

Innovation and the future ain't what they used to be...

Requisite for future success...

discontinuous improvement

Robert J. Holder — Gray Matter Productions and Ned Hamson — Positive Futures Guide

The time is 1987. Wang Laboratories, as well as DEC are the toast of Boston, Wall Street and the business press. A Macintosh users group meeting on the merits of Pagemaker versus Quark Xpress only rates a few lines in the Boston Globe.

We live in a new era that is extremely uncomfortable. Today's much lauded firm may become the short-sighted, outdated and out run behemoth in a matter of months. The introduction of the Macintosh and desktop publishing in the mid to late 1980s is one of the best illustrations of how a discontinuous change and innovation can in short order destroy an existing marketplace and create an entirely new playing field. Massive word processing networks connected and controlled through traditional bureaucratic mechanisms were the logical extension of the typing pool and the predictable corporate markets of the early 1980s. The steel, auto and consumer electronics industries had taken it in the neck, but the other markets and their traditional management systems seemed secure.

The idea that anyone can use a computer, if they have a Macintosh or a look alike Mac is still a bit scary to some folks. But because it matches individually controllable technology with one of the deepest and strongest trends that continues to turbulently reinvent Western society: the desire to increase the amount of control and freedom you have over your own worklife and homelife — everyday democracy — it has been wildly successful. The Mac's user friendliness trademark is now being applied to all sorts of products.

Well, you say, most have learned their lessons from that, no? Yet, today a the 1995 introduction of a desktop operating system and interface that emulates a 1987 Macintosh is being lauded as a great advance by the same folks who thought Wang and DEC would be the leaders for the 1990s in 1987.

So let us say this again, THIS IS AN AGE OF PERPETUAL AND DISCONTINUOUS CHANGE AND IMPROVEMENT — NOT AN AGE OF ME TOO MARKETING AND MANUFACTURING!

This revolutionary rate of change cuts across all industries:

- Twelve channels. then 90, then 150 and now 500 is only an interim estimate of what will be available via digital and satellite television. QVC and the Home Shopping Channel are killing traditional retailing and distribution of consumer goods.
- Will we be ordering our automobiles via a keypad connected to our new television/computer, specifying every detail and having it pull it up to the curb in three days in the next year or so?
- Saturn dealers have made a small improvement in the way we buy cars — no haggling over price — and think they have done the same thing that Toyota and Nissan did when they threw in all of the old extras in the basic auto package. Who will reinvent the way we build and buy houses? An Italian, German, Japanese, Canadian or US firm?

Perpetual and discontinuous change is turning out to not only be perpetual but the discontinuities seem to be getting greater.

Traditional ways of thinking, leading and organizing are obsolete. Here are four reasons why:

1. Being first to market has a great impact on profitability.

Research indicates higher profitability by those first to market with a products and/or services. However, focusing on single *breakthroughs* is a mistake. Firms need to support breakthroughs in manufacturing with service process improvements. A number of computer software firms have introduced great new products which have failed or may be headed for failure because they have paid no attention to improving the service processes.

Once a discontinuous improvement has been introduced, continuous improvement and the thinking on how to create your next discontinuous improvement must begin. Firms need to fuse continuous and discontinuous improvement. Casio, the consumer electronics gadget maker knows this well. So does Rubbermaid. The Rubbermaid folks know well that numerous competitors can create *knock-offs* of their new product in a short period of time. Their challenge and that of Casio is to constantly reinvent their product lines. The only surprising aspect of this is that surprisingly few companies have chosen to emulate the success of these two in some manner or another. Instead, they keep trying to reinvent the first plain paper copier or the *new* Mustang.

2. Innovation and creating new *games* is critical to the growth and development of human organizations.

Americans have mastered the breakthrough process. Silicon Valley represents the breakthrough crown jewels. But we have ignored fusion innovation.

What's fusion innovation? Fusion brings together different technologies, business functions and management processes to create new products and services. The introduction of desktop publishing took a machine that had been used as a faster and easier to use typewriter and fused the jobs of writer, copy editor, typesetter, layout artist, paste up technician into one person's hands. In fact, our breakthrough mastery has inhibited us from playing the new game of fusion.

3. Failure to enact discontinuous changes can cost enterprises millions, if not billions, in lost opportunity profits.

Xerox created numerous discontinuous ideas and products without launching them. The Macintosh, personal copiers and personal desktop laser copiers are three examples. The Macintosh, an irregular computer, has set the new standard in the computer market. Developed by Xerox and discovered by Apple, it was ignored by the former because of devotion to fighting the *last war*. This was also the case with personal copiers. Xerox stayed with the past war. Cannon and other Japanese firms saw a new one. This strategic blindspot has cost Xerox dearly in lost opportunity profits.

4. Management practices such as TQM, downsizing and re-engineering may improve existing operations, short run performance and profits but they may not improve long term enterprise development in a competitive and global environment.

Unlike their American peers, Japanese managers have placed new business and product development and continuous improvement as their primary priorities while Americans focus only on quality improvement and re-engineering (reshuffling) existing structures.

