(JB):	0.716
Kurtosis:	2.341	Cond. No.	3.61

The accuracy is 0.969696969697

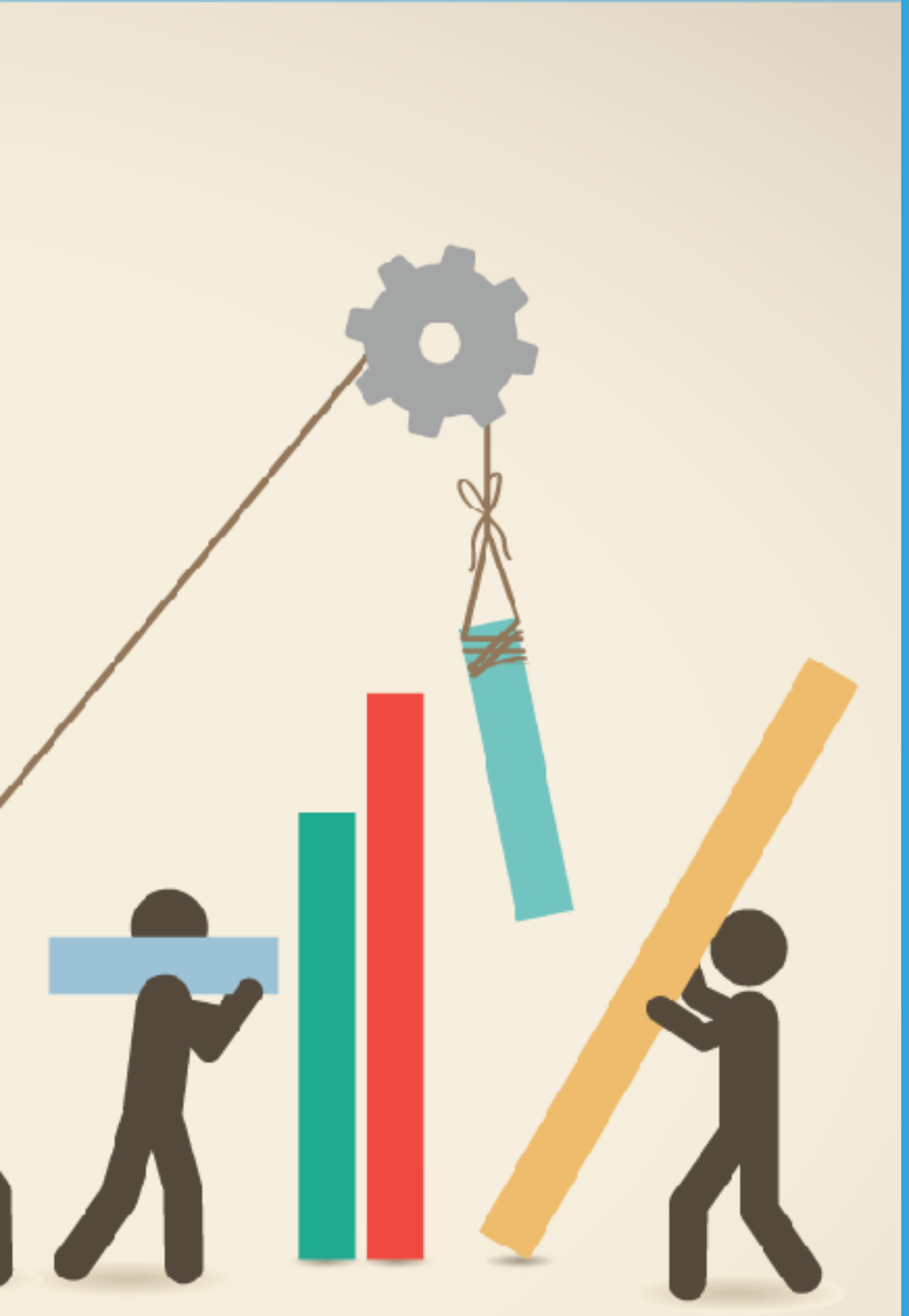
(3) REGISTERED/USED IN BAD FAITH (LOGIT)

