


**THE TRUTH
ABOUT**

INNOVATION

“Find the
creativity inside”

MAX McKEOWN




Innovation rocks. It rolls. It makes the world go round. Our lifestyles are the result of other people's efforts to improve the human condition. They mixed ideas and inventions together. They worked hard to create the must-have and often taken for granted stuff that surrounds us.

You have evolution to thank for your opposable thumbs and adorable belly button. And for your amazing brain, with more connections than stars in the galaxy, that has allowed millions and now billions of us to examine our world and seek to make it better. That is innovation and it matters.

Our century's greatest innovation will be the method of innovation. We are beginning to understand how to increase our ability to improve together. We are learning how to move from individual invention to group innovation.

This book shares some of what we have learned about innovation, what it is, how it happens, and how it can be increased. New insights into how our brains work collectively provide us with the opportunity to create the equivalent of a bigger brain, capable of dreaming and working together to make those dreams reality.

Everyone can help. Every kind of intelligence and personality plays a part. Our need for innovation has shifted power closer to the source of that power ? Us. We are the future.



You've seen the big picture, haven't you? The typical big company wants big products. They want big ideas. If they're big shots with big balls then they place big bets on a big future. No one wants the small project. Or to be the small project manager. Who wants to do that?

Problem with the big bet approach is that you are limited to a small number of guesses. You are forced to choose too early. Judging winners and losers before the race begins. Putting all your eggs in one big basket. Or worse – putting all your faith in one egg.

Most of us accept the common sense notion that risk should be spread. For some reason it is hard for most companies to spread that risk by sharing out the 'risk dollars' between many small projects. Some leaders seem to find it easier to bet big on their own hunches than to bet on their people.

A few years ago, Whirlpool decided to make a big bet on innovation by making hundreds of little bets. Instead of investing half a million dollars each on a few ideas they learned how to take smaller calculated risks. The choice was no longer all or nothing. It was 20 million dollars in 400 bite-size chunks of \$25,000. Enough money to test ideas, engage small teams of people and do enough learning to inform future funding decisions. The little bets now bring in \$1 billion a year.

Betting big has other, less obvious, disadvantages:

Most of the time, a big project develops a life of its own. No-one wants to take the decision to write-off all the money wasted so far so it becomes a zombie project - using up resources years after it is unnecessary or unwanted.

Often by the time a big project is completed the advantages of starting it are no longer relevant. Competitor products have overtaken the original objectives so that even if the big project succeeds it will fail.

Bizarrely, a big project is less likely to have rigorous criteria for investment than a small project. A big boss does not have to justify his big decisions. And, a big decision is less clearly defined than a small decision because there is simply more of it to define.

Betting small helps in a number of ways:

The safest investments are those that start to pay off soonest. Even better are those that inform the next round of investment decisions. A small project may develop into a big project having contributed to the success of the company.

The small bet allows more people to contribute. It engages their talents and goodwill. It encourages them to experiment with comfortable levels of responsibility.

Not all ideas require huge amounts of funding to take to market, or benefit from a large amount of money in the early stages of development. They can be ruined by the weight of expectation, and the rush to justify expenditure.

Toyota believes in betting small to win big. In one year, its employees suggested over 750,000 ideas for improvement. The company then implemented over 80 percent! In isolation, most suggestions were small and incremental. The total impact of quarter of a million improvements is to strengthen their culture of innovation - getting better is a habit gained through repetition.

Sony's success with the Walkman showed another side of betting small to win big. It did not know which combination of features would most appeal to customers so it developed over two hundred different models each

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available in different colours. The resulting thousands of variants each represented a small bet that allowed them to find out what customers wanted by offering them choice.

All or nothing bets are only wise when the future is certain. If winning is certain then bet everything. If there's nothing to lose then bet everything. Since the future is not certain the best choice today is usually the one that will leave you free to make most choices tomorrow. This is because you do not know what choices will be attractive tomorrow. You may change. You may learn something new. The future will change what works and what does not.

Too many attempts to innovate fail because all the resources are used up before the successful solution, the magic formula is found. Making as many small bets as possible increases the number of attempts possible and keeps options open.



References

Snyder, NT, Strategic Innovation: Embedding Innovation as a Core Competency in Your Organization, 2003, Jossey-Bass Business & Management

Rosenhead, J (Ed.),1992, Rational Analysis For A Problematic World: Problem Structuring Methods for Complexity, Uncertainty, and Conflict, John Wiley & Sons

Liker, JK, The Toyota Way:14 Management Principles From The World's Greatest Manufacturer, 2004, McGraw-Hill

A worker suggests an idea worth millions to her company. Should her managers keep their promise to give ten percent of the value of the idea even though it means paying her \$1 million? Or should they keep the money and give her a gesture of appreciation, a gift voucher perhaps, since it's the thought that counts?

