The Unstoppable Power of Leaderless Organizations

THE STARFISH
AND THE SPIDER

THE SUMMARY IN BRIEF

A spider is a creature with eight legs coming out of a central body. It has a tiny head and usually eight eyes. If you chop off the spider’s head, it dies. That’s exactly what happens with a centralized organization. A centralized organization has a clear leader who’s in charge, and there’s a specific place where decisions are made. Get rid of the leader and you paralyzed the organization.

A decentralized organization is a different animal — it is actually a starfish. At first glance, a starfish is similar to a spider in appearance. But the starfish is decentralized. The starfish doesn’t have a head. The major organs are replicated throughout each and every arm. In reality, a starfish is a neural network — basically a network of cells. Instead of having a head, like a spider, the starfish functions as a decentralized network.

In The Starfish and the Spider, Ori Brafman and Rod A. Beckstrom address the fundamental differences between the starfish organization and the spider organization. They demonstrate with examples why starfish organizations are sometimes confused with spiders, how difficult it is to attack or destroy a starfish organization and why a smart business model for the future is a hybrid organization — part starfish, part spider.

In addition, this summary will address:

✓ The right questions to ask when distinguishing a starfish organization from a spider organization.
✓ The rise of successful starfish organizations, such as Skype, craigslist and Wikipedia.
✓ The importance of circles, catalysts and ideology to the starfish organization.
✓ The key differences between catalysts and CEOs.
✓ Specific strategies to defeat starfish organizations.
✓ Rules for living in the new world of decentralization.
When There’s No One in Charge

When there’s no one in charge, you’d think there would be disorder, even chaos. But in many arenas, a lack of traditional leadership is giving rise to powerful groups that are turning industry and society upside down.

Decentralization has been lying dormant for thousands of years. But the advent of the Internet has unleashed this force, knocking down traditional businesses, altering entire industries, affecting how we relate to each other and influencing world politics. The absence of structure, leadership and formal organization, once considered a weakness, has become a major asset. Seemingly chaotic groups have challenged and defeated established institutions. The rules of the game have changed. ■

MGM’s Mistake and the Apache Mystery

Don Verrilli was about to argue a case in front of the Supreme Court in late March 2005; Verrilli and an all-star legal lineup were the hired guns of MGM. MGM, in turn, was joined in the suit by giants like Columbia, Disney and Atlantic Records. What were these giants fighting? Grokster, a tiny company that allows people to steal — or “share” — music and movie files over the Internet for free.

Justice Stephen Breyer wanted to know why it was such a problem. Verrilli pleaded, “The facts are that the recording industry has lost 25 percent of its revenue since the onslaught of these services.”

Five years before the Supreme Court case, Shawn Fanning launched a company called “Napster” out of his college dorm room. People logged into a central server and shared files with others around the world. The recording labels quickly slapped Napster with a lawsuit. In February 2000, the courts ruled against Napster, and in June 2003, the company declared bankruptcy.

The recording industry went after the specific thieves — the people who were swapping the music, and they also went after the people who were enabling the theft, like Napster. They hired attorneys like Verrilli. Two months after his oral arguments in front of the Supreme Court, a unanimous decision was handed down in MGM’s favor.

This did not prevent the problem of music piracy, however. In fact, the labels were adding fuel to the fire with every new lawsuit. The harder they fought, the stronger the opposition grew.

Ancient Mysteries and the Spanish

The best explanation for these events comes from an unlikely source: Tom Nevins, a cultural anthropologist who wrote a book on the Apaches. He tells the story of an ancient mystery. Spanish explorer Cortes went to the Aztec capital of Tenochtitlan in Mexico and encountered a civilization with a central government and a lot of gold. He took the gold, killed the leader, Montezuma II, and starved 240,000 of the city’s inhabitants. Two years after Cortes discovered Tenochtitlan, the entire Aztec empire had collapsed. The same thing occurred when the Spanish confronted the Incas.

The Spanish took control of the continent by the 1680s. Then they encountered the Apaches. This meeting is crucially linked with the music industry’s fight. Why? Because the Spanish lost.

They lost to a people who at first seemed primitive. The Apache defeat of the Spanish was all about the way the Apaches were organized as a society. The Apaches distributed political power and had very little centraliza-

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tion. They persevered because they were decentralized.

