

SyNet • [www.synet-group.com](http://www.synet-group.com)

## Group Genius

The Creative Power of Collaboration

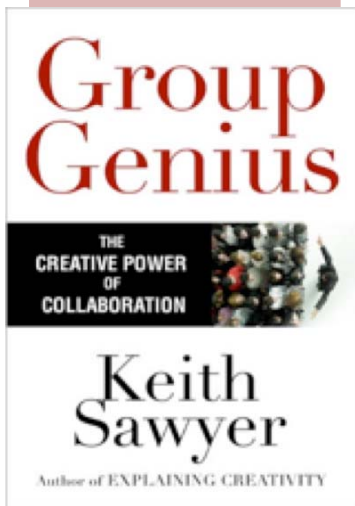
### OVERVIEW

Creativity has long been thought to be an individual gift, best pursued alone; schools, organizations, and whole industries are built on this idea. But what if the most common beliefs about creativity are wrong?

In this authoritative and fascinating new book, Keith Sawyer, a psychologist at Washington University, tears down some of the most popular myths about creativity and erects new principles in their place. He reveals that creativity is always collaborative—even when you're alone. Sawyer's book is filled with compelling stories about the inventions that changed our world: the ATM, the mountain bike, and open source operating systems, among others. In each case, Sawyer shows the true story of innovation: in spite of the "lone genius"

myths that always spring up after an invention's success, these important inventions always originate in collaboration.

To understand the hidden collaborations that drive exceptional creativity, Sawyer spent fifteen years studying jazz groups and theater ensembles, small businesses and large corporations. In *Group Genius*, he distills the essence of this acclaimed research and shows us how to be more creative in collaborative groups settings, how to change our organization for the better, and how to tap into our own reserves of creativity. The empowering message is that all of us have the potential to be more creative; we just need to learn the secrets of group genius.



By Keith Sawyer

## THE THREE PARTS OF COLLABORATION

### PART 1: THE COLLABORATIVE TEAM

Provides amazing examples of creative collaboration shown by earthquake and hurricane disaster response networks, military teams and pickup basketball games.

### PART 2: THE COLLABORATIVE MIND

Shares the results of exciting new research on the collaborative nature of the mind. You'll walk through some classic "insight problems" and learn that even though insight feels like a solitary event, its roots are in collaboration.

### PART 3: THE COLLABORATIVE ORGANIZATION

You'll go inside some of today's most innovative companies and learn how they succeed by designing their organizations to maximize collaboration. You'll learn how today's innovations and cutting edge products emerge from group genius.

## THE POWER OF COLLABORATION

There are seven key characteristics of effective creative teams.

1. **Innovation Emerges Over Time:** Successful innovations happen when organizations combine just the right ideas in just the right structure.
2. **Successful Collaborative Teams Practice Deep Listening:** Most people spend too much time planning their own actions and not enough time listening and observing others.
3. **Team Members Build On Their Collaborators' Ideas:** Each new idea is an extension of the ideas that have come before.
4. **Only Afterward Does The Meaning Of Each Idea Become Clear:** Even a single idea can't be attributed to one person because ideas don't take on their full importance until they're taken up, reinterpreted, and applied by others.
5. **Surprising Questions Emerge:** The most transformative creativity results when a group either thinks of a new way to frame a problem or finds a new problem that no one had noticed before.
6. **Innovation Is Inefficient:** Improvised innovation makes more mistakes, and has as many misses as hits. But the hits can be phenomenal; they'll make up for the inefficiency and the failures.
7. **Innovation Emerges From The Bottom Up:** The most innovative teams are those that can restructure themselves in response to unexpected shifts in the environment; they don't need a strong leader to tell them what to do.

*"The lone genius is a myth; instead, it's group genius that generates breakthrough innovations."*

## IMPROVISING INNOVATION

In November of 1980, a violent earthquake hit southern Italy near Naples. It took days to organize an official response; the army didn't reach some mountain villages for three days.