Discontinuous change defined (sort of) — Is discontinuous change and improvement just one thing or several? It's several things. It is the reconceptualizing of a product or service in one or more of four ways:

1. It makes doing something much, much easier.
 - a. It combines several tasks/functions into one operation.
 - b. It enables you to do something that could not be done by an individual prior to its introduction.
2. It greatly speeds up some processes.
3. A redefinition of beauty/style/feel/sensuality that makes the product or service much more enjoyable.
4. It greatly reduces cost while not sacrificing quality.

In short, continuity with the past is broken — seemingly forever and at once:

- Federal Express reinvented small parcel delivery...
- The 1980s fax reinvented letter and memo delivery by destroying time...

- E-mail is reinventing letter and mail delivery by destroying time and space...
- Internet chatlines and the World Wide Web may well be reinventing all of the above.

If you are not familiar with the new information technologies, then think about how the VCR has changed the movie industry and what the microwave did and is doing to traditional cooking.

If we haven't given enough product examples yet, go to any store that sells recorded music and try to buy a vinyl record album. In less than two years CDs destroyed a market that had thrived and existed for at least 80 years!

Warning! Discontinuous change isn't limited to technology and products — Services and human systems can also experience discontinuous change and improvement. Wal-Mart hasn't created a technological breakthrough, its breakthrough was in fusing distribution, technology and service. Ford's critical discontinuous improvement wasn't the *Model T* or *Model A*, its revisioning of organizational life and production systems was discontinuous with its time.

John Guaspari laid out the foundation for this view of discontinuous improvement in an article (*So that's what we should be doing?*) in this Journal a few years ago. His article was on considering and charting the entire transaction with a customer and not just with the customer after the service or product is purchased. The earlier cited examples of the no-haggling Saturn buying process and Toyota's and Nissan's pricing cars with power steering and brakes and am/fm radio tapedeck in the basic selling price illustrate how reinventing a part of the purchasing process can create a discontinuous market advantage.

The *go go* mail order catalogue sales of the 1980s should have been the handwriting on the wall for department stores. What else is driving the massive concentration of the remaining national players in the department store market? It's not just bad decisions by buyers, the mode of purchasing is changing and we have excess capacity in their industry.

QVC and the Home Shopping Network are in the process of reinventing the specialty store, department store and shopping mall all at once. They are redefining sales, buying, distribution, marketing on many consumer products. A good deal of their success is based upon creating a live mail order business, combined with the speed of

delivery offered by Federal Express or UPS and the atmospheres of an auction and a local shopping mall. You can watch your favorite author being interviewed, order the book, listen to people from across the country call in to say how much they like the book, see the number of books sold in the last few minutes. And if you're quick, you may be able to call in, order your book, talk briefly to the author and have him or her personally autograph your book. Within a day or so (by the next morning if you want to pay extra) you have your personally autographed book and you never left the house!

Enough already, you say. So how can we incorporate the concepts of discontinuous improvement into our products and services? And aren't there more ways to be discontinuous? Yes there are more ways to be discontinuous. If we'd thought of them all, we'd be sitting on a beach somewhere wondering how we would spend all our money. Seriously (in reference to how many ways are there to be discontinuous) each market, organization and environment consists of a somewhat unique context for discontinuity. The general concepts we have mentioned will apply in all, but only if adapted to the context of that market. To answer the first question, we will offer some images and clues for enacting and organizing discontinuous improvement.

Images and clues for enacting and organizing for discontinuous improvement

What follows is an experience in discontinuous change and improvement. Clues and images for supporting discontinuous improvement are presented. This breaks with the continuity of a conventional article in this journal. If you find yourself uncomfortable with this presentation, you may be experiencing a typical reaction to discontinuous change.

What no principles, strategies and techniques! Clues and images are also a discontinuous change. Most business, quality and management works present techniques, principles, and strategies and models. To speak of discontinuous change in this fashion would be an expression of continuity which we are breaking and revisioning. It would be out-of-sync with the actual images of discontinuous improvement and their creators. Clues and images require the reader to experience and engage in a discontinuous improvement.

Ideas and images for supporting and creating discontinuous improvement...

Support watching how people and customers use products — Go out and watch customers and people shopping and using products and services. (Read Yoshihara's December 1990 article in this Journal on managing innovation.) Keep in mind the cost, beauty, speed and ease of use/hassle in use concepts. How would you reinvent the kitchen, preparation of meals, use of the refrigerator? What are the most hassle producing aspects of maintaining an automobile?

A: Time pressures; refrigerators as an indistinguishable commodity; fridge magnets and messages... Make a message board built into the refrigerator to differentiate your product and please the customer.

B: Messiest and most hassle filled part of owning a car, desire to maintain a clean environment; need to save money and time... Combine the oil filter, pump and sump into a modular unit that can be easily removed, replaced and recycled. Gain an edge for your product.