A centralized organization has a clear leader who’s in charge, and there’s a specific place where decisions are made. Rules need to be set and enforced, or the system collapses.

Decentralized systems, like the Apaches, are different. There’s no clear leader, no hierarchy, no headquarters. The power is distributed among all the people and across geographic regions.

Instead of a chief, the Apaches had a Nant’an — a spiritual and cultural leader who led by example. On first impression, it may sound like the Apaches were disorganized. In reality, they were an advanced and sophisticated society that was immune to attacks that would have destroyed a centralized society.

Coercive vs. Open Systems

When a coercive system, like the Spanish, takes on an open system, like the Apaches, they start killing the leaders. But as soon as they killed a Nant’an, a new one would emerge. The strategy failed because no one person was essential to the overall well-being of Apache society.

Amazingly, the Spanish attacks served to make the Apaches even stronger. This is the first major principle of decentralization: When attacked, a decentralized organization tends to become even more open and decentralized.

Napster’s destruction didn’t quell people’s desire for free music. Along came Kazaa. It was different from Napster because there was no central server. Kazaa is like an Apache village. Unlike the record labels, there are no headquarters, and if you want to make a thousand copies of your favorite song, go right ahead.

Not only is the music industry unable to curb pirating, but, in accord with the first principle of decentralization, every time the labels sue a Napster or a Kazaa, a new player comes onto the scene that’s even more decentralized and more difficult to battle.

The harder you fight a decentralized opponent, the stronger it gets. Waging the battle started a chain reaction that now threatens the entire music industry. What we’ve seen is just the tip of the iceberg. ■

For additional information on the differences between the Spanish Army and the Apache, go to: http://my.summary.com

The Spider, the Starfish and the President of the Internet

It was 1995, and Dave Garrison had a problem. He’d just been hired as the CEO of Netcom, an early Internet service provider, and he knew nothing about the Internet. He learned about it in a limousine, while riding around trying to raise money for the company.

He tried explaining the Internet to a group of French investors. They wanted to know who the president of the Internet was. Garrison tried to tell them that the Internet was a network of networks and that no one person was in charge. They couldn’t understand the concept, so finally Garrison told them he was the president of the Internet.

It was difficult for the French investors to comprehend the new Internet technology because no part of it fit the way they viewed the world. The French, like the Spanish 200 years before them, were used to seeing things in a particular way: Organizations have structures, rules, hierarchies and, of course, a president. In regards to the Internet, the French were mistaking a starfish for a spider.

A spider is a creature with eight legs coming out of a central body. It has a tiny head and usually eight eyes. If the French investors were to ask who was running the spider show, the answer is clearly the head. If you chop off the spider’s head, it dies. When the French investors heard of the Internet, they wanted to know who was in charge — where was the head?

But the French investors weren’t dealing with a spider. The Internet was actually a starfish. At first glance, a starfish is similar to a spider in appearance. But the starfish is decentralized. The starfish doesn’t have a head. The major organs are replicated throughout each arm. In reality, a starfish is a neural network — basically a network of cells. Instead of having a head, like a spider, the starfish functions as a decentralized network.

This brings about the second principle of decentralization: It’s easy to confuse starfish with spiders.

Alcoholics Anonymous

When Bill Wilson realized he was dying of alcoholism, he knew he couldn’t combat it himself. His answer was to get help from people with the same problem. Alcoholics Anonymous was born.

At Alcoholics Anonymous, no one’s in charge. And yet, at the same time, everyone’s in charge. Today, if you were to ask how many members AA has, there’d be no way to tell. How many chapters? Again, no way to tell. No one knows, because AA is an open system. The third principle of decentralization is: An open system doesn’t have centralized intelligence; the intelligence is spread throughout the system. Information and knowledge naturally filter in at the edges, closer to where the action is.

Alcoholics Anonymous is flexible, equal and constantly mutating. The fourth principle of decentralization is: Open systems can easily mutate.

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Whether you’re a centralized organization, like a spider, or just an observer on the battlefield, eventually you’ll realize the fifth principle of decentralization: The decentralized organization sneaks up on you. Because the decentralized organization mutates so quickly, it can also grow quickly. Spider organizations weave their webs over long periods of time, but the starfish can take over an entire industry in the blink of an eye.

