

Part two of three

BUILDING A MICROBREWERY

Appropriate financing is essential. If the project is not financially rewarding, there is not much point in doing it.

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In the last article we outlined nine key functions that you must address when starting up a brewery venture. An analysis of some of the failures and closures of both microbreweries and brewpubs to date indicates that their mistakes began with their original plans which were not thought through completely and this carried to the actual operating strategy and implementation which was not researched or planned.

The 9 function steps are:

1. Conceptual Examination
2. Market Examination
3. Feasibility Examination
4. Project Justification
5. Financing
6. Project Planning
7. Construction/Implementation
8. Final Inspection/Testing
9. Operational Management

The fifth function called Financing, is a more essential function of the program because if the project is not financially rewarding, there is not much point in doing it at all. Financing can be achieved in many ways, but basically through two ways. One of them is risk capital, put up by the entrepreneurs and developers and the other one is debt capital supplied by third parties in one manner or another. In order to raise the financing, it is necessary to produce the "**Proforma Profit and Loss Statement**". However, this statement cannot be prepared until; the market is defined, the materials have been selected and costed, the conceptual design has been prepared and a capital cost has been made. In other words, a number of major decisions must be made at the planning stages and the correctness of these decisions will pre-determine your chances of success or failure.

Some of the fundamental decisions that you will have to make with some suggestions of the answers as they may apply to you are as follows.

BREW PUB OR MICROBREWERY?

A brewpub is an installation that brews its' own beer on-premise in the tavern, for consumption on-premise at that tavern only. A micro-brewery is a small independent free-standing brewing operation that sells, in one way or another, to taverns and/or the public at arms length, that is, other than size, a business like any of the major breweries. A micro-brewery is generally understood to have an annual output of less than 10,000 barrels/year.

If you are contemplating building a brewpub, you should already be a tavern or beverage room operator. With rare exceptions, brewpubs are an extension of an existing tavern operation where the main emphasis is on selling beer and food. What you hope to achieve with a brewpub is an increase in your draft beer sales and this increase will not be at the expense of your regular draft but additional to your existing sales volume. This does not mean that your individual clients will be drinking more, but that your clientele will increase because you have a special brew, made on-premise, that your competitor down the road does not have, and so you will attract more clientele. You will need to; first, be a successful tavern owner to finance the start-up costs, and second; to have the time needed to implement this departure from your regular business. You can probably conduct and perform most of the market examination yourself and a fair portion of the feasibility examination. You may need an engineer on a part-time basis to assist in specifying and selecting the equipment, engineering building and utilities modifications, providing your accountant with the necessary operating costs for incorporation into your business plan, and perhaps supervising on your behalf the expediting, permits, installation, and hook-up.

For a brewpub added to an existing tavern, and based on all-new equipment, today you need to allow \$100,000.00-150,000.00. This includes equipment, building renovations, installation, start-up and working capital.

A microbrewery is a new business venture that requires all the skills to run a successful business, including marketing, finance, engineering design, new construction, adherence to government regulations, production, personnel relations, amongst others. All of the step-by-step functions of a brewery project, as outlined in the previous article, will need to be performed. The "ballpark" capital cost (just the facility-not including marketing, operating, financing costs) will be \$3,500-7,000 per barrel of weekly production (1 barrel = 31 U.S. gals. = 2 kegs). This range may be even higher or lower depending on: real estate values; own or lease the property and building; type of building; malt syrup or whole grain production; ale or lager or both, how packaged? For the potential microbrewer, the capital cost and his ability to raise the necessary financing may be the determining factor in establishing the maximum size initially.

SIZE?

For brewpubs, a general rule of thumb (which your further market examination will either support or revise) is that you could expect that your current draft sales will increase by 50%. For example, if you are currently selling 20 kegs a week of draft, you can reasonably expect to continue to sell 20 kegs a week of regular draft plus 10 additional kegs of your own pub-brew/week.

