Starting your own laser business from home

In the last few months we have received many requests from potential new purchasers of laser engravers about setting up a home laser business. Potential users have framed the question many ways, including: What are the operating costs? What can I make? How soon before I make a profit?

These questions are almost always in the context of: I am retired, (or about to retire or take a severance package) and I want to do something to make extra money; I need to make other plans. ASAP; My company is going on short time and I have to make extra money.

I will answer the questions above drawn on three sets of knowledge. I completed a B Bus SC degree at UCT, I was Founding Publisher and Editor of YOUR BUSINESS MAGAZINE (which is still published bi-monthly) and I have shared the ups and downs with many entrepreneurs who have over the last 5 years bought over 500 machines from Perfect Laser. The vast majority are and continue to be very successful.

This article is completely free of any input from Google or any other search engine and is therefore the sum of my own experiences.

Let’s start with a reality check. It’s not an ‘ATM’. Like any other business startup, it requires enthusiasm, passion and commitment. Now back to the questions I have been asked.

Laser cutters and engravers are not new. They have been around in South Africa for at least the last ten years, and prices have dropped dramatically over that time.

In the late 80’s customers would come into one of my 11 computer stores and say: “I want to start a desktop publishing business. I need an IBM Compatible AT/386/486 PC”, (In those days PCs had to be IBM compatible) “WordPerfect,” (the word processor of choice back then) “and a laser printer” (black toner was the only choice).

Fast forward to 2017 and it’s almost the same type of question – Then it was the PC era and the entrepreneurship drive was just getting going. Today the business environment gets more interesting or complicated depending whether you are a ‘glass half full or glass half empty’ type of person.

I am going to summarise the business environment as I see it, because, while it doesn’t answer the questions directly, it does explain what’s adding impetus to the drive towards owning your own successful laser business.

Prior to about 1700 (with the industrial revolution) there was largely no such thing as going to work! We made our boots, clothes, horseshoses, furniture, glassware etc. from home or on the farm. Manufacturing techniques killed most of the craftsmanship – and perhaps the best example of that was the Black-only Model T Ford (early 1900’s) – for which no variations were allowed (or sold). Today we want the right shape, colour, style and it must be personalised. And we want it NOW.

So therefore the main consumer driver adding profitability and stimulus to owning a laser business is the relentless drive toward Personalisation and Customisation. We call it the ‘P&C’ effect. Whether we are giving, using or receiving – we all want to be unique and we all want to be identified and remembered.

Quite simply, consumer items (gifts, products etc.) become priceless with P&C and your laser business gives you the power to do just that.

The trend for working from home gained a lot of traction with the rapid adoption of the internet, cell phones, laptop and desktop PCs and cloud computing. This has started to overwhelm the manufacturing environment and has spawned a whole new subset of home-based manufacturing opportunities.

We call it Micro Manufacturing – all from your home or garage. And the trend is escalating rapidly. Create-on-demand via lasers and 3D printers are disrupting our standard way of organising our businesses. This set of disruptive technology opportunities is going to threaten businesses with lumpy assets (I love this phrase used recently by Economist Magazine to describe companies that hold onto legacy systems or infrastructure).

Perhaps the most fascinating aspect of this ever-expanding era of disruptive technologies is that unlike the ‘Luddites’ – who tried to destroy mechanisation in the industrial revolution – the true character of South African innovation and entrepreneurship is embracing all the skills learned the hard way and combining them with technology – and now there is a real opportunity to start a small business for under R50 000.

Subsequently the move to become financially independent is in full swing and a reality. For example, give South Africans half a chance to go off-grid, and Eskom will end up selling electricity to users who want more and are unwilling to pay. The same is true for In-home manufacturing. It’s a reality – and the opportunities are literally endless.

The final environmental factor adding impetus to your home manufacturing business opportunity is that consumers (both companies and individual) want their ideas (or your ideas) turned into prototypes (fully Personalised & Customised) NOW.

We live in a ‘now’ world, when waiting weeks and paying thousands for a prototype is being replaced by manufacturing entrepreneurs who can provide prototypes within hours – and then change it if necessary, numerous times with minimal delay.
Finally, it probably has never been easier to take personal responsibility for your own financial future. Ideas abound on the Internet (Google images/Instagram/Pinterest), etc. As older South Africans – numerous skills have been learned, networks have been developed, and often there is space at home and finance available. Time is not a problem and often rudimentary electrical, woodworking, manufacturing and PC skills have been learned, and the capacity to continue learning provides ongoing mental stimulation, and above all financial success.

With the focus of state resources rapidly shifting to the younger generation, the older generation is forced to reinvent and reinvigorate – and what better way than doing it from your home-based manufacturing business?

Start your business!