The sixth principle of decentralization is: As industries become decentralized, overall revenues decrease. Introduce starfish into the equation and wave goodbye to high profits. It’s why you want to be on the lookout for any starfish before they take an industry by storm.

The trick is, of course, to predict explosive change before it occurs. That’s the only way to avoid falling into the French investor pitfall over and over again. That means you need to ask the right questions.

A Sea of Starfish

What do an encyclopedia, a piece of software, a phone company, classified ads and naked people in the Nevada desert have in common? They’re all decentralized.

Skype

Niklas Zennstrom, the founder of Kazaa, applied the lesson from Kazaa — avoid central servers — to the phone business. Zennstrom started Skype, which let people connect to each other directly, via free computer-to-computer phone service. In December 2004, Skype had 15 million users. By the end of 2005, it had 57 million.

Skype rendered the telephone industry’s models of generating profits through long-distance charges obsolete. Although Skype may or may not thrive in the long run, it has opened up a Pandora’s box.

Craigslist

Founded by Craig Newmark in 1995, Craigslist is now in 35 countries and more than 175 cities around the world. The site attracts three billion page views a month.

According to Newmark, “The way Craigslist runs is that people who use it post, and if they find something inappropriate they flag it for approval. So in a very day-to-day kind of way, the people who use the site run it.”

The Web site is a starfish company because it allows users to interact with each other directly without anybody telling anybody else what they can and cannot do. But the big attraction to the site isn’t just free ads. It’s community.

In an open system, what matters most isn’t the CEO, The Right Questions

Is there a person in charge?
If you see a CEO, chances are you’re looking at a spider. An open system, on the other hand, is flat.

Are there headquarters?
Every spider organization has a physical headquarters. A starfish organization doesn’t depend on a central headquarters.

If you thump it on the head, will it die?
If you take out the headquarters, chances are you’ll kill a spider organization. Unlike spiders, starfish often don’t have a head to chop off.

Is there a clear division of roles?
Most centralized organizations are divided into departments. In decentralized organizations, anyone can do anything.

If you take out a unit, is the organization harmed?
Units of a decentralized organization are by definition completely autonomous. Cut off a unit and, like a starfish, the organization does just fine. In a centralized organization, any department is important. If a spider loses a leg, its mobility is significantly affected, and if it keeps losing legs, its survival will be at risk.

Are knowledge and power concentrated or distributed?
In spider companies, power and knowledge are concentrated at the top. In starfish organizations, power is spread throughout.

Is the organization flexible or rigid?
Decentralized organizations are amorphous and fluid. Because the arms of the starfish have relative freedom, they can go in a multitude of directions. Centralized organizations depend more on rigid structure.

Can you count the employees or participants?
It is possible to count the members of any spider organization. Counting the members of starfish organizations, though, is usually an impossible task. It’s not only that no one’s keeping track, but also that anyone can become a member of an open organization.

Are working groups funded by the organization, or are they self-funding?
In open organizations, there is often no central well of money. Things are different in centralized organizations. Without central funding, departments cannot survive.

Do working groups communicate directly or through intermediaries?
Typically, important information in centralized organizations is processed through headquarters. In open systems, communication occurs directly between members.
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but whether the leadership is trusting enough of members to leave them alone. Newmark does have reverence for his users. He lets them be.

Apache

The first popular browser for surfing the Web came from the University of Illinois at the National Center for Supercomputing Applications (NCSA) Project. But NCSA did not respond when engineers sent patches to be integrated.

The engineers started talking to one another through an e-mail list and decided to post the patches on their own. An engineer named Brian Behlendorf came up with a name for the project — Apache. Apache was organic — engineers would contribute, and the good patches would be picked up by other users.

Apache collected so many patches for the NCSA Project that eventually it posted its own version. The software was completely open-source. Engineers all over the world started using Apache to run their Web site server. Apache quickly became the industry standard. Today 67 percent of all Web sites are run on Apache.

Wikipedia

Wikipedia has fascinating origins that in many ways capture the evolution of an open system. In 2000, Jimmy Wales launched Nupedia, a free online encyclopedia that could be used by children whose parents couldn’t afford their own set.