It seems simple, but it's amazing how many managers forget that you have to share to get people's best work. Don't expect breakthrough innovations in return for free t-shirts or gift certificates. Recognition has its place but it doesn't pay the mortgage. Some managers are tempted by their inner scrooge when faced with the reality of passing on the profits. Where the idea is lucrative they may find the prospect uncomfortable of paying subordinates more than senior staff. Resist the temptation and the excuses that go with it.

If you want more, higher quality ideas then you will have to share more. People you trust to generate innovations are smart enough to want fair returns for their contribution. When the path to shared rights and rewards is not clear people tend to keep their best ideas secret or undeveloped. Others will leave to seek rewards from a new employer or by starting up a new company. The people you should most want to keep are those most likely to leave if they do not receive their fair share. The bold, obsessive, entrepreneurs leave first.

Different kinds of rewards will lead to different kinds of innovation. Short-term bonuses for managers are rarely a good match to increasing long-term innovation. Short-term financial rewards tend to encourage management behaviour that is unhelpful to the innovation process. The volume of ideas becomes more important than their value.

The purpose of sharing rewards is to encourage more great innovations and the behaviour that goes with it. Good ideas take time and effort. Great innovations demand careful, rigorous, imaginative joining-up of ideas. Incentives need to motivate the right kind of effort. Each stage in the innovation process should have a clear rewards mechanism.

Paying people for submitting suggestions, or introducing prize draws that reward some of those who put forward ideas, may generate more suggestions but will not encourage better ideas. The only reward for the act of submitting an idea should be recognition for having participated along with access to support, knowledge and training that can help the individual take the next steps to develop the idea.

Lessons and knowledge gained from attempts to implement an innovation deserve rewards. One pharmaceutical company now gives stock options to those brave enough to conclude that their own research projects will ultimately fail. It does this to encourage fast learning rather than back-covering, defensiveness.

You can also try rewarding people by promoting them to the most senior levels based on the impact of ideas. It works for 3M, the post-it people, who also elevate those who have taken personal risks to sell and implement their ideas. This approach has a number of strengths. The hierarchy becomes not only a meritocracy of past results but also a meritocracy of future growth. This is motivational to other innovation-minded individuals and ensures that the leadership team includes an innovation perspective.

Sharing is mirrored behaviour. We share most with those who share with us. Sharing is risky. Sharing new ideas is a gamble: Will the idea be laughed at? Will time spent developing the idea be wasted? Will credit for the idea be taken? Will the idea be stolen? Or ruined? The risks are so high that most people need to know that the upsides of sharing are considerable and that the process for sharing can be trusted before they will actively look for ideas that go beyond their job descriptions and pay grade.

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Money is not the only motivation for sharing and developing ideas. Sharing the benefits that come from an idea does not only mean financial benefits. You can share glory, the thrill of creation, the satisfaction of achievement, and the respect of colleagues. They are not directly paying the mortgage either but they are attractive to many people as long as they are real and first-hand.

It's tempting not to share benefits especially for the super-ambitious who often minimise the contribution of others in their own minds and conversations. Such behaviour is greedy and counterproductive because ultimately it will minimise the discretionary contribution that people make. Better, far better, to share.



When the Disney CEO was asked to choose one winner from twelve finalists in an internal competition for new business ideas he responded, 'Let's just do them all! Can't a company our size try something every once in a while just because it feels right? What if it does fail? It's still not going to cost as much as one expensive movie script.'

He was right. Not all the ideas worked but the ones that did transformed Disney from a backwater family favourite to a global entertainment mega-giant. And they all came from existing members of the company in the first three months of CEO Eisner's tenure. He adopted a style that was playful and bold, holding informal staff lunches - not to grill them on numbers and projects but to liberate creativity. He led by example by proposing off-the-wall ideas, and encouraging his team to give him the ideas that might embarrass them, to give ideas that went too far.

Leaders set the tone. Maybe you know that already but it's worth repeating. Every little thing you do and say as a leader sends a message about what you want, what you care about, and whether supporting you will be worthwhile.

Steve Jobs told the team building the Apple Mac computer 'We're here to put a dent in the universe. Otherwise, why even be here?' His words gave the team permission to challenge boundaries. Permission freed them to do amazing work. It provided an audience for innovation. They knew that their leader knew and cared about the difference between mediocre and brilliant, ugly and beautiful.

