

Question to ask yourself about a proposed or intended venture.

1. How much time do I have to devote?
2. Do I want to do this alone?
3. If not how many partners do I want or can I work with?
4. How much capital do I have available –this may dictate the number of “stakeholders”
5. How much cash do I need to cover expenses and receivables?
6. How much or how little do I intend to pay myself?
7. Do have a business plan?
8. Do I need help to prepare a business plan so that the idea can be successfully sold to lenders or potential partners?
9. If this is a forest based enterprise how will the raw material be sourced?
10. What is the grade or suitability of the raw material to the products that you or your team have expertise or experience in making?
11. Do I have a clear understanding of my machinery requirements? And the capital cost plus installation expenses.
12. What products and how many different items can I target and still be focused on the objectives?
13. Will I do my own marketing and selling? If not are there brokers or others that will do this for me?
14. A basic mechanical knowledge is required for most small manufacturing businesses.
15. How will I accommodate the government requirements managing my payroll and labor law requirements?

16. Since it is generally accepted that you can't manage what you can't or don't measure—how will I do this and is there a plan for this?

A few case histories that I have been asked to make suggestions on are listed below:

1. Select sawmill on Vancouver Island—
 - a. The business plan called for large cedar logs to be quartered by chainsaw and the resulting quarters then loaded on the log deck and transferred to the mill bunks- however the log loader was horizontal and resulted in the worker perching themselves on a narrow angle iron –peevies in hand trying to coax this 2000 pound wet cedar log forward- then they proceeded to start pressure washing the gravel and rocks out of the bark. Needless to say the mill only processed about 4 log quarters per shift. I introduced a line counter to the sawyer and after counting for a couple shifts it was determined that even with the logs costing ZERO and the product being sold for 1600\$ per MFBM they were losing more money that welfare was paying them before.
 - b. Another group had a Mobile dimension saw and a small travelling band saw but instead of making cants on the Mob Dim saw and having the band saw act as a resaw were it later produced very well they were sawing round logs with the small band saw as well with very low production. All or nearly all of the products made were specialty items and were sold for high dollars in the Tofino community (a very eclectic clientele)
 - c. At almost every mill where I was called to they had mountains of edgings and slabs- in many cases there were numerous 2x4 & ^ clears and many 1x4 clear pieces and the 1x4 sells for \$1200 per MFBM as flooring blanks.

2. Even when you are sawing for value added products, productivity comes into play. Most operators of small travelling band saws do not average 1 saw line per minute yet this is a figure that must be kept in mind. A good exercise to point this out is to watch someone with a stop watch sawing a log on a small mill and the thing to watch is not how fast the saw goes through the log but how many minutes go by from the time the log is presented to the mill until the next log is loaded then count the saw lines. You will see that most of the time sawing on a small mill is taken up in loading, turning, setting not SAWING. So the obvious solution for greater productivity is to make bigger pieces on your primary breakdown and then pass them off to resaws and edgers to run Butt to Butt at 3 or 4 times the speed.
3. The type of saws you use also play a large part in the speed and the maintenance.
 - a. Narrow bands are not as fast but are cheap and can be thrown away instead of sharpening although some operators are good at this.
 - b. Circular saws are good for sawing dirty logs but they really cost you money in saw kerf wood loss when sawing expensive logs.
4. Kiln drying
 - a. When making high end wood products the market demands dry products so unless you live in the city where some folks may complain about smoke the outdoor furnace is an ideal tool that will supply adequate heat for your kiln and also your greenhouse and carpenter shop.
 - b. Kilns can be built by yourself, some people like to use shipping containers and for small quantities that may be ok but the 7'6" width inside does not lend itself to efficient air flow. There is a picture in the ones passed out that shows one

that I built and loaned to the local High school – it is 16 feet long and cost about \$8000 to build. I am currently working with a First Nation group in Bella Coola that is running a mobile dim saw, a swing blade saw, and a LT70 wood miser. They are now set to build their own 50 Ft kiln with prefab panels and wood furnace (hot water Boiler) that will dry about 32 cubic metres per charge.

- c. The other reason besides reducing weight for drying wood is that to export it a phytosanitary certificate is now required by most countries importing wood products in order to prevent infestation.

I have attached a tool for your use that we will try and demonstrate here that should save you hours of work in determining whether or not your idea of making a certain mix of products from your chosen log profile is in fact good idea. My email is at the top so if any of you wish an electronic copy of this please email me and I will send you one- and if time is available I will be happy to walk you through it again. Anyone familiar with the basics of EXCEL should have no problems but I encourage you to keep a secure copy just in case you erase a “formula” please check the cell to make sure is not one of those. There are lots of explanations in the workbook so I hope it will work for you.