

Predictive modeling – Psychology of an underwriter

UCC – March 6-7, 2016



Agenda

- Introductions
- Changing Responsibilities
- Actuary vs Underwriter Profile
- Recommendations



Introductions

- Sarah Shine

RVP, Underwriting – Erie Insurance

- Keith Holler

2VP, Research & Development – Travelers

- Mike Neubauer

AVP, Casualty Underwriting – RLI Insurance

- Matt Walkowiak

Actuarial Analyst, Underwriting – Erie Insurance



Core Responsibilities

Underwriter

- Individual Risk Acceptability
- Appropriate Account Pricing
- Terms & Conditions

Actuary

- Enterprise Risk Management
- Ratemaking
- Product Development



Changing The Way

Underwriter



Pass the book around



Transaction Focus &
COPE



Actuary



Abacus



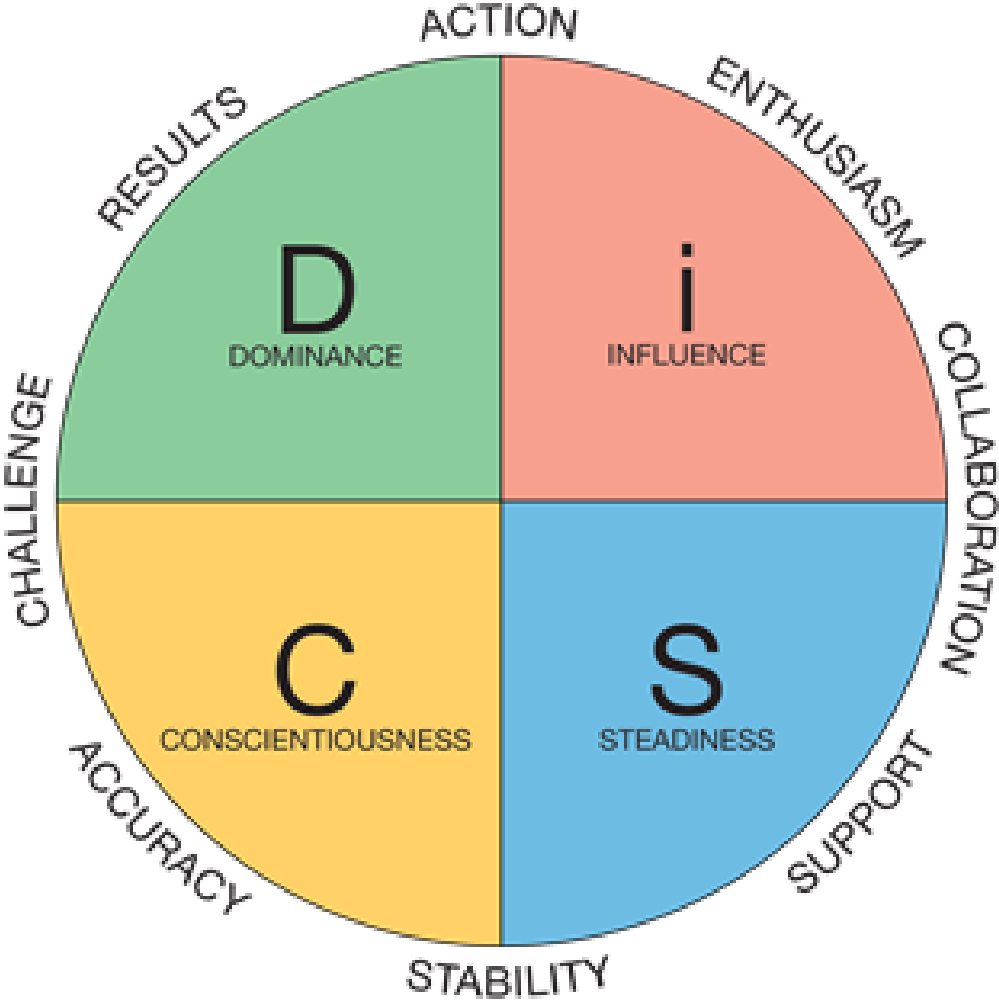
