

Why should you be one?

# VALUATION ANALYST

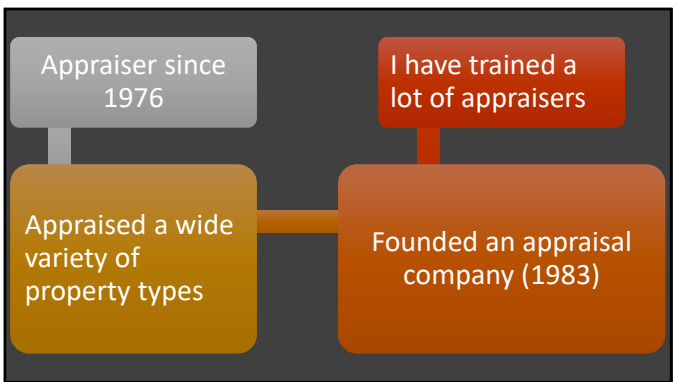
## TOPIC

- Things are 'ah' changing!
- What can you do to better meet the needs of your clients?



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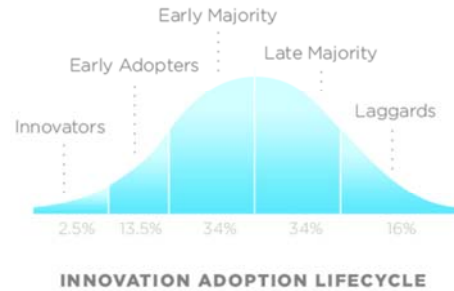



There seems to be a common theme: | Things are "ah' changing!

- Third party inspections.
- Hybrid Appraisals
- Bryan said, "Appraisers are paid to analyze".
- John said, "Appraisers are paid to analyze".
- Fannie: "Appraisers need to be at their desk."
- Jeff: Specialize in inspecting or analysis.

### This 3D Printed House Goes Up in a Day for Under \$10,000

Vanessa Bates Ramirez



## WHY ANTI-CHANGE?

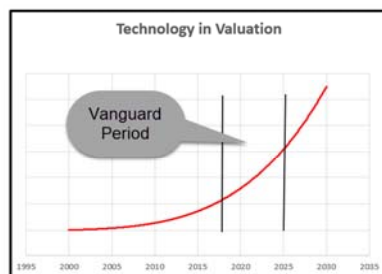
- Appraisal profession has been protected by laws and regulations.
- Survival of the fittest doesn't apply to protected species.
- In other words, we haven't had to.

## Are we losing Protection?

- Inspection Waivers (Fannie)
- ACE (Freddie)
- TriStar Bank Waiver (No appraisers available)
- CRE DeMinimus \$250,000 to \$500,000

My best guess at the rate of advancement in the **ANALYSIS** of real property.

"It's not hard to find signs that technological advances will render many jobs irrelevant; as many as 800 million workers worldwide will be displaced due to automation by 2030."  
--McKinsey



## Moving Forward

- Stay in the loop by being an active member of an appraisal organization.
- Make political contributions.
- Direct your appraisal organization.
- Stay relevant by becoming a Valuation Analyst.

## VALUATION ANALYST

Someone who has both valuation and analysis expertise.

## Goal

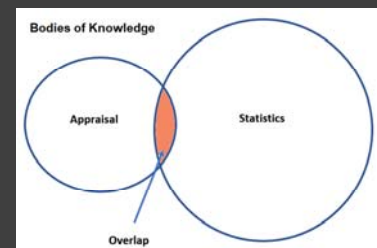
To be better analysts.

Not to be perfect analysts.

This morning Tim gave an overview of some statistical techniques.

## HOW MUCH STATISTICAL ANALYSIS TO LEARN?

Not nearly as much as you might think!



## What is an analysis?

## Sales Approach

1. Produce a credible value opinion.
2. Document the SOW that was used to form the value opinion.
3. Accomplish 1 & 2 above, in a quick and accurate manner.

### From a valuation standpoint...

Does it matter what adjustment rates are used as long as a relatively accurate value opinion is formed?

### Nature of an Adjustment

Are adjustment rates single-point values that are set in stone?

### The Nature of an Adjustment:

- Adjustment rates are not single-point values that are set in stone.
- They exist in the market in wide value ranges.

### Appraisers and Users...

Have talked themselves into unrealistic expectations when it comes to extracting adjustment rates.

