

Perspectives on Quantitative Modeling

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Congratulations!

You have taken up the best profession in the world.

In my somewhat admittedly biased view, you have chosen the right way to succeed in this profession!

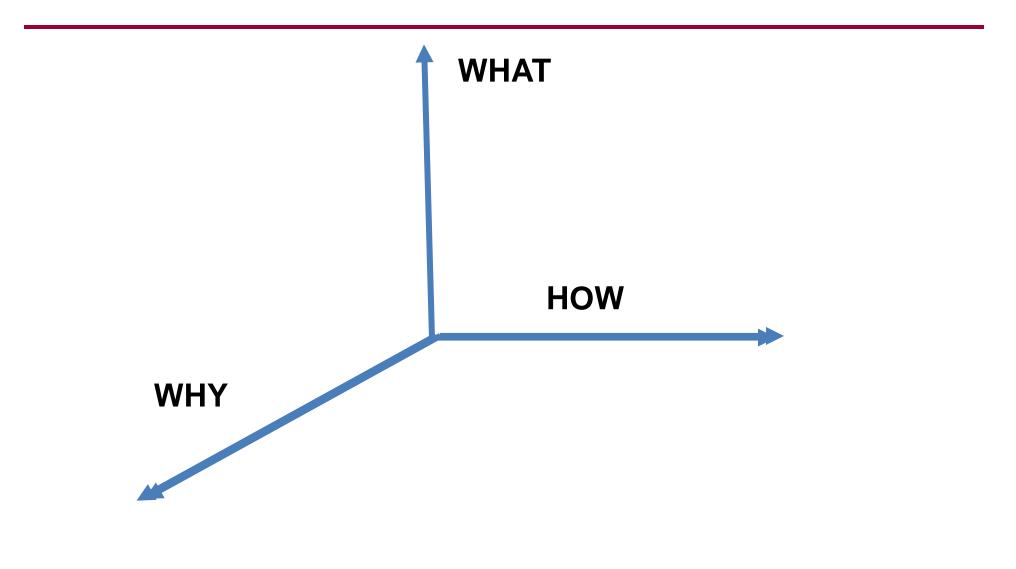


It will work out......

- We all started the same way.
- You are surely smarter than I am.
- You are also better trained.
- You will get a great job.
- You will contribute more to the field of Marketing than I have.
- Have confidence in your ability.
 - Yes...YOU can.



Quantitative Modeling: Research Typologies





What.....

- What is the effect of
 - Increased advertising (or creatives) on sales? Concave, S-shaped?
 - Free samples and Detailing on sales.
- What is the impact of
 - Improved privacy on consumer purchase behavior.
 - Shipping policies on demand,
 - Trial at home on purchase behavior
 - Opening a bricks and mortar retail store on online sales
 - E-Commerce on tail-length(long vs short)
 - Having a facebook page on brand image and sales.



1. Response Function Modeling



How.....

- How do I come up with an optimal media allocation plan now with the availability of digital media?
 - How do I figure out which media led to the sale?
- How do I figure out the right set of features in my product?
 - Should it be any different if consumers exhibit externalities?
- How do I design a website to get more stickiness?
- How do I design a better ad?
 - Should I do it, or have my consumers do it for me?
- How should I respond to competitive entry?
- How do I go about determining two-part pricing plan when all I have used so far is linear pricing?



2. Decision Support Models



Why.....

- Why do we see cents-off coupons even in mature markets?
- Why do salespeople spend time lobbying for lower prices?
- Why do competitors share the same advertising agency?
- Why do more alternatives often lead to less choice?
- Why do we see linear compensation plans when theory suggests more complex ones are better?
- Why do we offer delayed incentives as opposed to ones that lead to immediate gratification?

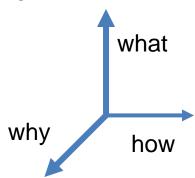


3. Come up with the simplest possible explanation for an otherwise strange practice!

Some Call it Theory Construction...



Moving forward on each of these three dimensions adds to our understanding, and therefore improves marketing practice



Which one to choose?

Over time you will do all three!



The Path Forward......



Focus on Important Problems

- Read popular business press before you read JMR or MKGSCI
 - What problems/challenges are businesses facing?
- Look at the world around you.
 - What problems do you face when you make choices?
 - Ask...why companies do A and not B
- Read
 - George Dantzig's "The Diet Problem" Interfaces 1990.
 - Gary Becker's "An Economic Analysis of Fertility"
 - Ronald Coase's "Nobel Acceptance Speech 1991
- Distinguish between:
 - A paper that will get published
 - One that will also get you a great job!



Build a STRONG Skill Set (Future Proof Yourself)

- Mathematics
- Economics
- Statistics
- OR (Optimization/Complex Computational Methods)
- Computer Science and Artificial Intelligence
 - Machine learning
 - Data Mining
- Psychology and Sociology



Add behavioral richness to your models...

The Seven Virtues

- Kindness (fairness)
- Charity
- Patience (vs lack of self-control)
- Humility
- Temperance
- Chastity

The Seven Sins

- Greed
- Envy (jealousy)
- Diligence (persistence/loyalty) Pride (negative externality)
 - Wrath
 - Lust
 - Gluttony
 - Sloth



A bad simple model...leads to a complex often intractable answer.

Once you have it right (behaviorally), the model is more complex, but the result is simple and elegant.



Congratulations and Best Wishes.

It will work out...
Yes...YOU Can