One-Way Analysis



Pricing Sophistication &
Increased Automation



DiSC Profile



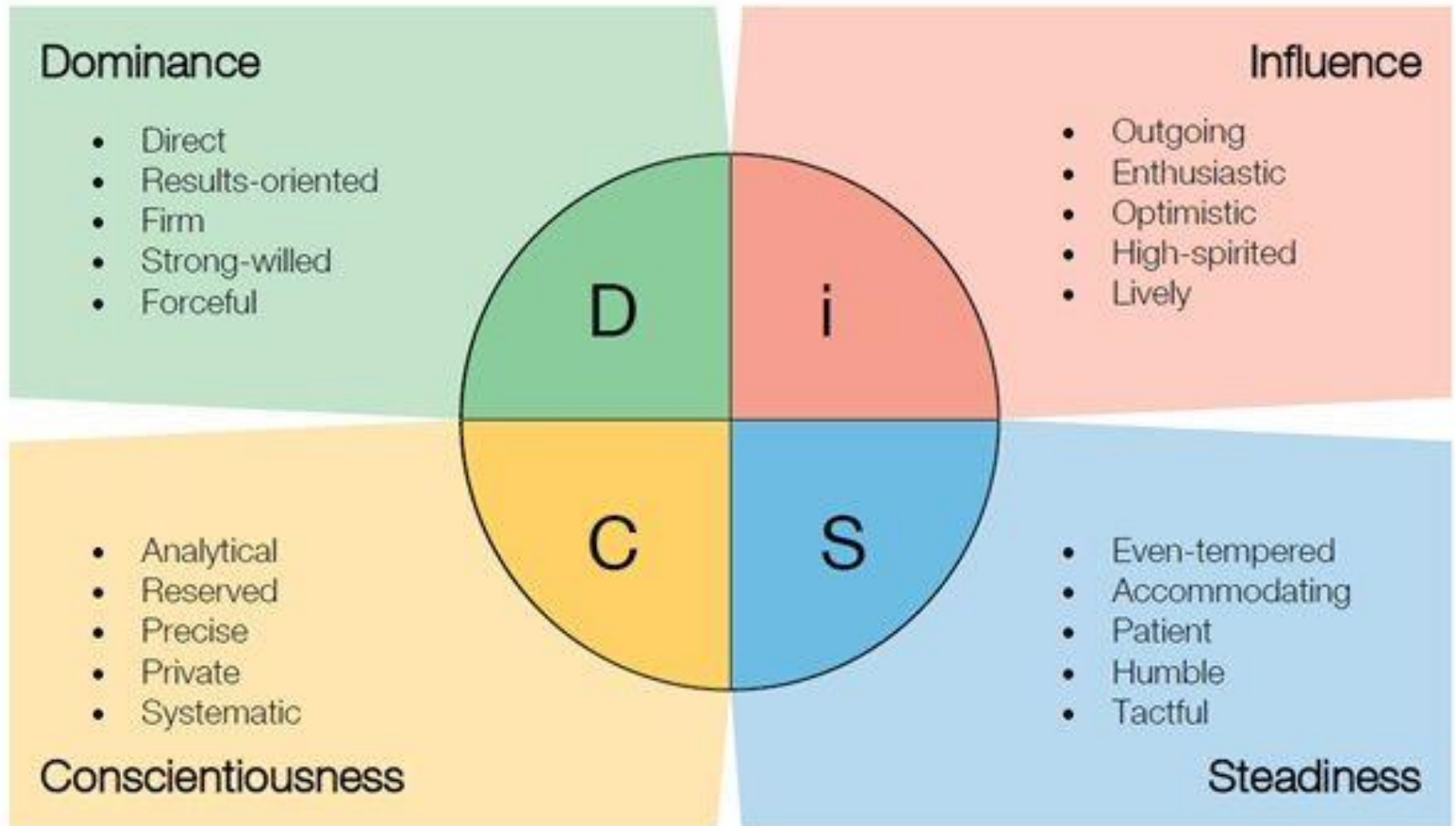
DiSC Profile



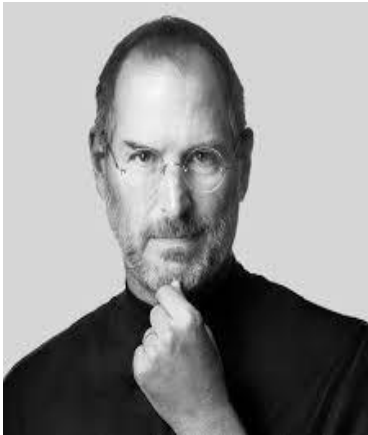
Different,
but not wrong



DiSC Profile



DiSC Profile

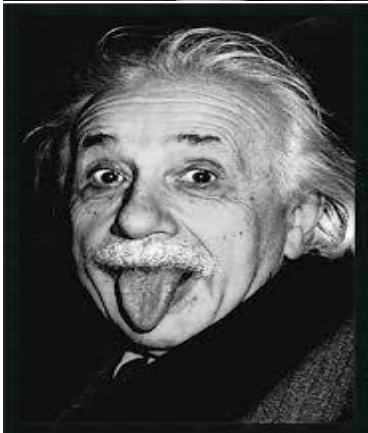


D

Dominance

I

Influence

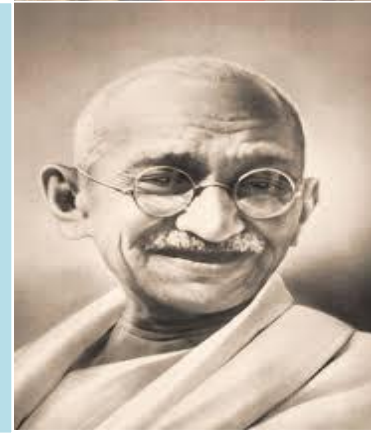


C

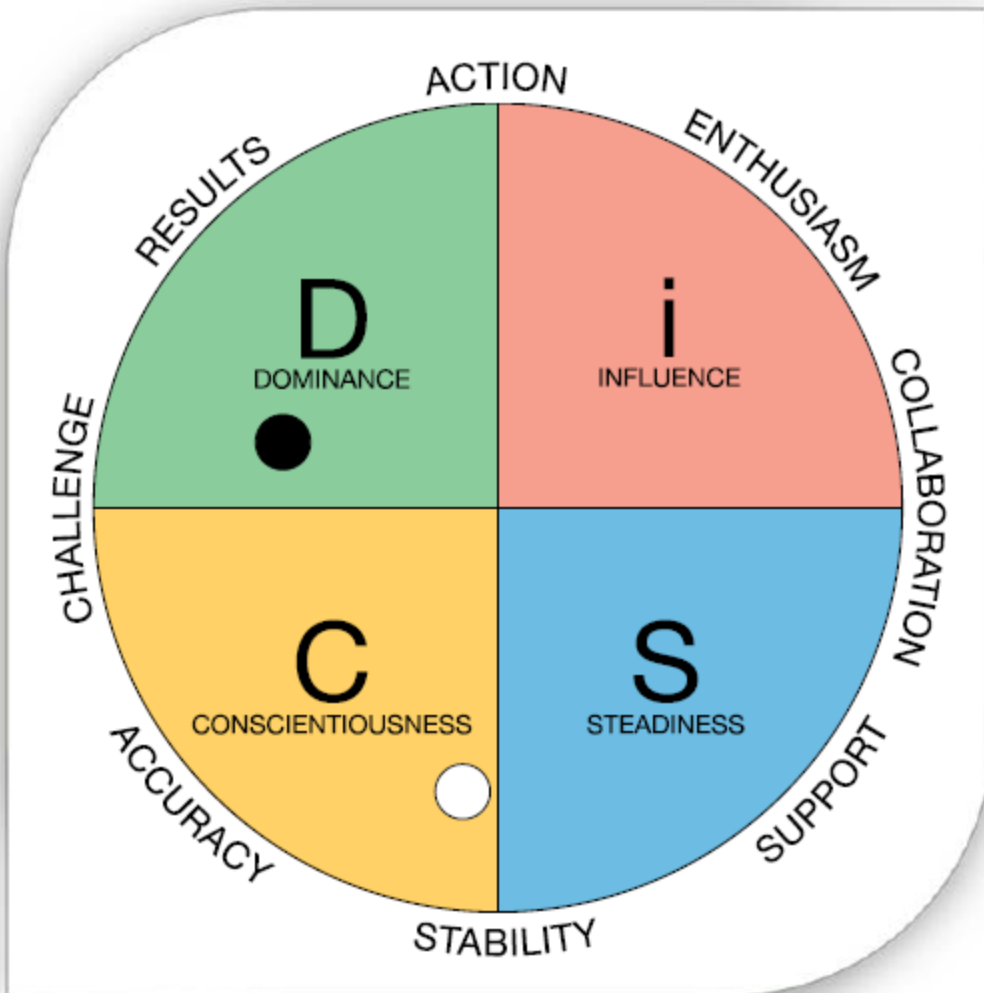