Logit Regression Results

Dep. Variable:	Conclusion	No. Observations:	33
Model:	Logit	Df Residuals:	28
Method:	MLE	Df Model:	4
Date:	Tue, 04 Apr 2017	Pseudo R-squ.:	0.9187
Time:	21:56:34	Log-Likelihood:	-1.3863
converged:	False	LL-Null:	-17.053
		LLR p-value:	2.618e-06

	coef	std err	z	P>|z|	[95.0% Conf.	Int.]
Intercept	-18.9637	6559.835	-0.003	0.998	-1.29e+04	1.28e+04
No_response_from_respondent	18.9637	6559.836	0.003	0.998	-1.28e+04	1.29e+04
Respondent_Attempt_to_sell	24.5944	1.55e+05	0.000	1.000	-3.04e+05	3.04e+05
Evidence_of_Attracting_customers_for_commercial_gain_through_likelihood_of_confusion	44.4119	1.94e+05	0.000	1.000	-3.8e+05	3.8e+05
Evidence_of_bad_faith_on_other_grounds	42.4848	1.28e+05	0.000	1.000	-2.51e+05	2.51e+05

The number of true positives is 26
The number of true negatives is 6
The number of false positives is 1
The number of false negatives is 0
The accuracy is 0.969696969697
The precision is 0.962962962963
The recall is 1.0
The F1 score is 0.981132075472



GENERAL MODEL

MODEL A: CONCLUSION ~ GENERAL VARIABLES

MODEL B: CONCLUSION ~ ATTRIBUTES FROM EACH ELEMENT

MODEL C: CONCLUSION ~ GENERAL VARIABLES + ATTRIBUTES FROM EACH ELEMENT

GENERAL VARIABLES TO CHOOSE FROM

LENGTH OF CASE

COUNTRY OF | COMPLAINANT / RESPONDENT | INDUSTRY OF

YEAR OF JUDGMENT

SG CASES | SDRP CASES

LIST OF PRECEDENTS

UK + EU CASES | US CASES | WIPO/UDRP

NAME | PANELLIST

PROFESSION

ACADEMIC | PRACTITIONER | AGC/ IPOS

NUMBER OF

SETTLE | ATTEMPTS / ACTUAL | MEDIATE

GENERAL MODEL A: CONCLUSION ~ PANELISTS (LINEAR)

OLS Regression Results

Dep. Variable:	Conclusion	R-squared:	0.402
Model:	OLS	Adj. R-squared:	0.043
Method:	Least Squares	F-statistic:	1.119
Date:	Tue, 04 Apr 2017	Prob (F-statistic):	0.398
Time:	13:20:39	Log-Likelihood:	-8.8323
No. Observations:	33	AIC:	43.66
Df Residuals:	20	BIC:	63.12
Df Model:	12		
Covariance Type:	nonrobust		

Panelist	
Jim Lim	6
Tan Tee Jim SC	5
Stanley Lai SC	5
Joyce A Tan	4
Murgiana Haq	3
David Llewelyn	2
Phang Hsiao Chung	2
Ng-Loy Wee Loon	1
Daren Tang Heng Shim	1
Daniel Seng	1
Jo-Ann See	1
Richard Tan	1
Jonathan Kok	1

	coef	std err	t	P>|t|	[95.0% Conf.	Int.]
Intercept	3.139e-15	0.406	7.73e-15	1.000	-0.847	0.847
Panelist[T.Daren Tang Heng Shim]	1.0000	0.574	1.741	0.097	-0.198	2.198
Panelist[T.David Llewelyn]	0.5000	0.497	1.005	0.327	-0.538	1.538
Panelist[T.Jim Lim]	0.5000	0.439	1.140	0.268	-0.415	1.415
Panelist[T.Jo-Ann See]	1.0000	0.574	1.741	0.097	-0.198	2.198
Panelist[T.Jonathan Kok]	1.0000	0.574	1.741	0.097	-0.198	2.198
Panelist[T.Joyce A Tan]	1.0000	0.454	2.202	0.040	0.053	1.947
Panelist[T.Murgiana Haq]	1.0000	0.469	2.132	0.046	0.022	1.978
Panelist[T.Ng-Loy Wee Loon]	1.0000	0.574	1.741	0.097	-0.198	2.198
Panelist[T.Phang Hsiao Chung]	0.5000	0.497	1.005	0.327	-0.538	1.538
Panelist[T.Richard Tan]	1.0000	0.574	1.741	0.097	-0.198	2.198
Panelist[T.Stanley Lai SC]	1.0000	0.445	2.247	0.036	0.072	1.928
Panelist[T.Tan Tee Jim SC]	0.8000	0.445	1.798	0.087	-0.128	1.728

