

innovation at the Verge by JOEL A. BARKER

TRANSCRIPT

Hello, I'm Joel Barker and I'm a futurist.

For more than 30 years, I have studied change and its impact on what we do everyday.

I have looked at how wealth, innovation, and diversity are all connected.

I have examined the best way to introduce innovations.

And now, here, I am going to show you a new way to find them.

Graphic:

"Innovation is now recognized as the single most important ingredient in any modern economy."

—The Economist Magazine

This is the Titan 1000. It is a product of Kuka Robotics, a German company that builds some of the best robots in the world.

The Titan is strong enough to lift 1000 kilograms, about 2200 pounds, and move it precisely to almost anywhere in a 30 foot circle and overhead as high as 15 feet.

In order to improve the return on investment, they decided to see if they could find a different industry where the Titan 1000 would be useful.

Kuka partnered with two amusement park ride experts from London and Canada, and created an experience unlike any other in the world... Robocoaster.

The same feel and excitement of a big roller coaster compressed into a much smaller space and with a wonderful return on investment.

The Robocoaster is a great innovation. But it is especially important to this discussion because it came from a place for innovations that is mostly overlooked.

That is the place we're going to focus our attention, because it has literally millions of new ideas waiting there to be discovered.

TITLE: INNOVATION AT THE VERGE

I call that place "the Verge". It is where something and something different meet.

A robot and a roller coaster, that fits doesn't it?

Special things happen at the Verge as differences come together to trigger new ideas, new combinations of elements, new partnerships.

The Verge has a huge potential to spawn innovations.

You find Verges between different industries, between different disciplines, between different professions, between different ecosystems. Yes, even Mother Nature has used the Verge to stimulate the creation of new biological innovations.

And when it is done right, innovation at the Verge creates whole new categories of products and services, wonderful opportunities for improvement, and huge competitive advantages.

In this program, we will examine stories and examples of innovations at the Verge.

These stories will help you to understand the basic lessons of this kind of innovation and to find this special innovation place anytime you want, no matter where in the world you are located, no matter whether you are a single individual, operate a small business, work in a hospital, teach in a school, or are part of a global corporation.

When we're done, you'll know how to innovate at the Verge.

Here's a simple example of an innovation at the Verge.

What do you get when you combine gift wrapping paper and a brown paper bag? This one is easy, gift bags.

A clever solution for wrapping gifts, and a godsend for people like me. This seems like an obvious combination, right? Yet it was 60 years after decorated gift wrapping paper was introduced and more than 100 years after the paper bag was invented that gift bags appeared in the marketplace.

The combination of these two simple ideas stayed hidden because they were so different. How could something so beautiful have anything in common with a brown paper bag?

And that's our first lesson: innovations at the Verge are hiding all around us.

It's our job to see the new combinations.

Let's look at an example with very sophisticated technology, the Apple iPod.

Apple used to be just a computer company.

Then Steve Jobs saw an opportunity in another territory, the music industry.

He realized that he could adapt some of his computer expertise, partner with some key players in the other territory, and create a whole new way to access, store, and listen to music.

The happy result of this meeting between computers and music was that Apple created a highly profitable new business segment from an innovation at the Verge and gave millions of music lovers a new way to listen to music.

By the way, if Apple had failed in their foray into the music territory, would they have disappeared as a computer company?

Of course not.

And this is one of the key lessons of innovating at the Verge. You don't have to risk your main business as you experiment with your Verge business.

How about an example that isn't about technology.

For instance, General Motors was able to dramatically improve their ability to catch errors in their new vehicles by partnering with the Center for Disease Control.

A GM vice president had noticed that the CDC was able to find the source of a food poisoning problem in a school in Michigan in less than 72 hours.

Yet, he noted, to find the cause for a car problem took GM more than two months.

So, GM called the Center for Disease Control and asked them if they would share their methodology. It is important to note that GM didn't just apply the CDC protocols. They had to make them fit their situation. But also notice they didn't have to invent the protocols.

