



What Comes **Next?**

A Trends Perspective for Our Future



Futurist Trends & Innovation Expert Jim Carroll



Big Ideas Go **Big Time**

There's a lot of big ideas out there, and each one can spark massive industry change — because big ideas increasingly make sense. Big ideas are executable and can succeed because organizations can now pull together resources in ways that had not previously been possible. The result — they aren't just big ideas anymore, they are the foundation for significant transformation in every industry. A transformation that is now underway.

Think transformation

Think GoogleCar. Think iPlane. Think WalMart Hip Replacements. Think how each and every industry out there could be turned upside down by the entrance of a competitor determined to rewrite the traditional rules.

Google could be a car company, simply by pulling together a wide variety of existing global resources. Given low cost offshore production, global collaboration and the slow response of those within traditional automotive business model ...why not?

Rewrite the rules. Think FedEx, not dealerships. Think smart engine modules that pop in and out, not mechanics who “fix things.” Think automated traffic management via GPS-linked self-organizing highway cones — not traffic jams.

The big ideas are out there, and they get more traction every day. Let's examine **Eight Big Trends** that you should be thinking about, and planning for.

Every industry today is ripe for massive disruption and the rapid emergence of new competitors



Revenge of the **Math Geeks**

Analytics is hot

Remember those kids in school who were really good at math? They own the future.

Our world is faced with a tremendous number of complex challenges and fascinating opportunities, and it's the math experts who will figure it all out. That's because they have mastered the skill of processing complex analytical algorithms with massive computing horsepower, and solving some of world's most complicated issues by doing so.

Take the issue of the environment. I visit my local Home Depot: there's a wind generator that I can buy. I think to myself, "*I can take it home, plug it in, use its power, and then sell the excess energy to my local power company!*" Except I can't : most energy grids were not built for two-way power transportation.

Although there are some small two way grids, most large scale systems have been designed to deliver energy in one direction: from big power plants to your home. That means that I can't contribute to the grid, and that the concept of "community generated power" will remain but a quaint idea. Until someone figures out how to do it, and launches a global revolution in the process.

That someone is likely to be a math geek, because experts suggest that this is essentially a math problem: someone has to figure out how to "balance the load" on the grid, taking a lot of small energy sources and feeding it carefully into the grid so that nothing goes out of whack.

Health care is already seeing the impact of analytical horsepower. It is estimated that there are some 50,000 people involved in the bio-informatics industry: basically, a bunch of math geeks figuring out very complicated analytics related to DNA-based medicine.

They're examining and mapping the human gene sequence in a great degree of detail. From that comes the era of personalized medicine; one in which you are treated for conditions you are likely to develop, rather than healing you after you become sick. A shift in focus that brings about a huge and fundamental transformation of the health care system.

The 21st century is all about math: some of the most unique, innovative ideas are emerging with these types of analytic projects.

This is where the next billion dollar industries are being born.



Small is the New R&D

It used to be that most innovation occurred from “big science.” Massive companies figured out an R&D plan, research was undertaken, and the future happened.

Slowly.

Today, the global R&D process has changed, and small is big. The global, infinite idea loop allows topic experts to share their latest research and insight with their global peers on a continuous basis. It's a fundamental transformation in which most new scientific discoveries now percolate from the bottom up. Some 40% of the new medicines unveiled by “big pharma” in the past five years originated in small and mid-sized company labs. That's a big and fundamental shift.

You can find the new “small but global” innovation factory online everywhere you look. Examine Piedmont BioFuels, and then take a look at the WindBlog — which is buried within the same Web site. Two fascinating “knowledge factories” that provide insight on the small but significant research occurring in the fields of alternative and renewable energy sources.

Established by two brothers separated by several hundreds of miles in geographic distance but linked by their passion for progress, they are impacting the world research stage. Each contributes a little bit of their daily insight in their niche topic to a global discussion; others will take their ideas, expand upon them, build upon them, and deliver something new.

That's the new R&D, and the impact is staggering.



Attitude & Amusement

Take a look at this kid.

He's your next employee. How are you going to recruit, retain, manage, interest and amuse this fellow? If you don't have this issue figured out yet, you'd better start thinking about it in a hurry.

Consider the staggering realities of what comes next with the corporate workforce:

- A huge amount of expertise is walking out of the door as baby boomers begin to retire. In 2010, 3 people will leave the economy for every new person that enters; by 2012, 4; by 2016, 6.
- The generations that are replacing them have completely different career concepts — and many are completely rejecting the concept of the traditional career. More than 50% of young people in a US survey indicated they believe self-employment to be more secure than a full time job. Every study suggests that they don't want to work for big organizations: they're nomadic, contingent workers, entrepreneurial and global in their outlook.
- More challenging yet: they're the gaming generation. They get extremely bored, very fast. They expect to have 20 or more different careers in their lifetime, because they thrive on change.

The fact is, you'll need them. That's why workforce *engagement* is the big issue — you'll only be able to get the staff you need if you can keep them active, engaged, interested and amused. A entirely different workplace concept that is radical, yet necessary.