Omnibus:	1.972	Durbin-Watson:	1.348
Prob(Omnibus):	0.373	Jarque-Bera (JB):	1.196
Skew:	-0.460	Prob(JB):	0.550
Kurtosis:	3.155	Cond. No.	22.4

GENERAL MODEL A: CONCLUSION ~ PANELISTS TYPE (LINEAR)

OLS Regression Results

Dep. Variable:	Conclusion	R-squared:	0.084
Model:	OLS	Adj. R-squared:	0.023
Method:	Least Squares	F-statistic:	1.377
Date:	Tue, 04 Apr 2017	Prob (F-statistic):	0.268
Time:	14:35:30	Log-Likelihood:	-15.857
No. Observations:	33	AIC:	37.71
Df Residuals:	30	BIC:	42.20
Df Model:	2		
Covariance Type:	nonrobust		

	coef	std err	t	P>|t|	[95.0% Conf.	Int.]
Intercept	0.6667	0.237	2.814	0.009	0.183	1.150
Panelist_Type[T.Academic]	-0.1667	0.313	-0.532	0.599	-0.807	0.473
Panelist_Type[T.Practitioner]	0.1795	0.250	0.717	0.479	-0.331	0.690

Omnibus:	9.692	Durbin-Watson:	1.629
Prob(Omnibus):	0.008	Jarque-Bera (JB):	9.375
Skew:	-1.298	Prob(JB):	0.00921
Kurtosis:	3.279	Cond. No.	7.87

Panelist Type	
Practitioner	26
Academic	4
AGC/IPOS	3

GENERAL MODEL A: CONCLUSION ~ GENERAL VARIABLES (LOG)

Logit Regression Results

Dep. Variable:	Conclusion	No. Observations:	33
Model:	Logit	Df Residuals:	28
Method:	MLE	Df Model:	4
Date:	Tue, 04 Apr 2017	Pseudo R-squ.:	0.1828
Time:	13:20:39	Log-Likelihood:	-13.936
converged:	False	LL-Null:	-17.053
		LLR p-value:	0.1823

	coef	std err	z	P>|z|	[95.0% Conf. Int.]	
Intercept	19.4146	1.16e+04	0.002	0.999	-2.28e+04	2.28e+04
Panelist_Type[T.Academic]	-19.4146	1.16e+04	-0.002	0.999	-2.28e+04	2.28e+04
Panelist_Type[T.Practitioner]	-17.7406	1.16e+04	-0.002	0.999	-2.28e+04	2.28e+04
Attempts_to_settle	0.1178	1.250	0.094	0.925	-2.332	2.568
Mediation_prior	-24.6319	1.16e+04	-0.002	0.998	-2.28e+04	2.28e+04

The number of true positives is 24
The number of true negatives is 3
The number of false positives is 4
The number of false negatives is 2
The accuracy is 0.818181818182
The precision is 0.857142857143
The recall is 0.923076923077
The F1 score is 0.888888888889

GENERAL MODEL A: CONCLUSION ~ COUNTRIES (LINEAR)

Dep. Variable:	Conclusion	R-squared:	0.602
Model:	OLS	Adj. R-squared:	0.321
Method:	Least Squares	F-statistic:	2.141
Date:	Tue, 04 Apr 2017	Prob (F-statistic):	0.0738
Time:	22:25:05	Log-Likelihood:	-2.9403
No. Observations:	30	AIC:	31.88
Df Residuals:	17	BIC:	50.10
Df Model:	12		
Covariance Type:	nonrobust		

