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The Unlikely Success of Leaderless Teams and the Swarm Effect

For prospective managers or individual contributors, the path to management often begins with an opportunity to lead a temporary or permanent team. They see this as their chance to both learn and demonstrate the organizing and interpersonal skills associated with successful managers. These team leader opportunities become talent assessment centers. When an opening occurs, we either find an already qualified candidate or seize the chance to test an individual who shows potential. Rarely or never do we send a team off without a designated leader because the team's success would be an accident waiting to happen in the absence of someone devoted to focus on and direct activity.

But accidents happen. At Procter &Gamble more than a century ago the legend tells of an operator who accidently left a mixing machine on too long, putting too much air in the soap. It was Ivory Soap and it floated. Consumers loved this exciting new product because they were no longer fishing about in bathtub water for the elusive soap. My story today of leaderless teams is not a legend. It happened. And much like Ivory Soap, in my version, the surprising result seemed more of an accident, a chance happening because of the unusual circumstances that brought it about.

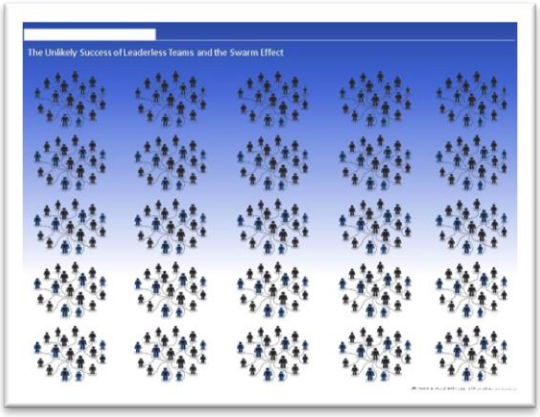
There are two parts to my talk. The first is a true tale of a product development challenge in a high tech company where the project was assigned to leaderless teams, and they overwhelmingly exceeded their objective. The second explores the insights that go beyond this one event to question our assumptions about leadership and hierarchal management – and even further to speculate about building self-managing networks without requiring the tried-and-true change processes we have relied on for many decades.

A True Tale of Leaderless Teams

A Silicon Valley network storage company that I will call StorServ faced a brutal corporate life or death challenge. In six months, a competitor was coming out with a new server that had performance and features that would surely obsolete StorServ's current product. They had been leapfrogged, and they knew that none of their customers would still be their customers six months down the road

unless they had something better or comparable to offer. Although a new product was in the works, their typical product development rollout history was thirteen months from concept to product.

They put a stake in the ground to achieve a five-month development cycle: a mighty goal, but one without a clear plan to succeed. The company was functionally fragmented into many different departments. The next generation product needed an array of new features to meet the next competitive bar. The construction of these new features, however, could not be easily accomplished without dialog and tradeoffs across the functional boundaries. There was a pervasive sense of gloom that the company would surely go under, putting several thousand employees out of work.



They formed 25 cross-functional teams composed of hardware and software engineers, sprinkled with a dash of marketing, operations and finance. Each team was charged with building one of the features as part of the new product architecture. This approach is not revolutionary. Indeed, cross-functional teams are a common organizational method for getting the right people together to deal with interrelated issues. On paper, it looked as though they were positioned to take a run at the accelerated schedule—except for one small detail. None of the teams had a member with experience leading a team like this. In fact, the executives in charge admitted they were concerned that only a handful of individuals across the entire company possessed the skills necessary to lead a team successfully. Put another way, they were "Team Leader Down" 25 times over, even before the project began.

To achieve engineering milestones in one feature team, there might be trade-offs or choices another team would have to adjust to—or perhaps block, in favor of their own objective. This process is typical of what you would expect to contend with across interdependent teams as they weigh choices and negotiate tradeoffs in the interests of building the best overall product.

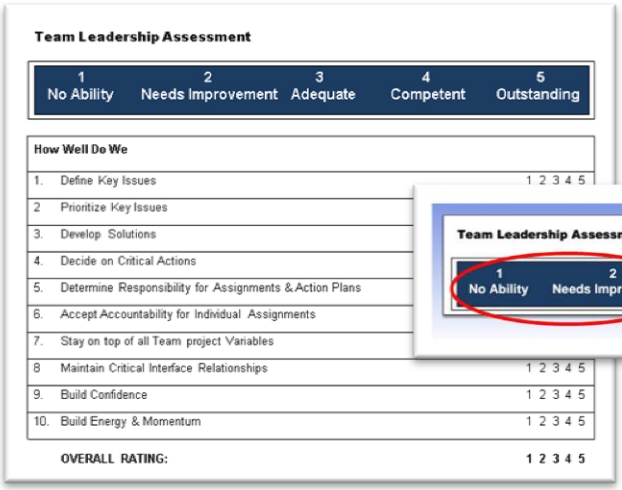
Only two or three of the teams were lucky enough to have seasoned engineers that had run projects before and seemed comfortable with taking on this mantle for their team. The rest of the teams—which did, indeed, have smart young engineers—had that dazed look that suggested they didn't believe their "leaderless" team would ever pull off their assignment.

