

# Getting Impact from Predictive Analytics: You Have a Model. Now What?

2018 CAS RPM Seminar March 20, 2018

David Wang Jessica Leong



# **Antitrust Notice**

- The Casualty Actuarial Society is committed to adhering strictly to the letter and spirit of the antitrust laws. Seminars conducted under the auspices of the CAS are designed solely to provide a forum for the expression of various points of view on topics described in the programs or agendas for such meetings.
- Under no circumstances shall CAS seminars be used as a means for competing companies or firms to reach any understanding expressed or implied that restricts competition or in any way impairs the ability of members to exercise independent business judgment regarding matters affecting competition.
- It is the responsibility of all seminar participants to be aware of antitrust regulations, to prevent any written or verbal discussions that appear to violate these laws, and to adhere in every respect to the CAS antitrust compliance policy.

#### The Marshmallow Challenge



**Goal:** Build the tallest freestanding structure that can hold a piece of marshmallow on top

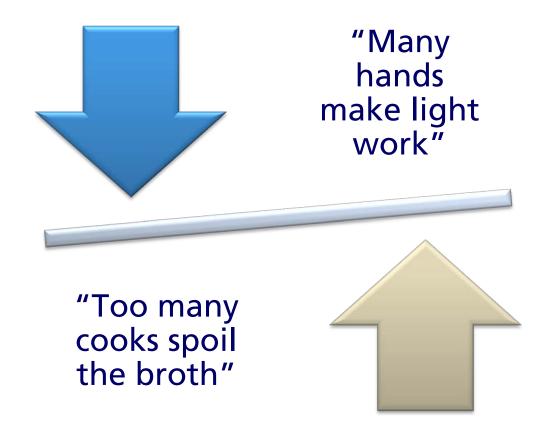
- Teams of 6 people
- 15 minutes building time
- Using the following ingredients
  - 20 sticks of uncooked spaghetti
  - 1 roll of tape
  - 1 roll of string
  - 1 piece of marshmallow



## **Key Takeaways**

# **Z**URICH<sup>®</sup>

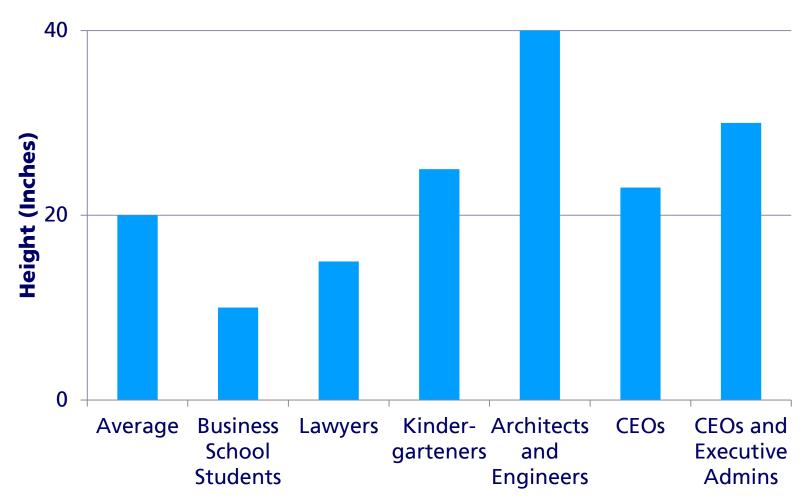
#### From the Marshmallow Challenge



#### **How Other Teams Did**



#### On the Marshmallow Challenge



Source: Tom Wujec, TED April 2010

#### **Key Takeaways**

# **Z**URICH<sup>®</sup>

#### From the Marshmallow Challenge

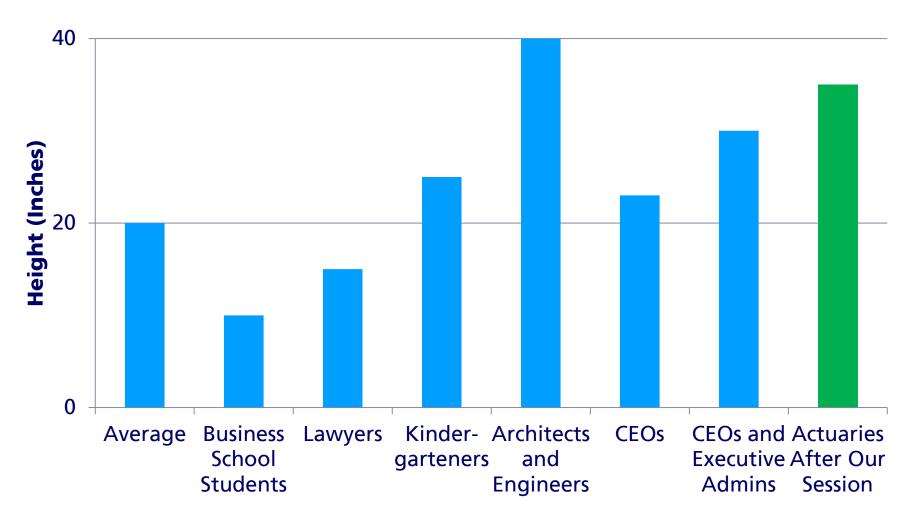
- Collaboration among team members with diverse skill sets and a common goal
  - The end users of predictive models can be key to providing timely feedback and promoting cross-functional ownership
  - Larger projects tend to have similarly skilled people with unclear goals, resulting in more low-efficiency meetings
  - Well-defined roles and responsibilities are required to support larger projects