Most news becomes old news in 36 hours or less. People scan 12 feet of shelf space per second when they're in a store. Brands go from hero-to-zero in a matter of minutes. At one time, "quality" and "China" weren't words that were inexorably linked; but moments later, CEO's of toy companies were testifying in Congress about the issue. That's kind of fast — and that's the new reality.

Time **Disappears**

In a time when faster is the new fast, issues, challenges, threats and opportunities can happen at light speed. If you aren't prepared for this new reality, you won't maintain your competitive edge.

There's an increasing intensity in the business world today, and its pace is speeding up. Consider the video game industry: some 45% to 60% of the total revenue made on a typical video game occurs in the first 4 to 5 days. That's pretty fast — and the same type of rapid intensity is coming to every industry as innovation accelerates, product life-cycles collapse, and trends intensify.

The major trend going forward is the collapse of time. There's no time to plan anymore - there is just a need for action. While we still need budgets to manage and control, they'll have to be constantly adjusted to deal with new realities. In this context, volatility is the new normal : the concept of risk management, for example, is transitioning quickly to one of risk containment.

With business intensity comes rapidity of change. New competitors appear overnight. Innovators examine your business model, and decide to redesign it even before you know they exist. Long standing business traditions crumble under relentless, fast paced innovation.

All of this implies that today's ponderous, careful, tedious and meticulous organizational structure won't cut it tomorrow. Agility and flexibility are the key capabilities; the ability to react intelligently to accelerated change is critical.



Resistance to Change Retires

One of the most significant trends to come will unfold as the current leadership generation hands over the levers of power to GenX. As this happens, change accelerates.

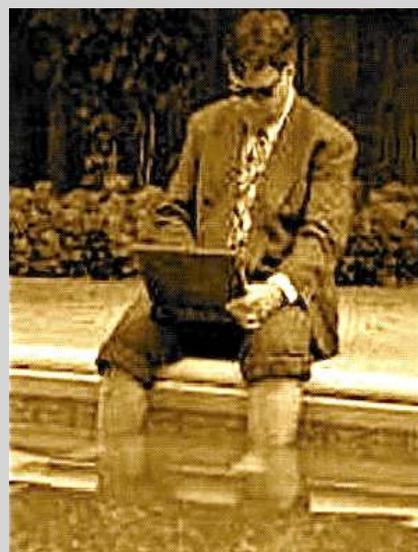
The two generations are inherently different.

Baby boomers learned COBOL and used punch cards while in university courses; GenX was weaned on video games and PC's.

The result is a dramatic difference in their strategic thinking as to the role of technology in the business; and dramatic differences in how they react to technology-driven business model disruption.

Consider recent comments by Universal Music CEO Doug Morris, who admitted that when it came to music piracy and the need for business model transformation, *"they just didn't know what to do.....we didn't know who to hire."* Staggering admissions for a senior executive in an industry in the throes of collapse.

Yet there is no such "mystery" for the next generation. The coming generation of senior management aggressively pursues and implements new ideas. While the first is reluctant to embrace new business models, the next steamrollers them. Expect velocity!



Careers **End**

Not having a job will be your future career option. Actually, it might be your only option.

By 2010, it is estimated that more than 60% of engineering professionals will work on a contingent, or contract basis; other professions are seeing similar trends. With rapid career and knowledge specialization, companies might need a particular, unique skill for only a short period of time before moving on. They are reluctant to hire “staff,” because they know the cost of downsizing will only continue to increase due to ever more generous severance packages.

Three trends that are in perfect harmony. Put them together, and one fact becomes crystal clear: we are witnessing the end of the modern organization, and an ever more rapid migration to the era of the itinerant workforce.

Which means, in the future, you are going to have to work really hard not to get a job. Because that’s where your paycheck will come from: the global, itinerant, part-time, skills-for-hire economy.



In the hyper-innovative global economy, the only thing that counts is knowledge. That's why outsourcing is transitioning rapidly from a cost-cutting exercise to a strategic necessity. In the future, organizations that can lock-up access to ever more specialized skills will emerge as the new "go-to" companies.

Knowledge & Skills **Banks**

Medical knowledge is now doubling every six years. Some suggest that half of what a freshman learns in the first year of any science based program is obsolete or revised by the time they graduate. The half-life of most engineering knowledge is collapsing as new methodologies, discoveries, technologies and design concepts evolve at a furious rate. Kids in preschool today will work in jobs or careers that don't yet exist, working on problems that we don't yet know about.

Knowledge and skills have extreme velocity — and with that comes greater specialization and ever more narrow niches of knowledge.

If you combine high-velocity markets with business model changes, and add to the mix skills specialization, you find an environment in which organizations need to access the right skills, at the right time, for the right purpose. Yet the law of supply and demand will make this more difficult. Knowing this, other organizations will seek to lock up these scarce skills, making them available in the form of a temporary, leasable asset.

Call them "skills banks."

