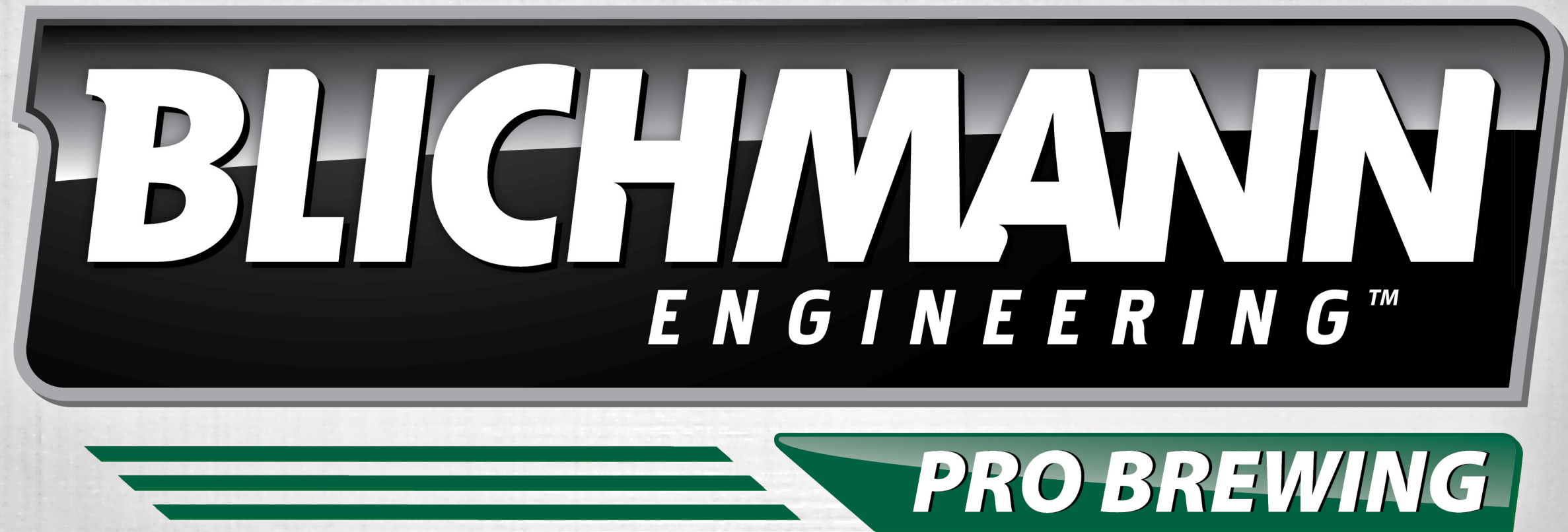


DETERMINING SYSTEM SIZE



Nano Brewery Experts | Systems up to 7BBL | blichmannpro.com

INTRODUCTION

- John Blichmann - Supreme Commander
- Provided equipment to over 500 nano breweries
- Located in Lafayette Indiana
- Been in business for 22 years

HOW BIG SHOULD I GO?

WEEEEELLLL – THAT DEPENDS!

So many things affect system sizing.