Support the love and romancing of the business, products and customer

— Seek out and support people and leaders who fall in love with product and service ideas. Support romantics with stars in their ideas who seem as impractical as youthful lovers but with the conviction and foresight to create revolutionary changes. Big dreams are the only ones likely to create discontinuous improvements.



Practice suicide leadership — Create a systemic process for killing off products, services, organizing and leading images and management practices. Engage in Bohemian dialogues to support agendaless assessments for suicide. Honor the past and recognize that rituals of passing may be required. Be aware that people may resist. This is natural. Accept their resistance rather than suppress it. Resistance made public can serve as a means to charge the innovation process with more energy.



Encourage and support creative madness

— Develop a culture where *weird*, *unique* and *strange* are nicknames to which people will aspire. Create the time-space for madness and provide resources for people experiencing creative madness. Recognize normality is a pathology called mediocrity. Encourage people to discover their uniqueness and express it openly. (Who's in the picture? A Young Salvador Dali, his wife/model Gala, Jung and editor Hamson.)





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Deform existing images... revision them —

Don't ask whether the enterprise is heading in the right direction but whether our images are going to create the future. Deform existing images of the enterprise, industry, products, services, organizing and leading. Engage existing beliefs and assumptions and create new ones.

Create a sensitive, sensuous enterprise —

Explore existing boundaries and open them up to customers, new ideas, and fresh information. Support fusing of R&D, marketing and manufacturing. Deploy scouting parties to get close and in touch with customers, competitors, new ideas and fresh information. Experience people and events in a sensuous fashion and not through abstractions such as statistics, marketing reports and consultants.

Support the novice effect — Recognize professionals and experienced persons may be locked into a fixed mindset which limits their ability to perceive and/or create discontinuous improvements. Encourage people to ask:

- Why are we doing this this way?
- What is our image and metaphor?
- What other images and metaphors might be used?

Encourage people to look and be stupid, foolish and naive about what is and what could be? Don't engage in analysis but revision to change perceptions.

Unleash the organizational soul —

Unleash the whole organization soul. Value the messy, confusing and complex. Turn over cultural boulders to uncover values and norms which support conformity. Scout the depths and darkness for unexpressed ideas and relationships. Support reflection and imagination to deal with difficulties.

Support a Hermes consciousness —

Consciously revision and see the world as alive, dynamic. Look into things deeply. Encourage and reward stealing ideas from outside the enterprise from other departments. Support swift application. Support traveling and scouting. Engage people to question traditions, the established order and be muscular about it.

Support team and enterprise deepening and rooting —

Create time-space for people to gather together. Provide resources for *high touch-high tech* experiences. Provide teams with the authority to continue to work together.

Deepen and create synaptic relationships between suppliers, marketing, manufacturing and researchers. Create systems for people to develop depthful knowledge and roots.

Create a whitewater culture in your workplace —

Discontinuous improvements aren't safe, they are dangerous — they destroy relationships and create mapless territories. Abandon the notion of safety, guaranteed returns, predictability and the sure thing attitude. Forget market research and analysis. Follow T.E. Lawrence's idea that dangerous men are those who act on their dreams and appreciate the situation.

Think of your products and services as gifts for those who you love —

(Hamson) My mother-in-law has 10% vision and a close friend isn't doing well after a cataract operation. I imagine that there must be people at Apple with loved ones with similar sight problems. That's why I can't imagine why they haven't already bundled their *Simple Text* software (which can read text aloud), their *Newton* handheld computers and optical recognition software with handheld scanning technology at a reasonable price. With an aging population staring all manufacturers in the face, the idea of providing people with failing vision an inexpensive means to read anything, anytime they want to should be appealing. But it's not on the market yet is it.

In your business, what could you make or provide that would make a loved one's life easier or more beautiful?

Think about making products or services to give away —

Ma Bell made billions by, in effect, giving your parents a telephone. They made their money by charging you for using it and making long distance calls. If we were in charge of the companies selling direct satellite television (and soon other information services) we wouldn't be charging \$600 to \$800 dollars for the small dish that goes on the roof. We would be nearly giving it away! If it were priced at about the same cost as the average VCR, it would take the market by storm, thus assuring the dish and not the cable will be the average home's connection to the information and entertainment highway.

If we were running Blockbuster video stores right now, we'd make a special deal with a VCR manufacturer and sell VCRs at our stores for \$49.95. Why? The videotape rental market may have a short life span with 500 channels looming on the horizon. *Giving away* inexpensive VCRs for a year

may enable us to maximize our profits in rentals and give us the time to reinvent our business.

Closing thoughts

We could go on and on with more clues and ideas but that would just reinforce the need for more and more examples rather than getting on with the business of creating order out of your chaos or creating chaos in your ordered marketplace with your revolutionary new products and services. The best service we can render right now is to encourage you to: *JUST DO IT!*

If your colleagues and you are still not sure of your creative abilities, here is one more clue:

1. Envision, taste, smell, feel and hear a lavish and raucous party in your office celebrating the wildly successful launch of your new product or service.
2. Backtrack or reverse engineer how that came about. ♦

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