Many people, frustrated and angry with the slow official response, decided that informal action was the only hope for the region. Almost six thousand volunteers rushed in to help. There were some initial problems but soon a surprising thing happened: Without any management or leaders, the volunteers formed themselves into unofficial organizations, emergent groups that saved hundreds of lives.

This system operated successfully for a few days until the army took over and restricted access. Although the soldiers

enjoyed superior training in advance planning techniques—they were initially less effective than the ad hoc group because they needed time to adapt their procedures to the unique features of the disaster. The surprising lesson from the 1980 Italian earthquake is that the planned and organized response was less effective than the improvised emergent response.

When people improvise together, they develop innovative responses to unexpected events even though no one is consciously aware of what the group is doing or why it works. Researchers have discovered that a small amount of advance planning can help make collaboration more effective. The key question, then, is this: What's the best balance of planning and improvisation?

## GROUP FLOW

Group Flow is a peak experience, a group performing at its top level of ability. In situations of rapid change it's more important than ever for a group to be able to merge actions and awareness, to adjust immediately by improvising. To foster Group Flow ten conditions must be created.

The Ten Conditions of Group Flow:

1. *The Group's Goal:* If the goal is well understood and can be explicitly stated, it's a problem-solving creative task. Group Flow requires that the members share an understanding of the group's goals.
2. *Close Listening:* Members of the group don't plan ahead what they're going to say, but their statements are genuinely unplanned responses to what they hear.
3. *Complete Concentration:* Group Flow is more likely when a group can draw a boundary between the group's activities and everything else.
4. *Being in Control:* Group Flow increases when people feel autonomy, competence, and relatedness. People get into the flow when they're in control of their actions and their environment.
5. *Blending Egos:* Members of the group must have the ability to submerge their egos to the group mind, to balance their own voices with deep listening.
6. *Equal Participation:* Group Flow is more likely to occur when all participants play an equal role in the collective creation of the final performance.
7. *Familiarity:* Group Flow is more likely to occur when members know the performance styles of their teammates and their opponents.
8. *Communication:* Group Flow requires constant communication.
9. *Moving It Forward:* Listen to what is being said, accept it, then extend and build on it.
10. *The Potential for Failure:* There's no creativity without failure and there's no Group Flow without that risk. However, Group Flow often produces the most significant innovations.

## FROM GROUPTHINK TO GROUP GENIUS

Groupthink is a term used to describe those all-too-common situations where a team of smart people ends up doing something dumber than they would have done if they had been working on their own. How do we make sure we have a genius group and not a stupid group?

A long research tradition shows that when solving complex, non-routine problems, groups are more effective when they're composed of people who have a variety of skills, knowledge, and perspective. Diversity makes teams more creative because of the friction that results from multiple opinions drives the team to more original and more complex work.

Conflict keeps the group from falling into the groupthink trap. But conflict is difficult to manage productively because it can easily spiral into destructive interpersonal attacks that interfere with creativity. Diversity enhances performance only when the group flow factors are present, including some degree of shared knowledge; a culture of close listening and open communication; a focus on well defined goals; autonomy, fairness, and equal participation.

*"Group genius can't be bottled; it has to be spread throughout the organization and practiced everyday."*

*“The myth that insight emerges suddenly and unpredictably persists because most people aren’t consciously aware of the social and collaborative encounters that lead to their insights.”*

*“Collaboration brings distant concepts together; it makes each individual more creative; and, most important of all, the emergent results of group genius are greater than those any one individual could think of alone.”*

## SMALL SPARKS

Psychologists have discovered that creative sparks are always embedded in a collaborative process, with five basic stages:

1. *Preparation:* This involves a period of working hard, studying the problem, and talking to everyone else working on it.
2. *Time off:* The team member changes context and engages in other activities-often in conversation with others.
3. *The Spark:* During the time off, a solution appears; but that solution is deeply imbedded in the knowledge and social interactions of the preparation and time off phases, and it builds on sparks that others have had.
4. *Selection:* An “Aha!” feeling doesn’t always mean the idea

was good. Creative people are very good at selecting the best ideas for follow-up, or they collaborate with others in selecting them.