Given the time limitations, each team was led through a standard chartering process to build basic project capability. All of this was accomplished in only 4 hour meeting.

- *Objectives*—the specifics of the feature(s) to be developed
- *Boundaries*—what was inside and outside of the team's scope
- *Technical Hurdles*—engineering issues that might be difficult to achieve
- *Cross-Team Issues*—interdependencies with other teams
- *Resources*—sufficient technical talent on, or available to, the team
- *Action Planning and Timelines*
- *Project Leadership Task Allocation*

It was this last element of the planning agenda – allocation of leadership tasks – that would make the difference between success and failure. Knowing what to do and having the technical talent is sufficient only if they can work together under time pressure successfully and, just as importantly, coordinate and negotiate tradeoffs with the other teams.

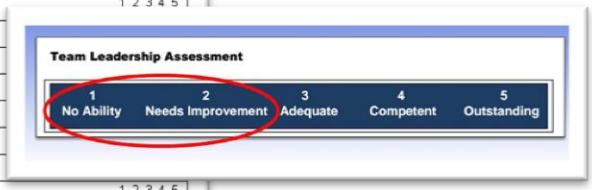
To overcome the obvious leadership inadequacy, each team was provided with the "Team Leadership Assessment" focused on the most basic leadership requirements for projects. The team members filled it in and took a poll on each item. The averages were in the very low, 1 to 2 range. The dazed look turned into one of gloom.



Team Leadership Assessment

1 No Ability	2 Needs Improvement	3 Adequate	4 Competent	5 Outstanding

How Well Do We	
1. Define Key Issues	1 2 3 4 5
2 Prioritize Key Issues	
3. Develop Solutions	
4. Decide on Critical Actions	
5. Determine Responsibility for Assignments & Action Plans	
6. Accept Accountability for Individual Assignments	
7. Stay on top of all Team project Variables	
8 Maintain Critical Interface Relationships	1 2 3 4 5
9. Build Confidence	1 2 3 4 5
10. Build Energy & Momentum	1 2 3 4 5
OVERALL RATING:	1 2 3 4 5



Team Leadership Assessment

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Usually this is when the comers would be jockeying for position to earn the chance to be seen and recognized. But these were not usual times. Instead everyone hunkered down, hoping not to get picked as the team "leader" – or as they saw it, the one who would take the blame for failure, the one whose career would receive the black mark. It was time for a reframe. Instead of considering the leadership function as something for which one person must take complete responsibility, the 10 items on the Team Leadership Assessment were each discussed and mapped to who on the team could successfully manage not all 10 items, but at least one aspect of the team leader responsibility. Doors opened and gloom turned to possibility. Very quickly, volunteers emerged who felt they had the skills and interest to manage one, two, or even three items.

For most teams, several people combined their abilities to fill the requirements for the list of ten. The leader was not one, but three or four people. More importantly, there was a confidence that the leader work could get done sufficiently for the team to accomplish its objectives. The mood in the teams almost universally transformed from "down and doubt" to "yes, we might just pull this off", that this

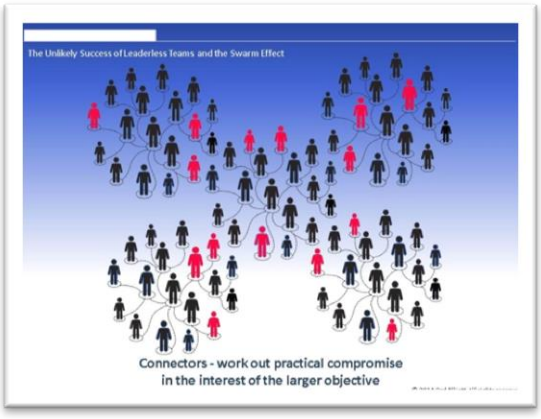
distribution of leadership responsibilities might work adequately enough. It would have been impossible to train individual leaders to do it all in the compressed time frame. Ironically, the very lack of capable leaders allowed for this unorthodox solution.