If the leader focuses on the future people will take more time to prepare for the future. Thinking about the future makes it easier to believe the impossible will be possible. Customers will demand, and competitors will deliver, what is impossible now. Working backwards from the future makes it easier to imagine and play our part.

If the leader focuses on the present people will spend most of their time doing what they can in the present. Thinking about here-and-now tends to trap people in the rules and pressure of the moment. People work hard to make end of month goals but don't pay attention to what customers need next year. Imagination and investment must come before innovation. It is difficult to imagine progress without time in which to make it and difficult to invest effort in the present without time in which to reap dividends. Innovation is unlikely for those stuck in the short term.

Leaders matter to innovation. The way you think. The way you talk. The way you talk about how you think. People look for signals from their leaders. Signs. Symbols. They may say nothing but notice everything.

Radical innovation depends on leadership. People want to know where they are going and whether the destination is worth the pain of the moment. It is here that the leader's ability to make the future seem desirable and a path to that future seem possible is valuable.

There are many best ways of leading originality. Each would depend on the type of company, the people involved, and the kind of innovation desired by the leader. Here are three broad groups of effective innovation leader:

First, the brash, colourful, look-at-me, egomaniac who has mile-high expectations and no sense of what can and can't be achieved. Unrealistic. Impossible. Childish. Argues. Throws Tantrums. Never satisfied.

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Second, the quiet, unassuming executive. No flashiness. Making decisions about process and rewards that make innovation easier. They work behind the scenes. They avoid the media. They remove bottlenecks. They are about team. Never arrogant.

Think of Lou Gerstner arriving as CEO at IBM. The company was failing. He made the decision to keep the company together. He urged the company to fight the competition not each other. He understood that the team could solve its own problems as long as egos did not get in the way. He helped the company to free its creativity. Innovation was the result.

The third group fits somewhere between the other two! The point is that there are two ways of leading innovation. Both work. A combination of the two is probably ideal. Inspirational when necessary, methodical facilitator of human creativity for the rest of the time.



References

Capek, PG, Frank, SP, Gerdt, S, & Shields, 2005, DA history of IBM's open-source involvement and strategy, IBM Systems Journal, Volume 44, Number 2

Gerstner, L, 2003, Who Says Elephants Can't Dance?: How I Turned Around IBM, HarperCollins

Stewart, JB, Disney War, 2005, Simon & Schuster

Yadav, MS, Prabhu, JC, Chandy, RK, Managing The Future: CEO Attention and Innovation Outcomes, Journal of Marketing, Vol. 71 (October 2007), 84-101

A few years ago, Proctor and Gamble's CEO, set a goal to find 50 percent of its innovations outside the company. His decision has boosted growth, and doubled its billion dollar brands and share price. Should you limit yourself to the talent inside your company? Could you get a bigger brain with the talents of millions in the outside world?

Every attempt at innovation is a guess. You start with a problem and try to solve it without knowing what will work. The more attempts made to solve a problem the more likely a solution is to emerge.

This approach was famously described by Edison who said 'I have not failed once (to make the light bulb work). I have succeeded in proving that those 700 ways will not work. When I have eliminated the ways that will not work, I will find the way that will work.'

Less well known is that Edison didn't invent the light-bulb. It was designed fifty years before he was born! He saved time by buying patents from outside the company and improving upon the various designs, and then moved his research team's attention to developing the other inventions necessary to deliver a working lighting system. The innovation, not the invention, changed the world.

Looking outside allows you to eliminate ways that will not work. It also increases the chances of you finding someone who has found the one way that does work. Not because they are necessarily smarter than you but because they have guessed right. You can now move onto new problems that need solving.

The Proctor and Gamble CEO, says that he made up the fifty percent number because it was just a way of saying that 'we don't care where the ideas come from'. He understood that innovation does not exist in a vacuum and that the important thing is not the origin of the ideas but their usefulness to the company.

There are three main advantages of going outside for ideas:

First, you can quickly benefit from lucky guesses where a successful solution is just a matter of working through the many different possibilities. The solution is not difficult just time consuming. Being open to the right solution wherever it comes from reduces the time required to solve a simple problem.

Second, you can find different approaches to solving difficult problems. Such a problem may require a combination of different skills outside of your experience. It may be that it is only a difficult problem if you lack those skills. For those with the required knowledge it is an easy problem.

Third, working with outsiders brings you solutions for problems you didn't recognise as important. The problem and the solution are new to you. Or maybe they match one of your existing solutions to an entirely new problem. The solution is old but the application of that solution is new. They bring opportunities that would have missed with an insider only perspective.