#### **How Other Teams Did**



On the Marshmallow Challenge



Source: Tom Wujec, TED April 2010





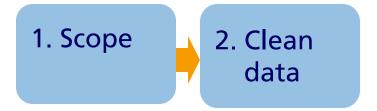




We are building a predictive model

1. Scope

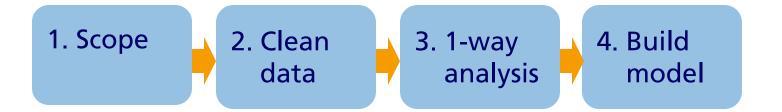




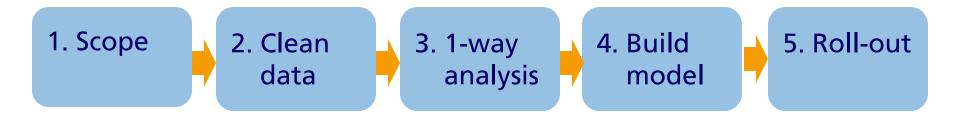




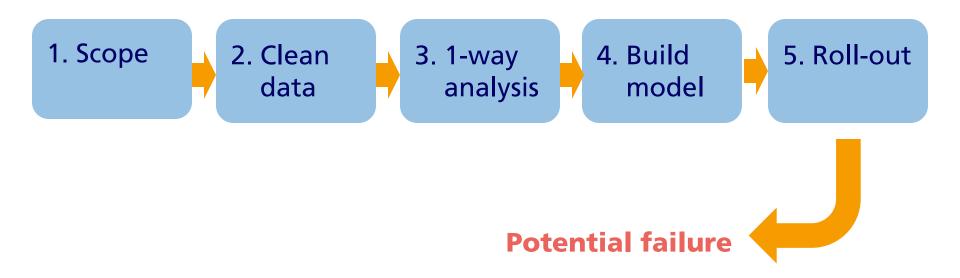




















In 2004 IMVU built virtual reality chat network

1. Business Plan



In 2004 IMVU built virtual reality chat network

1. Business Plan



2. Build













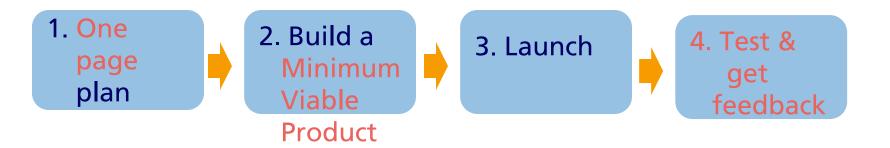




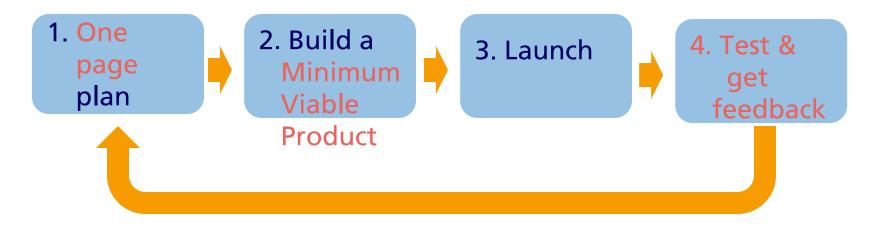






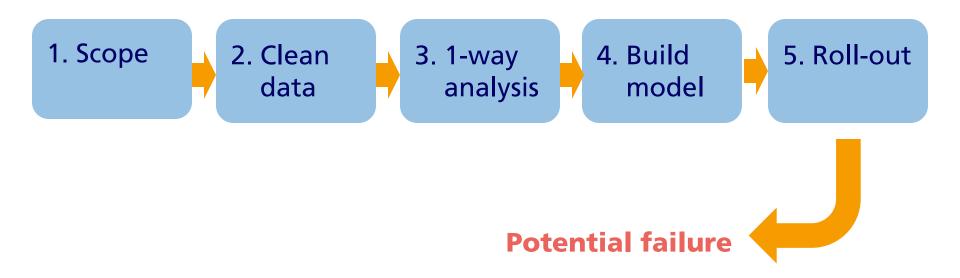




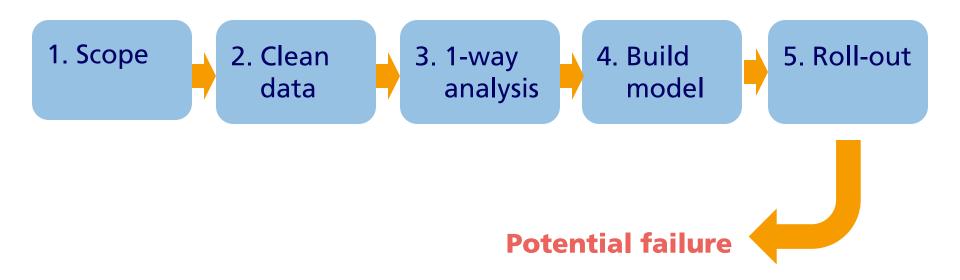




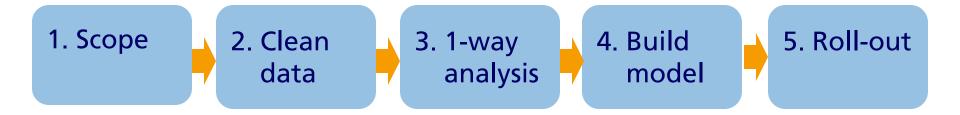
We are building a predictive pricing model













We are building a predictive pricing model solving a business problem.

1. Scope quickly 2. Clean data 3. 1-way analysis 4. Build model 5. Roll-out



