

*Editor's note: The seven installments of the mini-course presented in the weekly ASIT newsletter referred to here will be combined into 3 articles for the TRIZ Journal. Parts 2 and 3 will appear in November and December.*

## New Product Development Mini-Course, part 1

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In the July issue of the TRIZ journal, you can find a review on my new e-book, "How to Develop Winning New Products Ideas Systematically." Read the review at <http://www.triz-journal.com/archives/2004/07/07.pdf>, and buy the book from <http://www.start2innovate.com>

Many people have written to me asking about the difference between the ASIT Premier course and the new e-book about New Product Development (NPD). Read the review of the course and associated book at <http://www.triz-journal.com/archives/2003/04/e/05.pdf> or order them directly: [Click here](#). After giving it much thought, I've decided to write a 7installment mini-course to help you appreciate the basic principles behind the NPD tools and principles. Today's installment will establish the basis by discussing the methods currently used by businesses in creating their new product and will explain why a fresh new method is needed.

### The NPD mini course

#### Installment 1

#### What's missing from existing product idea practices?

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Creating exciting new products on a regular basis is essential to the success of any business. Today I'll outline the methods currently used by businesses to create their product ideas and I'll explain why a new, fresh method is needed. Ready? Grab a beverage and let's begin!

**Product life cycle** Every product goes through a similar life cycle: introduction, growth, maturity, sales and finally... decline. No product (except for Coca Cola...) can escape the decline phase, and eventually disappear. This is why businesses, large and small, must manage their products' life cycles and have new product ideas in the pipeline. "NEW" is probably the strongest word in marketing. People are attracted to new products like a magnet. Introducing new products on a constant basis is the best way to get attention and invaluable free publicity for your business.

Consider Gillette. They dominate the razor market, and yet they launch new products every several years in a clear act of marketing cannibalism. But with each new product launch, they take another bite of the market share cake. Companies nowadays appreciate the importance of introducing new products to the market, and therefore apply one of the following methods to get their ideas.

**Listen to the voice of the customer** The first bit of advice companies get from their marketing experts is to listen to the voice of their customers. After all, the customers are those who have the most intimate relationship with the products, so they should have an idea on how the products can be improved. Listening carefully to your customers is indeed a critical

factor in marketing success. Digital Equipment Company did not listen to their customers and disappeared. But here is the caveat. While you may listen carefully to your customers and develop products that satisfy them, your competitor may be uncovering needs your customers can't communicate, thereby creating more exciting products. Just listening to your customers will not provide you with the differentiation and 'wow factor' you need.

**Applying new technologies** The Laser, Global Positioning Systems, the Microwave, the Internet... When these technologies emerged, they created a wave of innovation and new products. When I was in high school (in the seventies) people talked about the laser as a "solution looking for problems". No doubt, new technology generates a wave of creativity and exciting products. But relying on new technologies is also very risky and costly. The technology may prove to be unripe, or the market may not be ready to accept it (the Apple Newton is a good case in point).

**Identifying trends** The developers of the Bratz dolls identified a trend among youngsters - admiring cool looking people. They created dolls that look very different from the classic Barbie dolls. The result was a great success. If you manage to identify a trend in its early stages, you're on the horse. But more often than not, when one can identify a trend, one is already too late. In fact, what we need is a method to help us CREATE a trend, rather than one that will help us identify a trend.

**Following Competitors** "Me too" is a great strategy. In fact it's Microsoft's strategy. They're currently busy developing a better Google. Although I certainly consider myself an innovation freak, I do acknowledge the strength of this strategy. But if you're not Microsoft, you can't rely on a "Me too" strategy, because eventually the customers prefer the leaders and punish the copycats.

**Mistakes** What is common to the floating Ivory soap, "Post it", penicillin and radioactivity? Right! They were all discovered by mistake. Anyone can get lucky once or twice, but for success to strike three or more times there has to be a systematic method.

**Advertising** Many companies opt for massive advertising in differentiating their products. However, people are increasingly ignoring interruptive advertising, and so companies have to invest huge amounts to get their message across. Seth Gudin, the marketing guru and the author of the best seller, "Free Prize Inside", claims that nowadays one should invest much more in product innovation and less in advertising campaigns.

You need an alternative--businesses turn to the customer, new technologies, trends, competitors, mistakes and their advertising agents to get ideas for innovation and differentiation. Each of these ways has its own merits, but its limitations as well. And there is one shortcoming common to all: everybody uses them. What I'm about to offer is a new fresh approach, (still) known to very few. It's a method comprising of principles and systematic tools developed by analyzing hundreds, even thousands, of highly innovative and successful products. We'll begin learning about this revolutionary method next week. Until then, **your homework** is to make a list of new products that really impressed you, and then try to identify the common properties underlying them.

**The NPD mini course**  
**Installment 2**  
**Constraints foster creativity**

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In our previous meeting I talked about what businesses currently do to get their new products ideas.

Today you'll start to learn about ASIT as regards new product development and will be able to appreciate how unique and powerful this method is.

Let's begin with a small exercise.

Please invent a new product.

Yes, really, go ahead and invent a new product...

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Stuck ha....

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I'll tell you why.

Paradoxically, when a problem statement is too broad, our mind finds it quite difficult to recruit all its creative powers.

Scientific studies have proved time and again that we tend to become more creative in a constrained thinking environment.

I'll let you see it for yourself.

Here's a more constrained task:

Think about a new idea for a pain reliever pill, such as Tylenol.

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Well at least now you have something to think about, but most of your ideas probably fall into known patterns of improvements to the medicine, such as reduced side effects, being active for longer periods, and so on.

Here's the dilemma: when the thinking task is too general, we're simply stuck; when it's more focused, we tend to follow known thought paths.

We need a mechanism to help us open new paths in a constrained environment.

OK. How about this: think of possible ways to \*damage\* or ruin the pill...

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That was easy, right?

Here are some ideas of mine for damaging the pill:

Make the pill so big that people will not be able to swallow it.

Take the active ingredients out of the pill.

Make it have stronger side effects.

Make it effective for shorter periods.

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And so on.

You may have come up with some of these ideas, and probably many others.

Here comes the fun part. Please do this part:

Select one of the damaged products and find a way to sell it.

Yes...try to find real benefits for a real target audience. You can make adaptations to the damaged product, but don't totally eliminate the damage itself.

Take 3 minutes for this exercise.

[illegible]

Done? Good.

Did you feel the difference? Did you notice how this exercise leads your brain along different and new routes?

Here's an example of what I came up with:

Take the large pill, for example. It's too large to swallow, and I thought about conditions under which this may be an advantage.

What came to my mind was that such a pill would prevent toddlers from swallowing it. In order to take the pill, adults would need to break it along a prefabricated slit.

Another benefit would be the possibility of adding text to the pill with brief instructions.

And from this idea, I went on to a new idea that was inspired by the parameter, "size".

The idea is to create a package of pills with different sized pills. There would be a scale on the package to help the customer select a pill according to the intensity of the pain.

Let's summarize this short exercise.

At first you were asked to develop an idea for a new product with no constraints. This was a difficult because it was too broad. Then you were asked to develop ideas for a specific product - a pain reliever.

The new, more focused exercise seemed easier at first, but most people find themselves, at this stage, offering ideas that can be categorized as clichés.

I helped you get around this problem by asking you to damage the product first and then move from there to useful ideas.

This is exactly how ASIT works. It helps you create a focused thinking environment by injecting constraints into the process. Then it provides you with tools to help you think along fresh and original paths.

Compare this to the conventional method of "listening to the voice of the customer" and you'll appreciate what a powerful approach ASIT is.