

# Win Prediction Analytics

for IT Consulting Company Project Bids

# Outline

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- Background & Motivation
- Dataset Description
- Objectives
- Outlook

# Background

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- Bidding for Contracts

- Contractors submit competitive proposals to do work
  - e.g., construction projects
- IT companies make bids for network services



[e2 IT Consulting](#)

# Motivation

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- Competitive Bidding
  - More bids won -> more potential profit -> more success
  - How to increase chances of winning a proposal?
    - Learning from past bidding data
      - What works?
      - What doesn't work?
- Data Analytics
  - Predict outcome (win/loss)



# Dataset

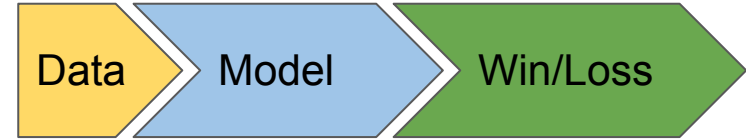
8 Attributes (Independent Variables)

Outcome

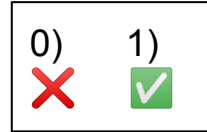
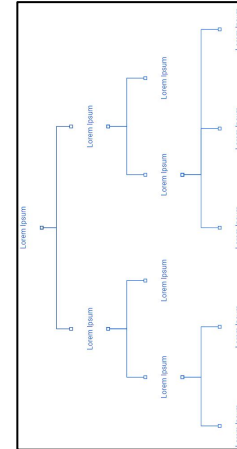
	A	B	C	D	E	F	G	H	I
	Client Category	Solution Type	Deal Date	Sector	Location	VP Name	Manager Name	Deal Cost	Deal Status Code
1	Telecom	Solution 7	27-Mar-12	Sector 24	L5	Ekta Zutshi	Gopa Trilochana	150000.00	Won
2	Telecom	Solution 7	25-Sep-12	Sector 24	L5	Ekta Zutshi	Gopa Trilochana	744705.88	Won
3	Internal	Solution 59	1-Aug-11	Sector 20	Others	Ekta Zutshi	Russell Dahlen	60000.00	Lost
4	Internal	Solution 59	28-Apr-11	Sector 20	Others	Ekta Zutshi	Russell Dahlen	60000.00	Lost
5	Internal	Solution 32	3-Jun-11	Sector 20	Others	Ekta Zutshi	Russell Dahlen	80882.35	Lost
6	Internal	Solution 32	24-May-11	Sector 20	Others	Ekta Zutshi	Russell Dahlen	80882.35	Lost
7	Internal	Solution 59	3-Nov-11	Sector 2	L10	Mervin Harwood	rahul sharma	526176.47	Won
8	Govt	Solution 7	17-Sep-12	Sector 13	L5	Sargar Deep Rao	Vidur Hukle	409705.88	Lost
9	Consumer Good	Solution 42	11-Apr-12	Sector 12	L10	Lilli Storrs	Md. Daud	1032352.94	Won
10	Internal	Solution 59	17-Nov-11	Sector 20	Others	Sargar Deep Rao	Hardeep Suksma	558823.53	Lost
11	International Bank	Solution 6	11-Feb-12	Sector 2	L10	Long Bergstrom	Luv Malhotra	316176.47	Won
12	Domestic Public Bank	Solution 59	30-Mar-12	Sector 2	L11	Mervin Harwood	Lino Batterton	929411.77	Won
13	Finance	Solution 59	26-Apr-12	Sector 2	L5	Mervin Harwood	Sang Ingle	2367647.06	Won
14	Manufacturing	Solution 59	20-Dec-11	Sector 15	L5	Ekta Zutshi	shafibul	8823529.41	Lost
15	Finance	Solution 20	22-Dec-11	Sector 17	L5	Long Bergstrom	Anand S. Pandey	122058.82	Lost
16	Services_based	Solution 32	23-Jan-12	Sector 23	L1	Ekta Zutshi	Molly Eakes	529411.77	Lost
17	Domestic Public Bank	Solution 59	20-Oct-11	Sector 2	L10	Mervin Harwood	Rakesh Sharma	2367647.06	Won

# Objectives

- Create the best win prediction model
  - Compare at least 3-4 models
- Identify the key attributes
- Identify the top 5 bid managers
- Grading system for false predictions
  - Penalty for false positive/negative?
- Determine prediction accuracy



1.	0.0204
2.	5.0434
3.	10.330
4.	3.4224
5.	6.9902
6.	1.1042
7.	8.5533
8.	0.0552
9.	3.5332
10.	6.0310
11.	...



# Outlook

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- Application
  - Successful models can be used to improve IT company bids
- Insight
  - Identification of key attributes
    - Revise company procedures
    - Evaluate management success
    - Reallocation of resources/efforts/investments
- Continued Study
  - Apply same models to bidding data from other business areas (e.g., construction)

**Thank you! Questions?**