5. *Elaboration:* Working out the idea typically requires lot of additional ideas. Brining them all together always requires social interaction and collaboration.

The spark of insight may seem uniquely solitary. As it turns out, even the moment of insight, this most private of moments, depends on collaboration. The brain itself is suffused with collaboration, and understanding how individual creativity combines with group genius is the key to realizing creative potential.

## COLLABORATION OVER TIME

Studies of the creative mind show that hard work, collaboration, and deep familiarity with an area make you more creative. When you have more information about the creative domain, taking time off from a problem helps you to have a spark of insight; it frees your mind to play around in other conceptual spaces and to notice more potential analogies. When you’re working hard on a problem, your mind is fully absorbed with one associative cluster; the others are forced into the background. Sometimes, you need to take a break and free your mind to allow the right analogy to emerge. But it won’t happen if you haven’t worked with those analogies and solved those problems yourself. One of the most solid findings in creativity research is the ten-year rule: It takes a minimum of ten years hard work and practice before attaining the high level performance that results in great creativity.

Collaboration makes the mind more creative because working with others gives you new and unexpected concepts and makes it more likely that your mind will engage in the most creative types of conceptual creativity-combining distant concepts, elaborating concepts by modifying their core features and creating new concepts. Many new ideas are bad ones; collaboration over time is the best way to select the good ones. And although each single spark of insight is small, collaboration brings them all together and results in breakthrough innovation.

Taking time off helps the sparks to fly, but only when that time off is embedded in a long process of collaboration over time. Psychologists have made great strides toward understanding how new ideas build on previous ones. This research shows how collaboration over time connects the small sparks together.

## ORGANIZING FOR IMPROVISATION

The culture of the collaborative organization is based on flexibility, connection, and conversation; improvised innovation is standard business practice. The most innovative companies do ten things that foster collaboration and innovation.

1. *Keep Many Irons in the Fire:* The best way to great success is to generate a lot of ideas and then select the best one.
2. *Create a Department of Surprise:* You need a group of people devoted to expecting surprises and looking for them to emerge.
3. *Build Spaces for Creative Conversations:* Open spaces feed into the natural flow of collaborative innovation.
4. *Allow Time for Ideas to Emerge:* Big ideas take time.
5. *Manage the Risks of Improvisation:* The key is to create just the right balance of planning and improvisation.
6. *Improvise at the Edge of Chaos:* Not too rigid to prevent emergent innovation, but not too loose to result in total chaos.
7. *Manage Knowledge for Innovation:* Use procedures that select good improvisation and spread them throughout the organization.
8. *Build Dense Networks: Train people to constantly share their ideas and seek out the ideas of others.*
9. *Ditch the Organizational Chart:* More interconnection leads to greater innovation.
10. *Measure the Right Things:* The best measure of an organization's innovation potential is how successfully it has created a collaborative organization.

## THE COLLABORATIVE WEB

The game of Monopoly that we know and love today was created over many decades-with contributions from Quakers, fraternity boys, economics professors, and one radiator repairman. It unfolded in cities from Indianapolis to Philadelphia. Monopoly emerged from a collaborative web, a diffuse and informal network of people dedicated to the game. Each group of players modified the rules as they saw fit, but no one ever owned anything. The ideas spread around freely, and those that worked best survived. Parker Brothers contributed by spotting the potential, and by packaging and marketing it to success. And even after Parker Brothers printed the official rules, players continued to make up their own rules, a tradition that continues today.

The key to understanding innovation is to realize that collaborative webs are more important than creative people. Of course creative people play an important role as the active element of collaborative webs. But in today's economy, most of the action is in the web, where everyone's creative power increases so that the whole is greater than the sum of the parts. From a board game to the theory of evolution, every innovation emerges from a collaborative web.