And here is another lesson: adaptation is much quicker and more cost effective than invention and it is one of the hallmarks of innovation at the Verge.

As a result, GM reduced the time it took them to catch errors from 70 days to less than 10 days, saving the company billions of dollars a year in recalls.

Before we move on to more examples, let's take time to review what we are learning about the Verge.

A Verge is where something and something different meet.

Verges are hiding all around us.

You don't have to risk your main business to explore your Verge business.

And, adaptation of already established ideas is almost always quicker and cheaper than creating an innovation from scratch.

One more thought...

As you are looking for innovations at the Verge, it's easy to focus on your strengths, like Apple did.

But it is equally important for you to understand your weaknesses and look for solutions that may help you solve your problems, like GM.

Understanding your strengths and weaknesses will help you in your search.

It's easy to think that innovation at the Verge is only for large companies. But it works at all levels, even for single individuals.

Debbe Kennedy, author of a wonderful book on team building called "Putting Our Differences to Work," left IBM in 1990 and decided to start a consulting business called Leadership Solutions.

She wanted to work with leaders high up in the organization, but she also knew she had some heavyweight competitors including organizations like Accenture and McKinsey.

How could she differentiate herself? She innovated at the Verge.

She called Sally Green, a wonderful graphic artist and old friend, and suggested a partnership. Debbe would provide the ideas and the words for their proposals. Sally would create unique graphics, logos, and proposal designs.

Now, think about this: the CEO is about to look at two proposals, one of them is what you would expect, clean, simple, crisp.

This is Debbe's. If you were CEO, which one would you pick up first? Me, too.

The lesson: just two people can become an innovation at the Verge.

This is a Verge example that has to do with scale.

Professor Behrokh Khoshnevis at the University of Southern California saw a Verge between inkjet printers and building houses.

He started by adapting the inkjet process. He enlarged and redesigned the nozzle and ejection technology until he could squirt out a tube of concrete.

Then he built a framework so it could trace the floor plan in real life dimensions.

His "concrete jet" printer will be able to complete a house in less than 72 hours.

The lesson: sometimes you need to change the scale of one of the elements so you can do something very different with the other.

Here's an example that sounds like a riddle: What is the Verge connection between a BIC lighter and a portable computer?

It's hard to believe there is one. Yet, it's simple once you have one more ingredient: a micro fuel cell.

It's designed to convert a fuel, like methanol, into electricity to provide portable devices with power.

The BIC researchers in France realized that their expertise in lighters could be adapted for fuel cells.

Anywhere you can get a BIC lighter, you could also get a specially designed cartridge to power your electronic device.

The Verge lesson from Bic: keep a constant eye out for those who can use your strengths, no matter what business they are in.

Sometimes innovation at the Verge is done by taking two old ideas and combining them into a new idea.

That's what the city of Curitiba, Brazil did with their bus system.

They had already been smart enough to set up special bus streets early in the city's development. But they were losing ridership because of the uncomfortable waits.

That's when someone got the great idea of adapting what subways have been using for more than a century; a single place to pay with a waiting platform beyond.

The bus tubes of Curitiba are shaded, safe, comfortable.

No longer do customers have to wait in line to get on, and the driver doesn't have to wait for someone to find the right change.

Who said innovation at the Verge has to use only new ideas? Not me.

In my research, I have found examples of innovation at the Verge from all over the world.

As I examined them, I began to see patterns of development.

So far, I have identified three distinctive ways the Verge occurs.

I created a chart to illustrate the differences.

Let's label the chart:

My Territory

The Other Territory

High Competition

Low Competition

The first innovation at the Verge pattern is what I call Vergent Territory.

It is the combining of two or more very different elements to create a new territory that didn't exist before, so there is initially no competition.

Federal Express is a perfect example. Its founder, Fred Smith, saw a niche in the delivery of packages and assembled his company around the following elements:

Small expensive components that were needed as soon as possible.

Small jets to carry these valuable little packages.