	coef	std err	t	P>|t|	[95.0% Conf.	Int.]
Intercept	1.1536	0.401	2.880	0.010	0.308	1.999
Country_of_Respondent[T.India]	-0.0768	0.267	-0.287	0.777	-0.641	0.487
Country_of_Respondent[T.Japan]	-0.1536	0.535	-0.287	0.777	-1.282	0.975
Country_of_Respondent[T.Singapore]	-0.1536	0.186	-0.824	0.421	-0.547	0.240
Country_of_Respondent[T.Taiwan]	-1.0838	0.384	-2.822	0.012	-1.894	-0.274
Country_of_Complainant[T.France]	2.268e-17	0.501	4.52e-17	1.000	-1.058	1.058
Country_of_Complainant[T.Germany]	-0.1536	0.535	-0.287	0.777	-1.282	0.975
Country_of_Complainant[T.India]	-0.0768	0.267	-0.287	0.777	-0.641	0.487
Country_of_Complainant[T.Korea]	5.862e-16	0.501	1.17e-15	1.000	-1.058	1.058
Country_of_Complainant[T.Luxembourg]	1.327e-17	7.84e-17	0.169	0.868	-1.52e-16	1.79e-16
Country_of_Complainant[T.Singapore]	-0.5726	0.374	-1.530	0.144	-1.362	0.217
Country_of_Complainant[T.Switzerland]	-1.0000	0.501	-1.994	0.062	-2.058	0.058
Country_of_Complainant[T.Turkey]	9.992e-16	0.501	1.99e-15	1.000	-1.058	1.058
Country_of_Complainant[T.UK]	-0.1536	0.535	-0.287	0.777	-1.282	0.975
Country_of_Complainant[T.USA]	-0.0698	0.380	-0.184	0.856	-0.871	0.732

Omnibus:	2.253	Durbin-Watson:	2.182
Prob(Omnibus):	0.324	Jarque-Bera (JB):	1.148
Skew:	0.431	Prob(JB):	0.563
Kurtosis:	3.420	Cond. No.	6.83e+16

Warnings:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
[2] The smallest eigenvalue is 1.12e-32. This might indicate that there are
strong multicollinearity problems or that the design matrix is singular.

Country of Respondent	
Singapore	19
China	8
Taiwan	1
Japan	1
India	1

Country of Complainant	
USA	14
Singapore	9
China	2
France	1
Luxembourg	1
India	1
Switzerland	1
UK	1
Germany	1
Korea	1
Turkey	1

GENERAL MODEL A: CONCLUSION ~ COUNTRIES + CASES (LINEAR)

OLS Regression Results

Dep. Variable:	Conclusion	R-squared:	0.618
Model:	OLS	Adj. R-squared:	0.349
Method:	Least Squares	F-statistic:	2.295
Date:	Tue, 04 Apr 2017	Prob (F-statistic):	0.0574
Time:	14:45:35	Log-Likelihood:	-2.3051
No. Observations:	30	AIC:	30.61
Df Residuals:	17	BIC:	48.83
Df Model:	12		
Covariance Type:	nonrobust		

Country of Respondent	
Singapore	19
China	8
Taiwan	1
Japan	1
India	1

	coef	std err	t	P>|t|	[95.0% Conf.	Int.]
Intercept	0.6125	0.306	2.000	0.062	-0.034	1.259
Country_of_Respondent[T.India]	-0.0907	0.389	-0.233	0.818	-0.911	0.729
Country_of_Respondent[T.Japan]	-0.2404	0.426	-0.564	0.580	-1.139	0.658
Country_of_Respondent[T.Singapore]	-0.2472	0.223	-1.109	0.283	-0.718	0.223
Country_of_Respondent[T.Taiwan]	-2.9855	1.040	-2.870	0.011	-5.181	-0.790
Panelist_Type[T.Academic]	-0.3520	0.364	-0.967	0.347	-1.120	0.416
Panelist_Type[T.Practitioner]	0.0901	0.240	0.375	0.713	-0.417	0.597
No_response_from_respondent	0.3631	0.193	1.882	0.077	-0.044	0.770
No_Cited_WIPO_UDRP_cases	0.0203	0.018	1.156	0.263	-0.017	0.057
No_Cited_US_Cases	0.1362	0.094	1.448	0.166	-0.062	0.335
No_Cited_UK_EU_cases	0.3320	0.132	2.522	0.022	0.054	0.610
No_Cited_SDRP_cases	-0.0078	0.080	-0.097	0.924	-0.176	0.161
No_Cited_SG_Cases	-0.3712	0.187	-1.983	0.064	-0.766	0.024

Omnibus:	0.419	Durbin-Watson:	1.842
Prob(Omnibus):	0.811	Jarque-Bera (JB):	0.556
Skew:	-0.083	Prob(JB):	0.757
Kurtosis:	2.354	Cond. No.	124.