These resource pools will become a significant asset, available to those who are willing to pay for them at a premium price. The capital of the 21st century isn't financial : it's experiential knowledge that is extremely scarce and specialized. That's a major trend that you can bank on.



Interactivity **Redefines**

Every industry will soon be transformed by the forthcoming era of “pervasive connectivity.” Essentially, every device and thing around us is about to become plugged in — leading us to an era of interactivity and connectivity that is mind-boggling in scope.

Consider, for example, the recreational skiing and snowboarding industry. Snowboards and skis will gain intelligence as microprocessors are embedded within them. Once they are linked in, everything begins to change.

- Ski and snowboard manufacturers will come up a new set of gear for aging Boomers & Gen-Xers, who will finally realize that their bodies can't quite take to the hills in the same way. Skis and snowboards will undertake real-time analysis of motion and direction; at the same time they are analyzing muscle contraction through a bio-connectivity link. The result will be a continuous adjustment of ski flexibility and edging in order to provide for a smoother ride — and a far bigger market opportunity.
- Every snowboard and ski will have its own IP (or Internet) address, grabbed from an in-park server. Creativity will blossom with the integration of software with the board. Smart companies will adopt the open-source model, allowing anyone to hack cool applications.

- Terrain parks will jump on the trend and get wired; “instant ride analyzers” will prove to be a smash hit. You'll do your ride, the park will pick up your signal, and will film you with a variety of cams in the park. When you jump into the hot tub later, you'll merely swipe your day pass; there's the video of you in the park, the greatness and ugliness in full.
- Smart-goggles will become part of the scene. They'll use the same virtual-cockpit helmet-mounted display that the military uses today. With a voice command, you'll be able to pull up an integrated trail map/condition report ; it will be displayed on the thin film of your goggles so that it simply "appears" in the air in front of you. Conditions are updated in real-time; you chase the powder instantly.
- Connectivity will provide an opportunity for innovative on-hill marketing. “Sticks and planks” will link to LCD displays both indoors and outdoors, which will instantly change and evolve to show advertisements related to the boarder / skier profile. Resorts will discover that the gaming generation takes to the new world of skiing and boarding with a vengeance. Opportunity prevails - innovation dominates.

Farfetched? Not in the world of pervasive connectivity. Get ready for it!



What Do You Do About It?

Focus on linking future trends to the concept of innovation.

Forget about the concept of innovation as simply involving the design of cool new products. In the high-velocity economy, where faster is the new fast, it's your ability to adapt, change, and evolve, through a constant flood of new ideas, that will define your potential for success.

That's innovation — and that's what you need to do.

That's why you need to think about you can ensure your organization is adequately prepared for the game-changing trends that will change your industry, capabilities, markets, customers, products and resources.

Jim Carroll has a long established list of **10 Great Words** that can help you get in the right frame of mind for innovation success:

- Observe
- Think
- Change
- Dare
- Banish
- Try
- Question
- Grow
- Do
- Enjoy!



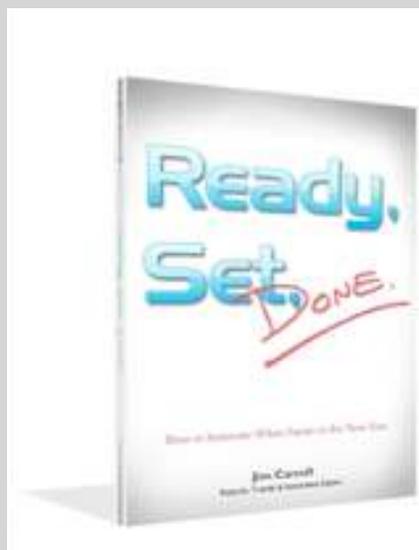


About **Jim Carroll**

When the Walt Disney Corporation went looking for an expert on the topic of innovation and creativity, they went with Jim Carroll!

Jim is the author of *Ready, Set, Done: How to Innovate When Faster is the New Fast*, and *What I Learned From Frogs in Texas: Saving Your Skin with Forward Thinking Innovation*. He is a strategic thinker and "thought leader" with deep insight into trends, the future, creativity, and innovation. For the last fifteen years, he has provided high energy keynotes for audiences of up to 3,000 people, and intimate, detailed customized strategic planning insight for CEO / board / senior management meetings.

Jim was recently named by *Business Week* as one of four leading sources for insight on innovation and creativity, and was a featured expert on the prime time *CNBC* series, "*The Business of Innovation*." His clients include Nestle, Motorola, Caterpillar, Verizon, the British Broadcasting Corporation, the Sporting Goods Manufacturers Association, Blue Cross Blue Shield, the World Congress on Quality, and the Swiss Innovation Forum.



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Organizations today are looking for deep insight into the trends that will affect their markets and industries. CEO's are focused on the need for innovation, knowing that a world of high velocity change requires that they respond to opportunity and challenge in an instant. They are looking for guidance on establishing high-performance, innovation oriented teams that are focused on achievement. That's why they've turned to Jim Carroll.