A pickup and delivery system that was flawless.

And a way to track every package.

When he put all those elements together, he had a Vergent innovation and, ultimately, a multi-billion dollar business.

The second pattern is Partners-Over-There.

In this case, one business from one industry takes their expertise to another, very different business to help them solve a problem.

Target, a corporation that is known for its social responsibility, participated in a partners-over-there pattern with a surprising and important organization.

It started with a newspaper story about the impact of hard core repeat criminals on society. Shortly after, when a horrible murder was committed by a repeat offender, it sent up a red flag for some Target executives. So they contacted the Minnesota Department of Public Safety to learn more about the crime.

In the conversation, the Commissioner of the Department explained that there was a lack of communications between counties and a lack of any uniform standards for tracking this special population.

"It sounds like an inventory management problem," said one of the Target staff. "We know where every pair of socks is anywhere in our system, but you don't know where your felons are?"

And that began a collaborative project between Target and the State of Minnesota, using Target's inventory system as a starting point.

The result is CriMNet, a statewide unified database, which allows for faster, fairer, and better tracking of felons and parolees.

The Target story has an important lesson: most of the benefits of this partnership went to improve the services of the government agency, not to Target.

But, what Target did get, along with the rest of the citizens of Minnesota, was safer streets. That's worth a lot.

The third pattern is Over-and-Back.

Toyota did this with their hybrid, the Prius. They went to other territories to collect battery technology, electric motor technology, and computerized power control technology and all the expertise that goes along with it.

Then they brought it back to the auto industry and assembled these very different elements into a car unlike any car on the market.

Other automobile companies, which initially rejected the idea as foolish, are now building their own hybrids. But Toyota saw the Verge opportunity before they did and has reaped the benefits.

Vergent territory, partners-over-there, over-and-back; there is one more pattern of innovations at the Verge that deserves its own special label.

I call them Super Verges because they can combine with so many different partners.

The result is dozens of combinations and in some cases, hundreds of combinations that create competitive advantage for the partners.

Let's take a look at three.

Cell phones.

Remember when they were just used for calling people? Now look at what we can do... cameras, text messages, video, FM, internet, calendars, and all sorts of games.

That's innovation at the Verge.

Personal computers.

Personal computer Verges with the typewriter... word processing.

Personal computer Verges with photography... Photoshop.

Personal computer Verges with the drafting board... computer aided design.

And all sorts of games.

And the internet, the ultimate Verge.

The number of Verges in the internet is almost beyond count and growing every day, and there are those games again.

Now that we understand the unique opportunities that innovating at the Verge can bring, I have two recommendations for you to make your search more effective.

Recommendation number one; even though you can search for Verges by yourself, there is also power in numbers, Verge Teams.

If you are going to put together a Verge Team, here is a symbol for your team to keep in mind.

Think of this multi-tool as your model. It has a single structure with lots of specialized elements.

That's what you want on your team, a wide diversity of skills, talents and points of view so your team can explore the full spectrum of combinations.

The diverse tool set allows you to take apart, adapt, and reassemble the different elements into your innovations at the Verge.

My second recommendation is this: make sure you look for significant differences to bring together.

For instance, the Verge between a Ford and a Chevy is trivial, the "V" is way too narrow.

But the Verge between Ford and Herman Miller business chairs? Now there is a Verge worth exploring.

Remember, not every attempted combination is going to bring you a great innovation. But looking for wide combinations is the best way to begin your search.

The Verge has been a place of innovation for the entire history of our planet.

Now, when we need new ideas to help us solve critical challenges, the Verge becomes a place of hope and promise.

The power of the Verge is in the combination of differences. By knowing where to go to access that power, you are halfway home.

The rest of the way is up to you, your cleverness, your willingness to reach beyond your usual boundaries, your openness to new partners and new territories.

Some futurists have been saying that the 21st Century will be the Century of Europe. Some say it will be the Century of China. I think it is going to be the Century of the Verge.

Time will tell.