Increasing external collaboration increases innovation productivity. Research produces more usable ideas. Time to market reduces. The choice is not between inside and outside ideas or between internal and external innovators. You will need both. Insiders will have to find outsiders with ideas worth pursuing and then work together to deliver innovative products.

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Xerox didn't invent photocopiers. Microsoft didn't invent word processing, spreadsheets, email, or windows. Apple didn't invent MP3 players. Hoover didn't invent vacuum cleaners. Amazon didn't invent online shopping. Sony didn't invent games consoles, video recorders, or portable cassette player. They brought together outside inventions into innovations that people wanted to buy.

Time saved on basic research and invention can be put to use making improvements. The winning difference between one product and another is usually in the new way existing ideas combine rather than the newness of the technology. Each year, products come more richly packed with ideas. New combinations of existing and new ideas. Doesn't matter where they come from.



References

Huston, L, & Sakkab, N, 2006, "Connect and Develop: Inside Procter & Gamble's New Model for Innovation," Harvard Business Review, Vol. 84, No. 3, March 2006.

Hughes, Thomas P. 1977. Edison's method. In Technology at the Turning Point, edited by W. B. Pickett. San Francisco: San Francisco Press Inc., 5-22

Owen, D, Copies in Seconds: How a Lone Inventor and an Unknown Company Created the Biggest Communication Breakthrough Since Gutenberg - Chester Carlson and the Birth of the Xerox (New York: Simon and Schuster, 2004)

Madonna is the queen of re-invention. She has sold over 200 million singles making her the most successful female artist of all time. How has she managed to thrive over two decades while others around her have faded away? What can you learn from her approach to innovation?

Having one hit single is hard work, but no one can be sure what will rock and what will rot. Who would have guessed that three teen mouseketeers, Britney, Justin, and Christina from the world of Disney would dominate the pop charts or that an animated frog would outsell serious muzos Coldplay?

You don't know what will be successful next. You do know it will be different. Which means that being the same won't work. Which means that you have to reinvent to stay successful.

The first hit is the result of a more-or-less chance series of mutations that produce something that better fits the environment, or appeals to the music buying public more than the next 180 seconds of licks and hooks. Individual ambition keeps new acts constantly bubbling up. They offer new choices for the constantly evolving musical taste of the buying public. Teens know little about past music and so buy the flavour of the moment.

Constant competition in a changing market means that only an act that can change will maintain its position in the charts. Unfortunately, they often don't know why they have been successful - it just happened that way - so find it hard to modify what they didn't design in the first place.

Even worse, they rarely have time to do any mutating of their own since they are busy with tours, interviews, video shoots and music award ceremonies. There are no "free floating resources" left to find new habits, hooks, or fashions.

The same stuff happens with organisations and with our individual careers. Success, particularly big success, makes us think that we have the answers. People just keep doing the thing that has brought them success in the past. We even hire people who fit into our established way of doing things. It reduces the range of variation, in the genotype of the firm and the phenotype of its members, in the service of efficiency. In other words, we endanger future success by betting on the habits of past success.

Lacking either the time or the humility to consider other options, companies naturally lose their competitive position when the market shifts from beneath it. Structural inertia kills the future of a firm just as surely as three-chord monotony will eventually bring about the demise of a band.

Being very good or even better is not enough. You need to become the hub of new things that are as popular as the old things were. Sure it's a risk? the so-called 'liability of newness', but then so is staying the same. You can reduce the risk by understanding how the reinvention queens and kings keep all virgin fresh while building on past success.

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Madonna does not work alone. Her reinventions come about by listening to those who are listening to music trends and being credible enough to attract producers who are producing the latest thing. She has the reputation of being good for other people's careers - not just her own.

Nintendo is a king of reinvention. It began in 1889 producing handmade playing cards. It experimented with a range of new ventures, including a taxi company, a 'love hotel' chain, and instant rice. All but one failed - toy making. While desperately looking for new toy ideas, the CEO noticed an extending arm made and used by a maintenance engineer for his own amusement. The Ultra Hand was a huge success, selling 1.2 million units. Its creator, Yokoi, went onto design the Game Boy selling 200 million units. Reinvention continued with the Wii games console.

Success is not an excuse to stop. It's an opportunity to reinvent.

References

Odum, EP, 1959, *Fundamentals of Ecology*, Second edition, Philadelphia and London: W. B. Saunders Co

Sheff, D, 1999, *Game over: How Nintendo Conquered the World*, Cyberactive Media Group

Taraborrelli, JR, 2008, *Madonna: An Intimate Biography*, Pan Books

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