Larry Sanger, Nupedia’s editor-in-chief, saw that getting something published on Nupedia was a chore. He learned about something called a wiki. Wiki is a technology that allows Web site users to easily (and quickly) edit the content of the site themselves.

With that, Nupedia became Wikipedia. Within five years, Wikipedia was available in 200 languages and had extensive articles — more than one million in the English-language section alone.

The quality of the articles is outstanding. People take great care in making the articles objective, accurate and easy to understand. Members themselves take on the job of policing the site. This brings us to the seventh principle of decentralization: Put people into an open system and they’ll automatically want to contribute.

Burning Man

The Burning Man festival, which happens yearly in the Nevada desert, is known for eclectic costumes, rave music and a host of naked people on drugs. It’s the only 24/7 decentralized experience you can find these days.

There are two main decentralized qualities to Burning Man. The first is that really aren’t many rules. The other thing that takes getting used to is that nothing costs money. That’s the second decentralized quality of Burning Man — it’s based on a gift economy. You provide things because you want to, as a way to contribute to the community, not because you expect anything in return.

Burning Man, though outside the mainstream, holds a crucial lesson for businesses. When you give people freedom, you get chaos, but you also get incredible creativity. Because everyone tries to contribute to the community, you get a variety of expressions.

Standing on Five Legs

A decentralized organization stands on five legs. As with the starfish, it can lose a leg or two and still survive. But when you have all the legs working together, a decentralized organization can really take off.

LEG 1: Circles

Circles are important to nearly every decentralized organization previously mentioned. Once you join a circle, you’re an equal. It’s then up to you to contribute to the best of your ability.

Today, the Internet has allowed circles to become virtual. Joining circles is so easy and seamless that most of us are members of a decentralized circle of one kind or another. Circles gain freedom and flexibility when they go virtual, but being in the physical presence of other participants adds a dimension of closeness, and a sense of ownership emerges.

Instead of rules, circles depend on norms. The norms become the backbone of the circle. Members enforce the norms with one another. As a result of self-enforcement, norms can gain even more power than rules.

As the norms of a circle develop and as members spend more time together, they begin to trust one another and are often motivated to contribute to the best of their abilities.

LEG 2: The Catalyst

In open organizations, a catalyst is the person who initiates a circle and then fades into the background. In Apache circles, the Nant’an played the role of a catalyst. He could lead by example, but he never forced his views on others.

The same pattern appears with every decentralized organization: A catalyst gets the decentralized organization going and then cedes control to the members.

In letting go of the leadership role, the catalyst transfers ownership and responsibility to the circle. When the job is done, a catalyst knows it’s time to move on.

Once the catalyst leaves, however, his or her presence

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is still felt. The catalyst is an inspirational figure who spurs others to action. Circles don’t form on their own.

LEG 3: Ideology

Ideology is the glue that holds decentralized organizations together. Ideology is the shared philosophy among members.

LEG 4: The Preexisting Network

Decentralized networks are much more conducive to serving as platforms for budding starfish organizations. Typically, it takes the special skills of a catalyst to enter a network. But the Internet changed everything.

Today the Internet serves as an open platform on the back of which a wide variety of starfish organizations can be launched. The implications of the Internet for decentralization are profound.

The Internet not only makes it easier for people to communicate, it also provides a fertile ground for a host of decentralized organizations.

LEG 5: The Champion

A champion is relentless in promoting a new idea. Catalysts inspire and naturally connect people, but there’s nothing subtle about the champion.

Champions are inherently hyperactive. Like catalysts, they operate well in non-hierarchical environments, but they tend to be more like salesmen than organizers and connectors.

The Five Legs in Action

Elizabeth Cady Stanton married an abolitionist, but her experience with the abolitionists wasn’t all positive. When she attended an anti-slavery convention, she was forced to sit in a segregated section reserved for women. Women were not allowed to speak or vote in the meeting. Stanton wondered how women could fight for slaves’ rights when they were denied equal rights.

Stanton was a catalyst who, when presented with an ideology, catalyzed a new movement. It took 10 years, but Stanton joined with the Quakers to organize a women’s rights convention.