Model 1: using “No Response from Respondent”

Dep. Variable:	Conclusion	R-squared:	0.797
Model:	OLS	Adj. R-squared:	0.730
Method:	Least Squares	F-statistic:	11.79
Date:	Mon, 03 Apr 2017	Prob (F-statistic):	1.19e-06
Time:	14:19:22	Log-Likelihood:	9.0164
No. Observations:	33	AIC:	-0.03272
Df Residuals:	24	BIC:	13.44
Df Model:	8		
Covariance Type:	nonrobust		

	coef	std err	t	P>|t|	[95.0% Conf.	Int.]
Intercept	0.0388	0.125	0.310	0.759	-0.220	0.297
No_response_from_respondent	0.1619	0.096	1.685	0.105	-0.036	0.360
Well_known_Foreign_Brand	0.3172	0.087	3.648	0.001	0.138	0.497
Usage_of_Domain_name	0.0759	0.040	1.877	0.073	-0.008	0.159
Respondent_Showed_Bona_Fide	-0.1472	0.067	-2.191	0.038	-0.286	-0.009
Evidence_of_Circumstances_of_registration_for_valuable_consideration	0.0761	0.065	1.162	0.257	-0.059	0.211
Evidence_of_Attracting_customers_for_commercial_gain_through_likelihood_of_confusion	0.3227	0.069	4.691	0.000	0.181	0.465
Evidence_of_bad_faith_on_other_grounds	0.1370	0.084	1.631	0.116	-0.036	0.310
Respondent_Attempt_to_sell	0.0035	0.080	0.043	0.966	-0.162	0.169

Omnibus:	1.117	Durbin-Watson:	2.135

GENERAL MODEL B: CONCLUSION ~ ELEMENTS (LINEAR)

Model 2: using “Did_Respondent_Respond”

Dep. Variable:	Conclusion	R-squared:	0.776
Model:	OLS	Adj. R-squared:	0.702
Method:	Least Squares	F-statistic:	10.42
Date:	Mon, 03 Apr 2017	Prob (F-statistic):	3.54e-06
Time:	14:19:22	Log-Likelihood:	7.4151
No. Observations:	33	AIC:	3.170
Df Residuals:	24	BIC:	16.64
Df Model:	8		
Covariance Type:	nonrobust		

	coef	std err	t	P>|t|	[95.0% Conf.	Int.]
Intercept	0.1516	0.120	1.264	0.218	-0.096	0.399
Did_Respondent_Respond	-0.0532	0.089	-0.597	0.556	-0.237	0.131
Well_known_Foreign_Brand	0.3072	0.092	3.350	0.003	0.118	0.496
Usage_of_Domain_name	0.0641	0.043	1.488	0.150	-0.025	0.153
Respondent_Showed_Bona_Fide	-0.1794	0.067	-2.671	0.013	-0.318	-0.041
Evidence_of_Circumstances_of_registration_for_valuable_consideration	0.0776	0.069	1.129	0.270	-0.064	0.219
Evidence_of_Attracting_customers_for_commercial_gain_through_likelihood_of_confusion	0.3240	0.073	4.461	0.000	0.174	0.474
Evidence_of_bad_faith_on_other_grounds	0.1526	0.088	1.740	0.095	-0.028	0.333
Respondent_Attempt_to_sell	0.0105	0.084	0.124	0.902	-0.163	0.184

Omnibus:	2.283	Durbin-Watson:	1.898
Prob(Omnibus):	0.319	Jarque-Bera (JB):	1.454
Skew:	-0.508	Prob(JB):	0.483
Kurtosis:	3.158	Cond. No.	8.42

GENERAL MODEL B: CONCLUSION ~ ELEMENTS (LINEAR)

Model 3 - Adding the Dummy Variable We Created: Percentage_ of_Similarity_of_Words