For microbreweries the following statistics can be used at the conceptual examination stage (again, the detailed market examination will either confirm or revise your estimate). For a new start-up situation, you should consider that you cannot obtain more than 3% of the sales market in the area you are entering. You will remember that you are entering the specialty beer market which is 23,000,000 barrels/year. If you had national distribution to all 50 States, you would conservatively achieve less than 700,000 barrels/year. But you undoubtedly will not have such a broad distribution and therefore you must determine the size of the market area that you are contemplating. For a first approximation, find out the total beer sales in your target area on an annual basis and then assume your volume will be 1/3% of this quantity. This number is then modified by your estimate of higher sales due to higher than national average beer consumption of specialty and imported beers (currently running 11%) and by the following 2 factors.

1. What are you going to produce - English ale? Bavarian lager? or something else? How is it going to be packaged for sale? Brewpubs should consider draft only, unpasteurized, dispensed directly from the

bright beer or government tank to the tap. Some states permit off-premise sales of pub brewery products but even in these cases the brewpub should not embark on kegging let alone bottling until they have achieved public acceptance of their product. For micro-breweries consider unpasteurized draft first, then bottled. There are novel packaging ideas for the micro-brewer that you should think about which the large breweries are not doing, such as pouches, PET bottles (plastic), beer balls, and so on.

2. How much money you can raise to finance your new project will be the final limitation on your ambitions. For instance, you may have to start by considering a distribution area of only 1 state, rather than a 500 or 1,000 mile radius because you cannot raise the necessary funds for the extensive marketing and promotion that will be necessary to launch the product.

However it may be a good idea to conservatively estimate your start-up at considerably smaller than your anticipated final market share objective. A wise buyer had a good answer to the question - What Size? when I was trying to persuade him that for 20% more cost, he could get 50% more output from his equipment system since such things as pump size, electrical, installation, pipe diameters, etc. do not increase in price significantly with increased size. He said "No" to the extra capacity built-in at the start and replied, "If our business is highly successful, we can afford to pay for the expansion out of retained earnings. If we are not successful, the plant is already too big".

MALT EXTRACT OR WHOLE GRAIN?

The answer to this question is like the controversy between which it better - Coke or Pepsi? You can easily get 6 people to support using malt extract and a 1/2 dozen others who will swear that whole grain is the only way to go. In our experience the malt extract (or malt syrup, or concentrated wort) is the obvious approach for the brewpub/tavern operator, remembering that the brewpub is in the business of **selling** beer. The brewpub is selling "image" at a premium price and while it is imperative that the product has high quality, the real reason for installing a brewpub on-premises is for it's marketing value to the total establishment and not a reduced cost of production. You can still command a premium price for specialty beers regardless of whether or not you produce it yourself.

Several years ago, potential brewpub operator had to have a fairly extensive knowledge of the brewing process in order to know what to buy and install. Today that situation has changed in that there are numerous equipment supply manufacturers who sell total "turn key" equipment packages, some complete with training programs, so that the production of a high quality product every time is assured. This means that you do not have to retain a knowledgeable brewer on staff. Using a concentrated wort also saves capital cost since the process starts at the brewkettle and does not require malt handling, grinding, cooker or lautering equipment.

The purists say that the best beer is made from whole grain. What they are neglecting to remember is that the quality concentrated wort purchased by the brewer is made from whole grain. The only difference is that the concentrated wort (with all the grain handling, milling, cooking, lautering) was simply produced elsewhere with water removed, requiring only re-constituting at the brewpub.

The preference for whole grain was probably the right decision several years ago when quality wort concentrate was not readily available in the market place. This situation has changed and today there are several reputable suppliers with quality products. Purchasing wort concentrate has the advantage that you are guaranteed consistent quality and do not have to be concerned about the vagaries which affect consistency of your product that is inherent in the annual barley crops. You can now obtain even pre-hopped wort concentrate, thereby making the brewing process no more complicated than the

operation of a specialty soup kettle. Even some microbrewers have opted to use wort concentrate rather than whole grain.