### Reason

- We often take statistical concepts out of context, then repeat till we believe it.
- Use perfect data sets in the class room.
- A lack of research.

### Monte Carlo Simulations

- Probability
- Large Numbers

### Matched Paired Analysis Problem

Conditions: 1) Prices are stable, 2) prices randomly vary between  $\pm 5\%$ , 3) the intrinsic value of the property is \$100,000.

The property sells and resells one year later in similar condition. While the correct answer is 0% change in prices, any output between a  $\pm 2\%$  is counted as correct.

1. The greater the randomness in the market, the ...

- A. less probability that the analysis will return the correct answer.
- B. more probability that the analysis will return the correct answer.
- C. randomness will not affect the probability of getting the correct answer.
- D. Chance, randomness, and probability should have no place in appraising methodology.

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2. The more pairs of sales considered, the ...

- A. less probability that the analysis will return the correct answer.
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- D. Three is always the magic number in appraising.

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3. When two pairs of sales are considered, the probability of getting the correct answer (under the specific conditions presented) is...

- A. about 46%.
- B. about 62%.
- C. about 81%
- D. This is a trick question.

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### Hypothesis 46% probability Under Stated Conditions

1. First Sale House 1, 2, 3
2. Second Sale House 1, 2, 3
3. Random Generator 1, 2, 3

House 1 Sale 1 1-10 \_\_\_\_\_ translates to \_\_\_\_\_  
House 1 Sale 2 1-10 \_\_\_\_\_ translates to \_\_\_\_\_

House 2 Sale 1 1-10 \_\_\_\_\_ translates to \_\_\_\_\_  
House 2 Sale 2 1-10 \_\_\_\_\_ translates to \_\_\_\_\_

House 3 Sale 1 1-10 \_\_\_\_\_ translates to \_\_\_\_\_  
House 3 Sale 2 1-10 \_\_\_\_\_ translates to \_\_\_\_\_

House 4 Sale 1 1-10 \_\_\_\_\_ translates to \_\_\_\_\_  
House 4 Sale 2 1-10 \_\_\_\_\_ translates to \_\_\_\_\_

Complete solution is presented in Videos 1, 2 & 3 found at AVTtools.com at the bottom of "The Valuation Analyst" book section.

### Regression Analysis

At the 90% confidence interval for the pool the interval range averaged a +- 37%.

Meaning that the correct answer for a \$30,000 pool could be anywhere from about \$19,000 to \$41,000.

Correct single-point adjustment rates simply don't exist in real property markets. If you still don't believe me write down the acronym for line item adjustment rate.

### The Nature of an Adjustment:

Adjustments are sensitive to the amount of the other adjustments applied.

If there are no correct single-point adjustment rates, then what should appraisers be doing?

### Focus more on the outputs than the inputs (Coefficients)

- Residual Analysis
  - Actual Sale Price of a comparable less the Price predicted for that comparable.

Is an Adjustment Grid a Market Model?

### Residual Analyses for Comparable Grid

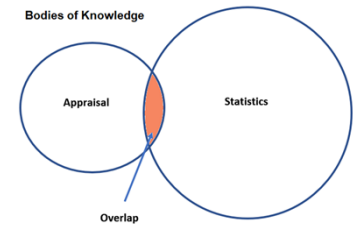
1. Sensitivity analysis measured by the slope of the adjusted sale prices.
2. Shadow grids

### Residual tests

- MAPE
- Variance
- Sum
- Average of highest two

Are the bottom up methods of extracting adjustment rates (allocation, cost based, income based) antiquated?

Seven specific things required to:  
1) become a valuation analyst.



## STEP 1

Be competent with spreadsheets.

## STEP 2

Learn more about databasing.

## STEP 3

Be familiar with mapping fields and scrubbing data.

## STEP 4

Understand how to market model.



**STEP 5**

Be able to perform different types of residual analyses.

**STEP 6**

Master the concept of “Probability”, which explains Randomness (the analyst’s nemesis).

**STEP 7**

Develop a limited proficiency with regression analysis (even if you don’t intend to use it).

Look at the Compass Spread sheet

**AVT’S PLAN OF ACTION**

- Encourage appraisers to become better analysts.
- Provide Education & Training
- Provide Automated Valuation Tools

**Education & Training**

- THE “VALUATION ANALYST” book
- Webinars
- Seminars
- Information on the AVT web site

**The reality is AVT  
can't do enough  
by itself under  
the serious time  
constraints  
appraisers face.**



**THANK YOU!**