OLS Regression Results

Dep. Variable:	Conclusion	R-squared:	0.749
Model:	OLS	Adj. R-squared:	0.665
Method:	Least Squares	F-statistic:	8.940
Date:	Sun, 02 Apr 2017	Prob (F-statistic):	1.31e-05
Time:	16:32:50	Log-Likelihood:	5.4843
No. Observations:	33	AIC:	7.031
Df Residuals:	24	BIC:	20.50
Df Model:	8		
Covariance Type:	nonrobust		

	coef	std err	t	P>|t|	[95.0% Conf. Int.]
Intercept	0.2152	0.365	0.590	0.560	-0.537 0.968
No_response_from_respondent	0.2015	0.099	2.034	0.053	-0.003 0.406
Well_known_Foreign_Brand	0.3292	0.100	3.278	0.003	0.122 0.537
Percentage_of_Similarity_of_Words	-0.0011	0.003	-0.305	0.763	-0.008 0.006
Length_of_usage	0.0246	0.024	1.023	0.316	-0.025 0.074
Evidence_of_Circumstances_of_registration_for_valuable_consideration	0.0782	0.072	1.080	0.291	-0.071 0.227
Evidence_of_Attracting_customers_for_commercial_gain_through_likelihood_of_confusion	0.3450	0.076	4.525	0.000	0.188 0.502
Evidence_of_bad_fath_on_other_grounds	0.1851	0.097	1.900	0.069	-0.016 0.386
Respondent_Attempt_to_sell	0.0382	0.093	0.413	0.683	-0.153 0.229

Omnibus:	0.863	Durbin-Watson:	2.158
Prob(Omnibus):	0.650	Jarque-Bera (JB):	0.783
Skew:	0.073	Prob(JB):	0.676
Kurtosis:	2.260	Cond. No.	842.

Warnings:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
The Accuracy of this Linear Regression Model is : 100.0%

GENERAL MODEL C: CONCLUSION ~ GENERAL + ELEMENTS (LINEAR)

OLS Regression Results

Dep. Variable:	Conclusion	R-squared:	0.925
Model:	OLS	Adj. R-squared:	0.782
Method:	Least Squares	F-statistic:	6.453
Date:	Wed, 05 Apr 2017	Prob (F-statistic):	0.00141
Time:	12:06:44	Log-Likelihood:	25.416
No. Observations:	33	AIC:	-6.831
Df Residuals:	11	BIC:	26.09
Df Model:	21		
Covariance Type:	nonrobust		

The number of true positives is 26
The number of true negatives is 7
The number of false positives is 0
The number of false negatives is 0
The accuracy is 1.0
The precision is 1.0
The recall is 1.0
The F1 score is 1.0

	coef	std err	t	P>|t|	[95.0% Conf.	Int.]
Intercept	0.1875	0.322	0.583	0.572	-0.520	0.895
Panelist[T.Daren Tang Heng Shim]	0.1149	0.411	0.279	0.785	-0.790	1.020
Panelist[T.David Llewelyn]	-0.1171	0.330	-0.354	0.730	-0.844	0.610
Panelist[T.Jim Lim]	-0.1212	0.281	-0.432	0.674	-0.739	0.496
Panelist[T.Jo-Ann See]	0.1580	0.355	0.445	0.665	-0.624	0.940
Panelist[T.Jonathan Kok]	-0.0763	0.346	-0.220	0.830	-0.839	0.686
Panelist[T.Joyce A Tan]	0.1324	0.329	0.402	0.695	-0.592	0.857
Panelist[T.Murgiana Haq]	-0.0157	0.355	-0.044	0.966	-0.796	0.765
Panelist[T.Ng-Loy Wee Loon]	-0.0731	0.395	-0.185	0.857	-0.943	0.797
Panelist[T.Phang Hsiao Chung]	0.6077	0.409	1.487	0.165	-0.292	1.507
Panelist[T.Richard Tan]	-0.0763	0.346	-0.220	0.830	-0.839	0.686
Panelist[T.Stanley Lai SC]	0.1813	0.307	0.591	0.566	-0.494	0.856
Panelist[T.Tan Tee Jim SC]	0.2554	0.298	0.858	0.409	-0.400	0.910
Attempts_to_settle	-0.2000	0.125	-1.602	0.137	-0.475	0.075
Mediation_prior	-0.9859	0.391	-2.523	0.028	-1.846	-0.126
No_response_from_respondent	0.0821	0.126	0.653	0.527	-0.195	0.359
Well_known_Foreign_Brand	0.3818	0.108	3.546	0.005	0.145	0.619
Usage_of_Domain_name	0.0729	0.144	0.506	0.623	-0.244	0.390
Respondent_Showed_Bona_Fide	-0.1383	0.177	-0.782	0.451	-0.528	0.251
Evidence_of_Circumstances_of_registration_for_valuable_consideration	0.1905	0.104	1.832	0.094	-0.038	0.420
Evidence_of_Attracting_customers_for_commercial_gain_through_likelihood_of_confusion	0.3132	0.035	3.703	0.003	0.127	0.499
Evidence_of_bad_faith_on_other_grounds	0.1117	0.123	0.910	0.382	-0.158	0.382