The Hidden Powers of the Catalyst

Catalysts often draw upon similar tools. These are:

● **Genuine Interest in Others.** Catalysts are genuinely interested in others. We can tell when a catalyst really cares about what we’re talking about; when that happens, we tend to open up and reveal more about ourselves. This is the catalyst’s essential tool.

● **Loose Connections.** Catalysts thrive on meeting new people every day. Knowing so many people allows a catalyst to make connections between individuals who would otherwise never meet.

● **Mapping.** Catalysts think of who they know, who those people know, how they relate to one another and how they fit into a huge mental map.

Catalysts don’t just know more people; they also spend time thinking about how each person fits within their network.

● **Desire to Help.** Wanting to help is the fuel that drives a catalyst’s ability to connect people. The desire to help people isn’t just a nicety; it’s an essential part of being a catalyst.

● **Passion.** The catalyst provides the drumbeat for a decentralized organization. The organization needs a strong and ongoing ideology to keep going. The catalyst starts the organization and then takes on the role of constant cheerleader.

● **Meet People Where They Are.** A catalyst doesn’t try to persuade people but rather relies on a much more subtle technique: meeting people where they are. A catalyst doesn’t prescribe a solution; instead, he assumes a peer relationship and listens intently. You follow a catalyst because he understands you.

● **Emotional Intelligence.** Catalysts tend to be intellectually brilliant, but they lead with emotions. Once there’s an emotional connection, then and only then is it time to brainstorm and talk strategy.

● **Trust.** It’s not enough to meet people where they are and to form emotional bonds with them; a catalyst must also trust the network. As a catalyst, all you can control is whether people have personal relationships with each other based on trust.

● **Inspiration.** A true catalyst isn’t just a matchmaker but an inspiration to others to work toward a goal that often doesn’t involve personal gain.

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● Tolerance for Ambiguity. Being a catalyst requires a high tolerance for ambiguity. That’s because a decentralized organization is so fluid that someone who needs order and structure would quickly go mad. But this ambiguity creates a platform for creativity and innovation. Starfish organizations need ambiguity to survive.

● Hands-Off Approach. Perhaps the most difficult and counterintuitive element of being a catalyst is getting out of the way. Members of a starfish organization can become frustrated with the catalyst when they don’t know what they are supposed to be doing. But this is what leads people to take charge, giving members a high level of ownership over the organization.

● Receding. After catalysts map a network, make connections, build trust and inspire people to act, what do they do? They leave. It is only in a catalyst’s absence that people take the reins and move their own relationships forward.

Taking On Decentralization

As in the case of the Apaches, when attacked, decentralized organizations become even more decentralized. The opposite is true for spider organizations, and it’s the eighth principle: When attacked, centralized organizations tend to become even more centralized.

Decentralized organizations are able to wreak havoc on a variety of industries and sectors, and the strategies used to combat these organizations fail. But starfish are not invincible. Here are some concrete strategies to combat a starfish invasion.

STRATEGY 1: Changing Ideology

The only part of the decentralized organization that you can realistically go after is the ideology. But changing ideology isn’t easy.

When a starfish ideology can be successfully changed, the results are powerful, so theoretically, trying to change an ideology makes sense. But the process is difficult.

STRATEGY 2: Centralize Them (The Cow Approach)

The Apaches remained a significant threat well into the 20th century. But then the tide turned. The Americans prevailed. How? The Americans gave the Nant’ans cattle. Once the Nant’ans had possession of a scarce resource — cows — their power shifted from symbolic to material. Now they could reward and punish tribe members by giving and withholding this resource.

Once people gain a right to property, be it cows or anything else, they quickly seek out a centralized system to protect their interests. The moment you introduce property rights into the equation, everything changes: The starfish organization turns into a spider.

STRATEGY 3: Decentralize Yourself (If you Can’t Beat ’em … Join ’em)

The third strategy recognizes that decentralized organizations can be so resilient it’s hard to affect their internal structure. If you can’t beat them, join them.

The best opponent for a starfish organization is often another starfish. In the decentralized revolution, old strategies don’t work.

A company or corporation must explore new options in order to effectively fend off a starfish attack. Sometimes it’s best to draw upon both the centralized and decentralized worlds — “the combo special.”

