



We turn good ideas into *great* products.

The Second Quarter - Building Infrastructure for Future Growth

Welcome to the second edition of our quarterly newsletter. We have been very busy over the last three months upgrading our infrastructure as we take the next steps to become the number one mechanical design and product development services firm in the Southeast. There are now seven of us working out of our new facility. Our recently announced partnership with APC-services will give us access to an additional four mechanical engineering resources, right when we need them.

I want to thank our friends and current customers for their referrals and recommendations for new business. We truly value your business and look forward to building long term partnerships.

Jonathan DeLine, President

THE BUSINESS OF **IDEAS**

Greg Patterson, CTO

Last time we introduced our series "Business of Ideas" and talked about some of the challenges, misconceptions, and odds associated with filing, receiving and profiting from your intellectual property. In this section I will explore another common misconception that many people have. I call this the "Single Product Myth". You know, the little voice deep down that says, "if I could just come up with that one great idea, I'd be walking on easy street".

read more...

New Faces

Dmitry Dryiga joined Porticos in June as a summer intern. Dmitry is a graduate of

Eastern Chapel Hill High School and will be attending the University of Michigan in the fall.

<http://www.porticos.net/people.pl>



New in Mechanical Design Printing Transistors

onto Mechanical Parts!

By: Debbie DeLine

We've all seen the commercial where the guy conspicuously loads up his pockets with items that he is supposedly stealing, but when he exits the store something magical happens and his credit card is automatically charged. How can this be a reality? RF ID tags...they're all the rage right now for everything from the grocery store example to tracking wildlife, and preventing theft of all kinds of devices. How will this technology affect mechanical engineers? Well, in short, these little beauties will eventually be in everything we design. But not just as another electro-mechanical component that you have to fit in somewhere. A recent article on the Science Daily website talks about the rapidly approaching ability for transistors to be printed on substrates which are serving other functions in the design, such as plastics. "By carving specks of single crystal silicon from a bulk wafer and casting them onto sheets of plastic, scientists at the University of Illinois at Urbana-Champaign have demonstrated a route to ultrahigh performance, mechanically flexible thin-film transistors." "Not only could huge, wall-sized displays be built at far less cost, components could be printed on the insides of windshields and other non-flat surfaces. While current fabrication techniques favor flat chips, printing-based methods remove that constraint."

Read more at...

<http://www.sciencedaily.com/releases/2004/06/040618064110.htm>

RECENT HEADLINES & UPDATES

We've Moved!



In May we said our final farewell to headquarters and moved into a new office space. We're now located in Aerial Center, just one mile south of RDU airport. We all fit comfortably with a little room to grow. Thanks to all of our friends and customers who were able to stop by for the open house.

Press Release

[Porticos Forms Alliance with APC for Additional Engineering Resources](#)

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THE BUSINESS OF
IDEAS

Greg Patterson, CTO

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The truth is it takes more than a single idea or product to build a business. First there is the whole odds thing you have to consider. I'm not going down that path again here since we discussed it in detail last time, but suffice it to say the chance that your idea will produce a monetary return is fairly low. To be successful you need to have a portfolio of ideas or products to work with. I compare it to the general disclaimer and advice your investment manager would give you on the importance of diversification. The more ideas you have, the larger your intellectual property portfolio can be and the greater your base will be for generating a return on your investment.

I suspect that there are some of you twitching in your seat right now wishing that I was standing in front of you so you could point out the errors in my ways. Surely there have been lots of entrepreneurs who have started a company on the premise of a single idea and reaped the rewards. What about Bill Gates at Microsoft or Steve Jobs at Apple? Those guys seem to have a pretty hefty bank roll. Well as I said before, it is not impossible and I suspect that there are some of you who do have the "good story" to tell, but let's take a deeper look at Microsoft.

Maybe it's just semantics, but I would argue that Bill Gates started with a *vision* rather than a *product idea*. There is a difference. His vision led to the development of a large intellectual property portfolio and a wide range of products. A simple search on the US Patent and Trademark Organization site shows a large number of patents assigned to Microsoft. Similarly a ride to the nearest computer or software store will probably astound you by the sheer number of products that Microsoft offers. Bottom line: he had a vision; he was creative and surrounded himself with other creative people to develop innovative products in support of his vision. He has a knack for business and he was a little lucky to boot! Either way you look at it, a pretty good combination to say the least.

Looking at the flip side of that example, I know a couple of engineers that had a pretty good idea for a product to address a real problem in the market place. They used their engineering skills, did test markets, etc., all with good

results. They were successful in being granted a couple of patents on the product and put together a solid business case. With help from a few private investors, they were even able to launch into production. That was late 1996. Although the product was well received and continues to garner positive reviews, here it is eight years later, and it is still just barely able to cover the cost of manufacturing. It's not what you would consider a financial success story by any measure.

What's the difference between the two? You could argue (and I think that you'd be right) that the original kernel that spawned each company was stronger in the Gates example compared to the anti-Gates example. That would go a long way to explain the difference in the number of zeros preceding the decimal point in the return on investment. But I would contend that the later company could have been "successful" as well if they had expanded their product offering.

Still not convinced? Go to any store, or mall, or even any local flea market and what do you see; a store or booth with just one item? No! You see retailers with a multitude of products on the shelf. They might be similar in theme, like a candle shop for example, but even that store will have a variety of candles plus various knick knacks and accessories for candles. This is the same whether you are in retail or whether your business is developing products.

So what should we learn from this? That we should just give up and sit on the couch in front of the TV? Absolutely not! We just need to realize that if innovation is a cornerstone upon which we are going to build a business, then it cannot be a part time endeavor. You have to continually and actively seek out problems (or opportunities as the self help books would say). You have to develop innovative solutions to those problems. And you have to build your business portfolio all while remaining aligned to the overall vision of the company. Remember what we said last time. Most active inventors have more than one patent to their credit. To be successful it needs to be a *passion*, not a hobby, but we'll save that for another day.

If you don't take away anything else from this section please understand this; if you intend to build a company solely on the merit of a single product idea you'd better keep your resume up to date because you're probably going to need it.