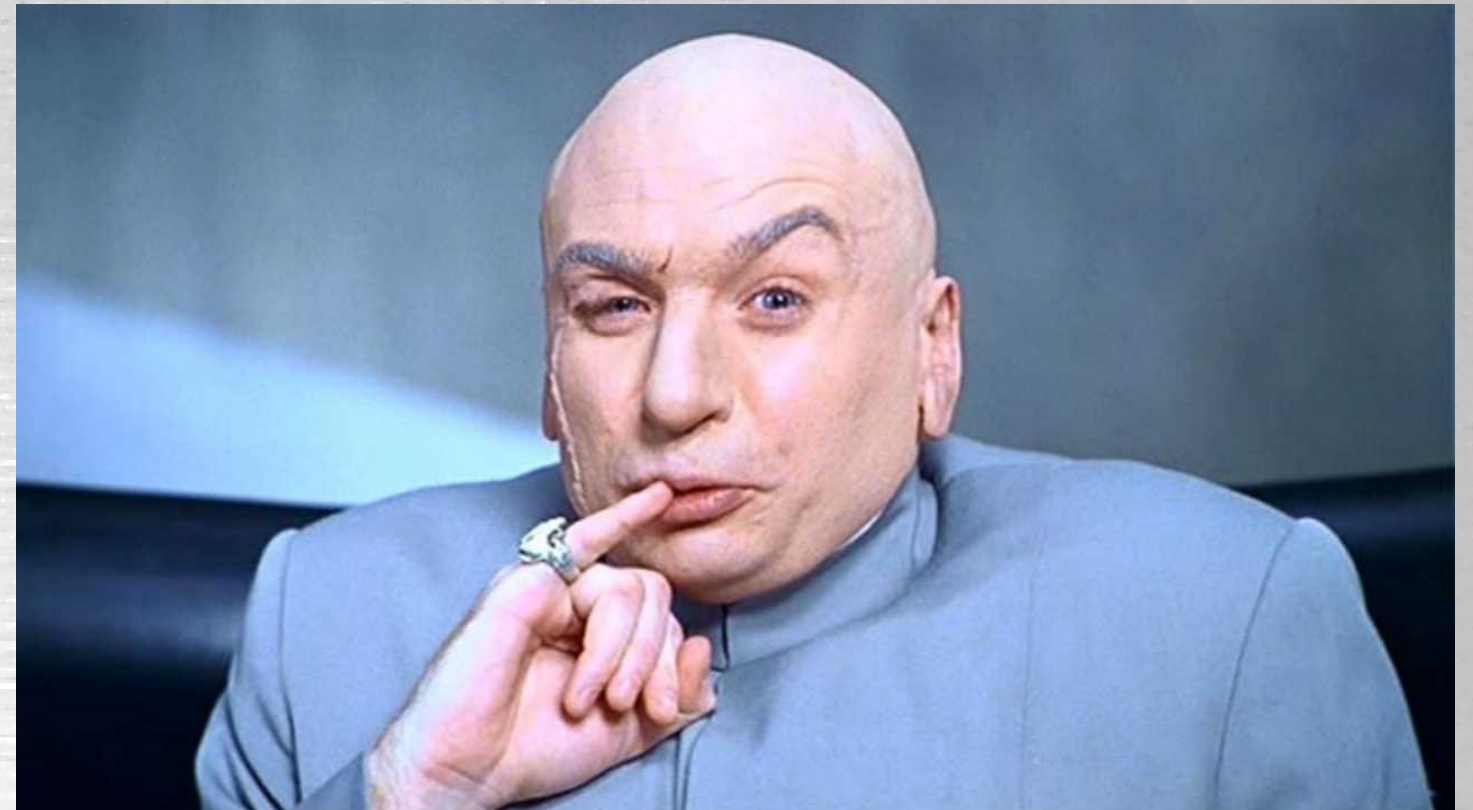
OVERVIEW OF TOPICS

Will try to wrap up in 40 min for more Q&A!

- What are your goals
- Business plan
- Market study
- Your niche
- The business side of things
- Cellaring activities
- Glycol systems
- Infrastructure factors
- Doing the math
- Pulling it together
- Planned expansion

WHAT ARE YOUR GOALS?

- Make a decent income doing something I love?
- Fun side job?
- Make one MILLION dollars?



THE BUSINESS PLAN DRIVES IT ALL

- Taproom, distribution, restaurant, all three?
 - 100-110 pints per half BBL net yield
 - \$5-8/pint retail = \$500-800 per half BBL
 - \$175-200/half BBL wholesale, but no retail overhead
- Community size
- Competition (market saturation)
- Community interest in craft beer
- Personal goals
- Financial goals

MARKET STUDY – REALITY SETS IN

- Don't listen to your friends, listen to your customers.
- What breweries are near you? How much do they sell?
- Visit breweries in other state(s) that are similar to your community in size and personality
- Are you located where your customers want to go?
- Look for your own niche – (more on that next!)

FIND YOUR NICHE!

- Lots of styles with something always new?
 - Brew smaller batches often
- A few flagships with a few rotators?
 - Brew larger batches less often
- Guest taps? Great for startup cash flow!
- Is your niche realistic and does it fill a REAL market need?

THE BUSINESS SIDE OF A BREWERY

- TTB Reporting
- Finances / banking
- Purchasing & bills
- IT and Point of Sale
- Managing people
- Web/FB/Twitter/other ads
- Beer events
- Working in the tap room
- Distributing beer
- Maintenance

BREWHOUSE & CELLAR DUTIES

- Brewing
- Fermentation monitoring
- Ingredient inventory management
- Cleaning tanks
- Kegging

INFRASTRUCTURE CONSIDERATIONS

- Ideally you size the building to the equipment needs – reality is a compromise based on what is available and/or affordable.
- Allow space for additional cellar tanks
- Compact spaces favor kegging vs dedicated serving from BBT
- Floor mount VS Skidded systems
- Stacked vessels

INFRASTRUCTURE CONSIDERATIONS



INFRASTRUCTURE CONSIDERATIONS



200 SF Brewhouse

GLYCOL CHILLER CONSIDERATIONS

- Define your process cooling needs – crashing vs. maintaining
- Wort chilling
 - “Crash” in fermentor
 - Cold liquor tank
 - Two stage chiller
 - Massive chiller
- Future growth – a chiller 2X the size is not 2X the cost.



PULLING IT ALL TOGETHER

- How much beer can I sell in year 1, 2, and 3?
- How often can I brew to meet demand and other duties?
- Will I keg the beer, or serve from a bright tank?
- How many days will the tap room be open & what hours?
- What can I fit in the building?
- Will I hire a brewer or office assistant now or later?
- What is my tolerance for risk and debt?