For additional information on why a decentralized organization like al Qaeda is so powerful, go to: http://my.summary.com

The Combo Special: The Hybrid Organization

eBay represents the combo special. It’s neither a pure starfish nor a pure spider, but a hybrid organization. Companies like eBay combine the best of both worlds — the bottom-up approach of decentralization and the structure, control and resulting profit potential of centralization. eBay is a centralized company that decentralizes the customer experience.

The second type of hybrid organization is a centralized company that decentralizes internal parts of the business. These companies have a CEO and some hierarchy, but they also have starfish-like DNA.

When Jack Welch, GE’s charismatic leader, took the reins, GE was a highly centralized bureaucracy in need of a healthy overhaul. His real genius was in decentralizing the massive organization. He separated GE into different units that had to perform as stand-alone businesses. Welch’s approach benefited GE because it made each unit accountable and did away with inefficiencies.

The combo special often requires a constant balancing act. Companies can’t rest on their decentralized laurels; they must seek and pursue the elusive “sweet spot.”

In Search of the Sweet Spot

The decentralized sweet spot is the point along the centralized-decentralized continuum that yields the best competitive position. Around the same time that eBay was founded, another auction house, Onsale, entered the market. Onsale held and sold inventory like other ven-

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dors, but rather than charging a set price, it allowed con-
sumers to bid against one another. It was a centralized
solution that took a small step toward decentralization.

When people started using eBay, the market dramatically shifted. Compared to Onsale’s small step, eBay took a giant leap toward decentralization by allowing anyone to sell and purchase items. Onsale began losing market share and soon went out of business.

The decentralized system that allowed eBay users to auction items directly to each other was simply superior — eBay had landed on the sweet spot.

The New World

The forces of decentralization have created a new set of rules.

**RULE 1: Diseconomies of Scale**

As countercultural as it sounds, it can be better to be small. We have entered a new world where being small sometimes provides a fundamental economic advantage. As diseconomies of scale increase, the cost of entering a new market dramatically decreases.

**RULE 2: The Network Effect**

The network effect is the increase in the overall value of the network with the addition of each new member. Starfish organizations are particularly well positioned to take advantage of the network effect.

Often without spending a dime, starfish organizations create communities where each new member adds value to the larger network.

**RULE 3: The Power of Chaos**

In the decentralized world, it pays to be chaotic. In seemingly chaotic systems, users are free to do whatever they want.

Starfish systems are wonderful incubators for creative, destructive, innovative or crazy ideas. Where creativity is valuable, learning to accept chaos is a must.

**RULE 4: Knowledge at the Edge**

In starfish organizations, knowledge is spread throughout the organization. The best knowledge is often at the fringe of the organization.

**RULE 5: Everyone Wants to Contribute**

Not only do people throughout a starfish have knowledge, but they have a fundamental desire to share and to contribute. Contributors spend hours editing Wikipedia articles because they want to make the site better.

**RULE 6: Beware the Hydra Response**

Attack a decentralized organization and you’ll soon be reminded of Hydra. If you cut off one head, two more will grow in its place. There are ways to battle a decentralized organization — but don’t try to cut off its head.

**RULE 7: Catalysts Rule**

Catalysts are crucial to decentralized organizations. It’s not because they run the show, it’s because they inspire people to action. But watch out: If you turn a catalyst into a CEO, the entire network will be in jeopardy.

**RULE 8: The Values Are the Organization**

Ideology is the fuel that drives the decentralized organization. If you really want to change a decentralized organization, the best strategy is to alter the ideology of the members.

**RULE 9: Measure, Monitor and Manage**

Just because starfish organizations tend to be ambiguous and chaotic doesn’t mean that we can’t measure their results. But when measuring a decentralized network, it’s better to be vaguely right than precisely wrong.

Most catalysts care about the members, but they don’t expect reports or want control. Managing a decentralized network requires someone who can be a cross between an architect, a cheerleader and an awestruck observer.

**RULE 10: Flatten or Be Flattened**

There are ways to fight a decentralized organization. But often the best hope for survival is to join them. Increasingly, in order to survive, companies and institutions must take the hybrid approach.

Yes, decentralized organizations appear at first glance to be messy and chaotic. But when we begin to appreciate their full potential, what initially looked like entropy turns out to be one of the most powerful forces the world has seen.