*"To realize your full creative potential, you must move beyond the linear creativity mindset and tap into the power of collaborative webs."*

*"The way to collaborate with customers is to foster links up and down the organization-not to channel customers through a sales contact or customer service desk."*

## COLLABORATING WITH CUSTOMERS

Some of today's most significant innovations are completely created by the people who use them. Wikipedia is a free online encyclopedia, its entries created and edited by its users. At more than 1.5 million entries, it has far surpassed the 120,000 articles in the online Encyclopedia Britannica. A second example is YouTube, the free video-sharing site where users film, edit, and post their own videos. In July 2006, a hundred thousand clips were viewed daily, and sixty-five thousand new videos were uploaded in every twenty-four-hour period. Just about everything on YouTube is created by amateurs, yet in October 2006, the big players were lining

up to join this collaborative web: NBC, CBS, Warner Music Group, and Sony BMG Music had all announced partnerships with YouTube.

These are the latest high-profile examples of customer-driven collaborative webs. But customers have always driven innovation. Initially Kimberly-Clark marketed Kleenex Kerchiefs as a disposable substitute for cloth facial towels that women used to remove make-up. Mail started arriving from men who were using Kleenex to blow their noses. In 1930 the company decided to sell the idea of Kleenex as a handkerchief. The response is now history.

## CREATING THE COLLABORATIVE ECONOMY

The competitive advantage in the United States today is the ability to out-innovate global competition. But the United States can't rest easy; from Singapore to Finland, governments are investing heavily in education for creativity.

Countries need legal systems in place that balance the rights of individual creators without blocking the collaborative webs that give them inspiration. In recent years, U.S. copyrights and patent law has shifted toward the greater protection of individual ownership ideas. This recent shift is ironic because, at the same time, innovation has become more and more dependent on collaborative webs. The science of innovation has shown us the power of collaboration, but U.S. government policy remains based on the myth of the solitary genius.

To release the innovation potential of society, we need to modify seven aspects of our legal system to create a closer match to the natural behavior of collaborative webs.

1. *Reduce Copyright Terms*
2. *Reward Small Sparks*
3. *Legalize Modding*
4. *Free Employees*
5. *Mandatory Licensing*
6. *Pool Patents*
7. *Encourage Industry-Wide Standards*

Innovation is the key to a better future for our planet. Without a good understanding of how innovation works for all of us, government policies have often responded to the interests of the corporations that hold existing patents and copyrights. Unfortunately, established corporations often have the most to lose from the onset of radical new innovations, and the temptation is great to use their power to block the emergence of collaborative webs.

This is why understanding the science of group genius is so important.

*"Companies that can't transform themselves into collaborative organizations will suffer in today's innovation economy."*

**SyNet**

## SyNet EMEA

Phone:  
+49 (0)89 548 868 40

SyNet Americas  
Phone:  
+1-800-606-5460

SyNet APAC  
Phone:  
+61-7-3303-8704

E-Mail:  
info@synet-group.com

***We're on the Web!******Visit us at:***

[www.synet-group.com](http://www.synet-group.com)



SyNet is a global network of independent HR and LD consultants. We collaborate to create, deliver, and facilitate world-class consulting services, programs, tools, and business opportunities.

SyNet is what it appears to be. We are a truly global learning and development consultancy providing business professionals worldwide with the personal and professional skills needed to be highly effective in their organizational roles and personal lives. Our affiliated consultants, instructional designers, trainers and coaches throughout the world are experts in their field. Our team works to help clients effectively address strategic and tactical challenges in critical-to-success areas. SyNet's proven track record of success comprises an extensive list of industry leaders who rely on a globally present, fast and flexible partner to meet their specific learning and development needs in line with their business objectives.

SyNet operates from a 100% client-centric perspective – we listen and we meet the unique needs of each individual client. We do not just manage client relationships, but make them inspiring and real– which leads to a lasting shared success. It's a winning experience.

As a global organization with locally operating units, we are proud to say, that wherever you meet us you will get:

- New and best-in-class interventions and solutions to address performance-limiting problems/issues
- Senior consultants with in-depth knowledge and experience
- Complete turnkey capabilities to address your needs from start to finish
- Interactive training methodology vs. conceptual learning and lecture
- Transformative learning experiences

We value learning above all. When dealing with new initiatives, we always consider the degree to which we think we can make a lasting business and social difference while learning alongside our clients.