Conscientious

S

Steadiness



Typical Profile



Underwriter = DC

Actuary = CS



Underwriter Profile

- Skeptical and CHALLENGE assumptions
- Push for efficient RESULTS
- Work analytically to ensure ACCURACY

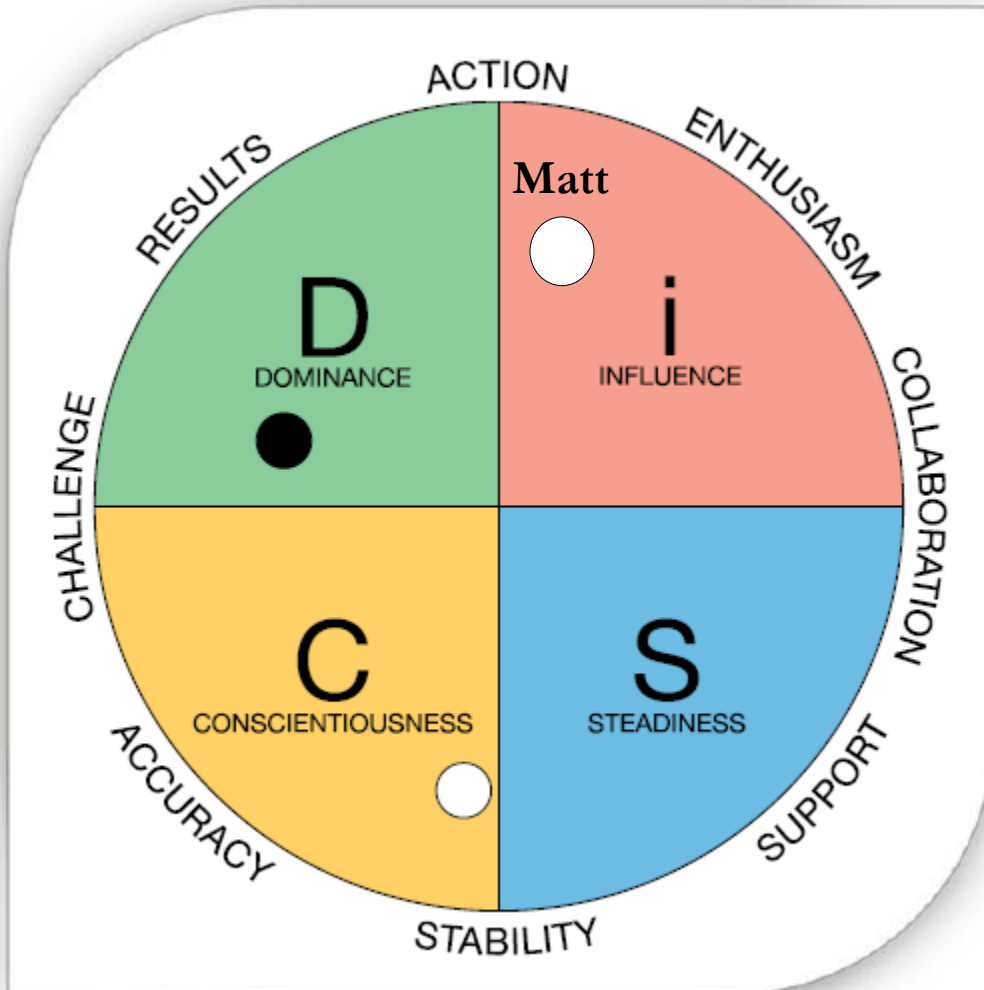


Actuary Profile

- Maintain order and STABILITY
- Create SUPPORTIVE environment
- Work methodically to ensure ACCURACY