GENERAL MODEL C: CONCLUSION ~ GENERAL + ELEMENTS (LINEAR)

OLS Regression Results

Dep. Variable:	Conclusion	R-squared:	0.971
Model:	OLS	Adj. R-squared:	0.868
Method:	Least Squares	F-statistic:	9.435
Date:	Tue, 04 Apr 2017	Prob (F-statistic):	0.00258
Time:	22:44:10	Log-Likelihood:	41.213
No. Observations:	33	AIC:	-30.43
Df Residuals:	7	BIC:	8.482
Df Model:	25		
Covariance Type:	nonrobust		

The number of true positives is 26
The number of true negatives is 7
The number of false positives is 0
The number of false negatives is 0
The accuracy is 1.0
The precision is 1.0
The recall is 1.0
The F1 score is 1.0

	coef	std err	t	P>|t|	[95.0% Conf.	Int.]
Intercept	-0.0112	0.260	-0.043	0.967	-0.625	0.603
Panelist[T.Daren Tang Heng Shim]	0.1527	0.344	0.444	0.671	-0.661	0.967
Panelist[T.David Llewelyn]	0.0729	0.266	0.274	0.792	-0.557	0.703
Panelist[T.Jim Lim]	0.0347	0.224	0.155	0.881	-0.494	0.564
Panelist[T.Jo-Ann See]	0.2464	0.279	0.884	0.406	-0.413	0.905
Panelist[T.Jonathan Kok]	-0.0517	0.277	-0.186	0.857	-0.708	0.604
Panelist[T.Joyce A Tan]	0.0931	0.306	0.305	0.770	-0.630	0.816
Panelist[T.Murgiana Haq]	0.2073	0.279	0.743	0.482	-0.452	0.867
Panelist[T.Ng-Loy Wee Loon]	0.1721	0.315	0.545	0.602	-0.574	0.918
Panelist[T.Phang Hsiao Chung]	0.4403	0.386	1.140	0.292	-0.473	1.354
Panelist[T.Richard Tan]	0.0657	0.334	0.197	0.849	-0.723	0.854
Panelist[T.Stanley Lai SC]	0.2927	0.252	1.162	0.283	-0.303	0.888
Panelist[T.Tan Tee Jim SC]	0.2949	0.247	1.196	0.270	-0.288	0.878
Usage_of_Domain_name[T.1]	0.2082	0.118	1.767	0.121	-0.070	0.487
Usage_of_Domain_name[T.2]	0.1174	0.156	0.752	0.477	-0.252	0.487
Usage_of_Domain_name[T.3]	0.1380	0.124	1.116	0.301	-0.154	0.430
Attempts_to_settle	-0.4245	0.154	-2.749	0.029	-0.790	-0.059
Number_of_settle_attempts	0.3021	0.142	2.128	0.071	-0.034	0.638
Mediation_prior	-0.7323	0.533	-1.375	0.212	-1.992	0.527
Mediaiton_Prior_attempts	-0.0047	0.250	-0.019	0.985	-0.596	0.586
No_response_from_respondent	0.0060	0.111	0.054	0.959	-0.256	0.268
Well_known_Foreign_Brand	0.3602	0.092	3.935	0.006	0.144	0.577
Respondent_Showed_Bona_Fide	-0.1254	0.086	-1.457	0.189	-0.329	0.078
Evidence_of_Circumstances_of_registration_for_valuable_consideration	0.0651	0.107	0.608	0.562	-0.183	0.318
Evidence_of_Attracting_customers_for_commercial_gain_through_likelihood_of_confusion	0.2964	0.079	3.734	0.007	0.109	0.484
Evidence_of_bad_faith_on_other_grounds	0.1575	0.101	1.561	0.163	-0.081	0.396

CONCLUSION

3 CUMULATIVE ELEMENTS – ALL MATTER

WELL-KNOWN FOREIGN BRAND

REGISTERING FOR COMMERCIAL GAIN THROUGH CONFUSION

MEDIATION PRIOR

ATTEMPTS TO SETTLE