DOING THE MATH

THE MAGIC SPREADSHEET

<https://www.blichmannengineering.com/tankplanner/index/index>



PLAN FOR EXPANSION

THE RUNWAY BEHIND YOU DOES YOU NO GOOD.

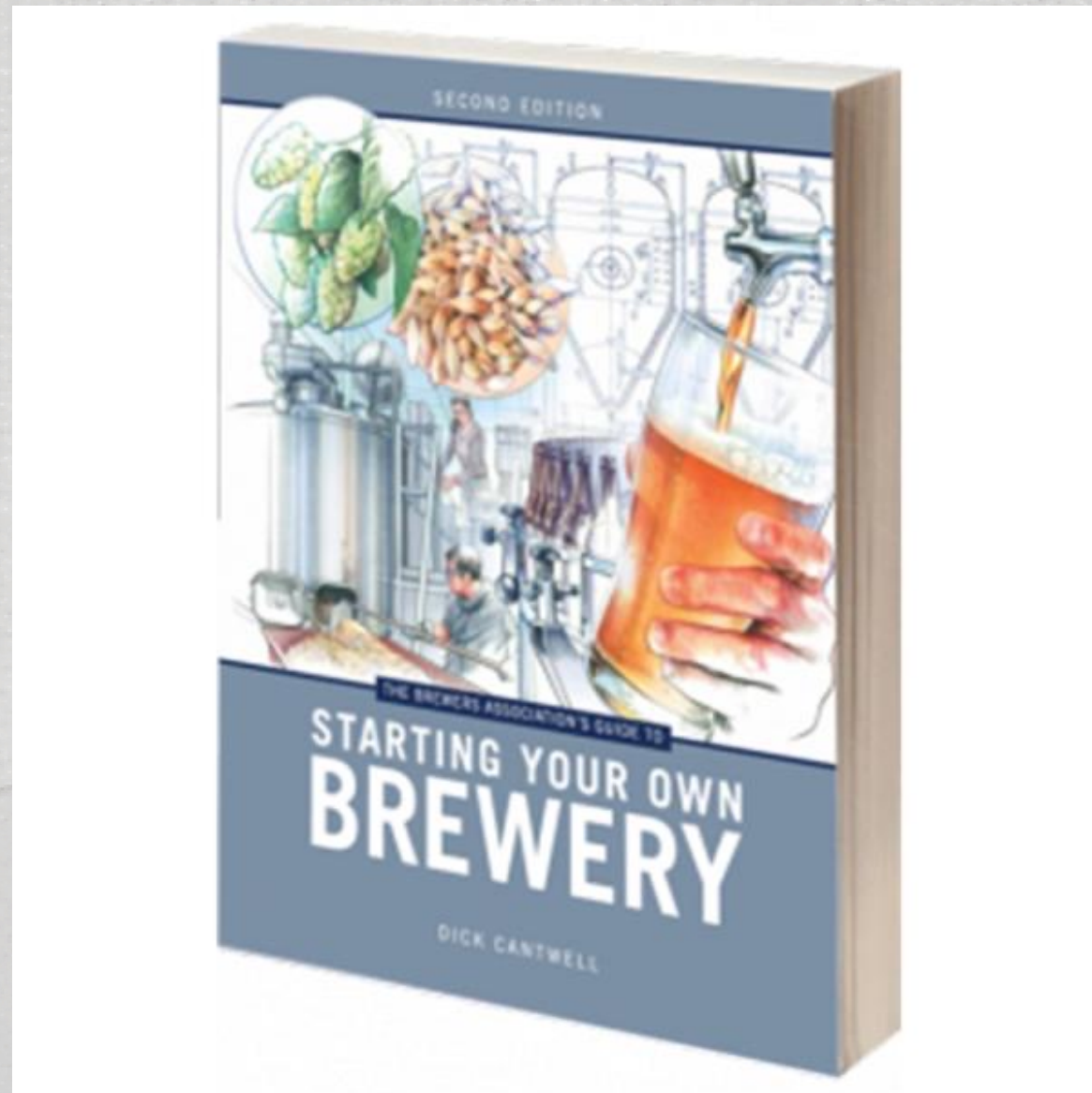
- Factor expansion into your facility selection and design.
- Cellaring equipment is MOST ALWAYS the bottleneck.
- Allow space for additional cellaring equipment?
- Can you get the equipment in after construction?
- Consider double batch size tanks for flagship beers.
- Brew more days, or multiple times in a day.

WRAPPING UP

- Define your personal goals.
- Spend time on the business plan and marketing research. The rest is just math.
- Be realistic about what you can physically do.
- If you are on the fence and can afford it, lean towards bigger.
- Plan for the future before the shovel hits the ground

BREWERY STARTUP GUIDE

Starting Your Own Brewery – Dick Cantwell, Brewers Association



LET'S GET SOMETHING
BREWING.