Typical Profile



Underwriter = DC

Actuary = CS

Matt = ID

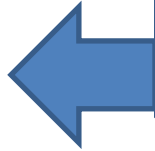


New Product Training

6 New Variables

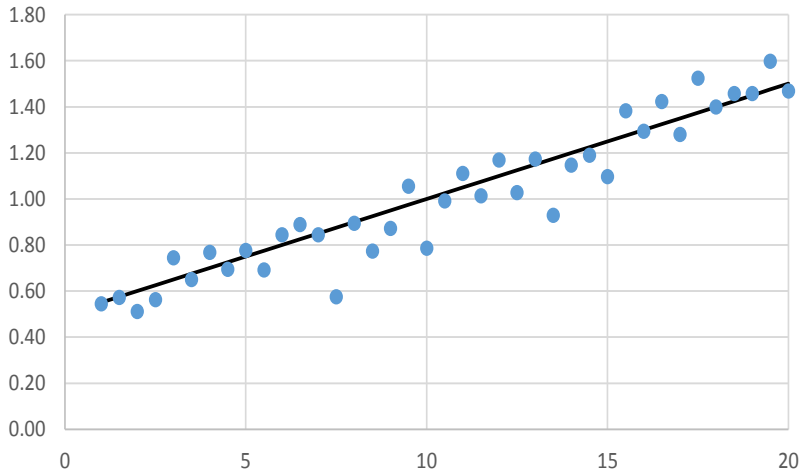
1,000
ROWS

1,000
ROWS



Cross both tables with *tenure*
Super Accurate !

Relative Loss Ratio



PPC



Launch in 2 months.

NAILED IT !



Recommendations

- Message was very analytical, graphs, tables
 - Take more of an individual risk view
 - Tell a story behind each variable
 - Eg Dogs in communities with Dog parks, are happier
 - Will be more understandable, and more useful



Recommendations

- Message was also – Here's the answer
 - Impression of Arrogance
 - Partner with UW all along the way
 - Result will be better product
 - Avoid mistakes like PPC9 and PPC10 interpretation



Recommendations

- Invest in understanding the day to day work of UW
 - Shadow an UW for a day, or just have lunch more often
 - Eg “Cross with Tenure”
 - UW is going to have to explain premium changes on renewal
 - Either temper, or remove, or build tools
 - Better yet – ask
 - How will this impact your day to day?
 - Would it help to have a tool that did ...



Partnership

Cold calls on your customers are not very effective.

A: I've been tasked with building an algorithm to replicate your rating.

U: We are making money, we know our appetite for risk, we do not need your input.

A

A: Please tell me all of the things you consider in determining your premium.

U: I think we are done here.

U

The actuary's approach lacks vision of the benefit for the U/W, and does not consider the underwriter's perspective.



Recommendations

- Actuaries Should Build Credibility
 - Start small - build rapport and trust
 - Look for pain points – find solutions for those
 - Work on understanding the impact of individual underwriting decisions on the portfolio
 - Be ready to answer the question at hand, but also be ready for at least the next two expected questions



Recommendations

- Underwriters need to engage the actuaries to control the direction of work to meet the business needs
 - “You kids stay off of my lawn!” is not acceptable to management, the board, or shareholders
 - If the U/W thinks there is a trend developing, ask the actuary for confirmation
 - Actuaries can work within your current appetite and also outside your current appetite
 - External data sources can help improve profitability and allow growth into new areas



Recommendations

- Cross Pollination Builds Stronger (Underwriting) Plants
 - Consider multi-discipline/co-located teams
 - Have actuarial presentations reviewed by an underwriter before being presented to full underwriting team.
 - Consider using your corporate U/W staff or a semi-retired (part time) experienced U/W



Working Together

Underwriter

Forceful
Frank
Daring
Driven
Outgoing

Soft-spoken
Tactful
Careful
Patient
Private

Actuary



Thank You!

- Session presentations will remain uploaded to the Hubb for review after the seminar
- Complete session evaluation (to be sent via email)