Checklist, realities and time frames

Now that you have made your decision to start your own laser engraving / cutting home business it’s time to give you the blueprint about what works best and break it down – how to achieve success and independence.

The best laser business operators have some or most of the following characteristics:

They know whether their strong points – or weak points are their design skills. Those who have become successful learned their design software (mostly CorelDRAW) by trial and error – and through perseverance. Alternatively, they use their machines as a laser bureau or pay to have a unique item developed which they then scale to size or personalise or both. They have taken the trouble to understand the relationship between the 3 M's. Man-Machine-Material. Restated, a good design using quality materials and the correct machine settings (power/speed), will yield a saleable product.

They have built up their own portfolio of products – which demonstrates their overall competency levels and allows quicker concept to prototype generation.

They look after their machine, realising that the electrical, mechanical and optical components and cooling system need to be in peak condition.

They value their time correctly.

They are always experimenting with different materials from melamine to hard woods, various paint finishes, leather, paper, cardboard, glass etcetera, application of the rotary (cylindrical) object attachment, and then recording the knowledge gained in a book for later recall.

They have made a basic decision whether the business is a hobby, full time or part time. Machine cleaning schedules have been set up, and above all whether they plan to serve the consumer or business markets.

They have worked out that spending a few Rand more on better quality materials (veneers, solid wood, lighter colour woods) or on the final finish (paint effects, mosaics, two-tone items (ie: perspex laminate on wood) yield far quicker sales and a much higher price.

Going Niche

It probably is a well-worn cliché to say the possibilities are endless. This is what we at Perfect Laser have learned from our customers about what can be made and has resulted in essentially a full time operation.

Fresh water fishing flies for exports, engraving of bamboo cell phone covers, gaskets for old motor vehicles, pre-school alphabet practice writing tablets, personalised whisky bottles, wooden pens, hunting knife marking, stainless steel trailer identification tags, photo/mirror-engraved clock sets, tombstone engraving, Perspex electrical box faceplates, custom leather belts ... actually the list is endless. Enjoy the journey – there will most likely never be a destination.

Whatever the reason was that you bought your first machine, there will be another 10 ideas and products you will want to make within the first month of owning your machine.

The more time spent learning design software, the more confident you will feel and the more aggressively you will be able to tackle new projects.

Experiment with a wide variety of materials with different combinations of power and speed. For this reason we give you suggested cutting / engraving speeds, materials supplier lists and a GOODY BAG with material ranging from wood to rubber, glass, plastic etc. And please record your own ideal cutting / engraving settings sheet as materials and machines do differ.

If you can’t or don’t want to clean your machine, give the job to someone who will. Dirt is your machine’s worst enemy.
Marketing and Sales

We have discussed already that P&C is driving the market. For every idea we have mentioned, there are another 10 we haven’t. These include more traditional items such as rubber stamps, staff name badges, company signage and awards, toys and gifts, key and luggage tags – I could go on forever ...

Perhaps the biggest factor to consider, is the value of lost business. Oops, is there a downside that nobody mentioned? No. Simply put, a laser engraver / cutter will only satisfy about 50% of your average business clients' needs and about 70% of end-user needs. The bottom line is once you have the ear of a business (so to speak), you must be prepared (as your finances and skills improve) to invest in more than one type of machine.

To give you an example: A 15cm rugby logo lasered on MDF will sell for R40 - 50 (and it won’t be hung in the client's study or boardroom). The same logo CNC routed from solid wood – with the look and perceived craftsmanship of a sculpture – will sell for R300 - 400 and it will be treasured for life.

Consider introducing at some stage a Fiber laser, CNC router or (if you have the budget) a Waterjet Cutter. Basically gear yourself up to be a one stop shop – unless you make fishing flies (or another niche product) so popular you won’t want or need to produce anything else.

How long to success?

That’s a bit like asking how long a piece of string is! But this is in your favour. Other than interest cost and about R200-300 per month electricity cost, there are no other direct running costs. But do allow the cost of a replacement laser tube. We sell a 60W for R6000 and with (conservatively) 4000 hours at 50% power your tube will last you for a few years. It will eventually need to be replaced. Fortunately it doesn’t just shut down – it loses power gradually and so you will have plenty of warning.

Most printing and manufacturing companies will tell you the profits are in the off-cuts. The same applies to your laser business.

You have to prime your business. MDF wood is cheap. Make everyone you know a luggage or key ring name tag and add your details – it will work wonders.

Much like owning a car, regular maintenance is required. Your laser is a combination of motors, electronics, mechanical moving parts, mirrors and a lens. Keep them clean and they will look after you. If not, be prepared to pay around R1000 per lens and R350 per mirror.

Worse still, not keeping your water temperature within prescribed limits – to keep the laser tube cool – and the tube end will just detach itself – and replacement tubes run from R5000 (40W) to R25000 (200W).

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