A good comparison for the case of malt extract versus whole grain is to look at the bread and cake industry. Packaged cake mixes offer the ability to make a consistently good quality cake by pre-packaging all the ingredients. The cake maker simply adds the egg (in our case the yeast) to the ingredients with water, requiring little expert skill if you followed the 1-2-3 instructions. The quality of namebrand cake mixes today insures a consistent, high quality end product. There are only 2 reason you should consider using whole grain (and thus going back to basics)

1. The brewery is at a scale of production where there are significant cost savings using basic ingredients;
2. The brewery wishes to produce a product where the basic "cake mix" is not available.

With the arrival of the large variety of wort concentrates now appearing on the market, there is little reason for the small micro-brewers and no good business reason for the brewpub to handle whole grain. In England, for instance, the big brewer, Watney's, has been setting up brewpubs in many of it's public houses and providing the brewpub with wort concentrate from the main brewery formulated to it's own unique and characteristic recipes. For the micro-brewer to decide whether to use malt extract or whole grain, it will be necessary to perform a capital cost versus operating cost estimate, to determine the return-on-investment for the extra cost of the front end needed to use whole grain versus the higher operating cost using a purchased malt extract.

NEW OR USED EQUIPMENT?

The brewpub and microbrewery industry is in its infancy and while a few operations have failed, there is not much used equipment available at the present. So when you are talking used equipment you have to be looking at equipment originally designed for other food processing operations, such as, dairies, soft drink plants, etc., or pieces of brewing equipment from numerous sources that collectively can be made into a brewing operation. Unless you are extremely lucky, you may end up with a mish-mash of equipment, with some pieces oversized and with repairs/modifications, adaptations needed to be performed. While you may save money on the original equipment purchase, you still have to install it and this may cost more than with a straightforward balanced equipment supply package. By the time you are finished, what you will have is a nice "old" used brewery that you may have cost almost as much as a "turnkey" packaged system.

Until you have all of your money in place and are ready to actually buy, figure only new equipment pricing so that your financial resource requirements are conservatively estimated. A used piece of equipment that you looked at when you put your business plan together may no longer be available when you go to buy it.

DISTRIBUTION SYSTEM

You may be restricted in your state on how you can distribute your products. In three previous issues of The New Brewer, the distribution rules for each state were highlighted, together with names of the state contact to obtain further information. The New Brewer is providing ongoing updating of the rules in future issues. Your distribution strategy may well be dictated to you by state law.

PEOPLE RESOURCES

You need to examine objectively your own personal skills and weaknesses (and if you have partners, their's also) and identify what skills are missing both to implement and build the facility and later to operate.

To better insure a profitable venture, you need people with experience relating to this industry. Someone once said that the definition of an experienced person, is one who has already made lots of mistakes. What you want are practical qualified people who made their mistakes at someone elses expense and who know your industry.

For instance, your accountant should be familiar with the food processing or food service business; your engineers experienced in designing/building/operating breweries (not engineers who build nuclear plants and bridges); your lawyer familiar with BATF and state licencing procedures, and commercial contracts.

For brewpubs, you will want to purchase a packaged system from an experienced and well established supplier who can provide backup brewmaster consulting.

For a micro-brewery, you will need a consulting engineer to handle the design and construction contracts. You will need to employ a young brewmaster to be your plant manager who is experienced in working in small breweries, or a recent graduate from one of the reputable brewing schools (Siebel Institute or Davis College, for example) with some experience in a brewery . Your second choice for a plant manager may be a graduate from an agricultural or biology school, coupled with a qualified brewmaster who is either retired or currently employed but available to you as a consultant.

Suggestions of possible answers to some other important questions that you need to ask yourself if you are going to build a brewing operation from scratch will be presented in the final article.

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