Rethinking Leadership

Is team leadership a job with a defined skill set, or is it a set of skills and tasks that can be divided up among a number of individuals on a team who fulfill that traditional leadership role just as effectively? We do not normally consider shared leadership as a practical approach. Is that because it is inherently inferior to having individuals who encompass this entire skill and task set, or simply that our hierarchal universe is accustomed to and comfortable with having single leaders? Is the requirement to demonstrate leadership skills in order to move up the ladder also a propelling factor, both for individuals to seek the opportunity and for organizations to provide it in order to test for leadership capability? While distributed leadership is possible and often necessary for success, the irony is how infrequently it occurs in even the most sophisticated organizations.

At StorServ the newly formed teams believed they could coordinate their internal work, but accomplishing the larger objective of shortening the product development timeframe remained a dreamlike fantasy. Once the teams were formed and it became clear that those chosen to be on this project would be spending the majority of their time in team mode vs. staying behind in their comfortable functional jobs. The new group was disconnected from the stable, functional organization that spawned it. This loose network seemed more like a separate company.

This happened, in part, because there was no strong link back to the rest of the organization. One Director was assigned to oversee the project, but he largely ignored the effort, choosing to focus on his functional job – no attention given to visiting and monitoring the various teams. The lack of encouragement and support was noticeable after the launch – clearly not a best practice – which only served to create a deepening sense of isolation.



As for the team's work, getting the job done inside each team was challenge enough. Negotiating the overlapping issues across 25 teams posed another leadership challenge at a higher level. After discussing with each team who could help coordinate these ongoing issues, typically three or more individuals would emerge with sufficient skills or interest among

them to collectively take on what no single person had the skill or confidence to accomplish alone. Not only did the teams correctly determine which of the other teams they needed to interface with, but the chosen "connectors" were successful in bridging overlaps and differences to work out practical compromises in the interests of the larger objective. Only one month into the project this success at integrating the individual team efforts was a surprise to everyone.

Despite the newly discovered ability to move forward and handle differences without the delays and hang-ups expected, there remained a pervasive disbelief that the new product could be developed anywhere close to this unrealistic, five-month deadline. While doubt remained, a new culture was emerging within this network. Things were getting done quickly and effectively. Benchmarks and timelines were being met. Engineers talked about how they were solving the technical problems with each other, how they were becoming energized to stay on task and move forward without the usual delays and second-guessing from managers above them. They started talking about how much more they liked being in this organization, how much more effective they were, and how positive they felt about their accomplishments.

Time passed quickly, as it often does when things are clicking. Three-and-a-half months had passed since these teams were formed. They did it! Not only had they surpassed their "unrealistic" goal of five months, they absolutely destroyed the previous product development best of thirteen months. It was a stay of execution for the company, and a joyous one at that. Ultimately they would beat the competitors to the marketplace, and more importantly, save all those jobs.

Had they traveled for a brief time to an alternate organization universe? Had they done something highly unusual by providing "good enough" leadership and project skills in a uniquely shared way, without the talent typically required? Or did they stumble into a collective talent pool that we don't often tap into? It didn't happen just by tossing people together into teams. Detailing and assigning specific project-coordination roles among the members based on the "Team Leadership Assessment" built the minimum requirements and structural robustness to meet an unthinkable challenge. Only a few months earlier this basic team infrastructure was completed in less than a day without experienced leaders, without extensive training, and in a climate without much support.

The Swarm Effect

The StorServ teams filled the empty team leader role by distributing the leader tasks. Because there was so much shared leadership, the team members may have felt more responsibility for the team's overall success, which did in fact turn into better team performance. That was the foundation necessary for success at the next level – the inter-team connections and integration of effort required to successfully complete the product development challenge. This second level is even more difficult to achieve in any company, even with

top-notch team leaders and a knowledgeable and engaged overall project manager.

StorServ quietly managed inter-team relationships and tasks such that the entire product development enterprise operated as if it had a seasoned director managing all that. At each stage there was no leader, director, no highly skilled manager to integrate and align the many pieces. But the hidden benefit of more leaders, even partial leaders, is that it may be the key to enabling the "swarm effect." I stumbled on to a video of starlings swarming and learned something about how they accomplish this that leads me to believe there may be a human analogy.

Research on how starlings are able to fly in precise formations may actually shed light on how the StorServ teams formed a collective leader. The scientists wanted to find out how flocks remain so incredibly cohesive when under attack by a bird of prey. They gathered data on large flocks of starlings over the skies of Rome's Termini railway station. Computer models had assumed that each bird interacts with all birds within a certain distance.

But their findings indicated that each bird tracks a fixed number of seven, irrespective of how close or far away they are which is the secret of how they stick together. A flock under predator attack may expand dramatically, but birds can regroup very quickly because the cohesion does not depend on the physical distance among starlings, but rather on their ability to interact with this fixed number of seven.

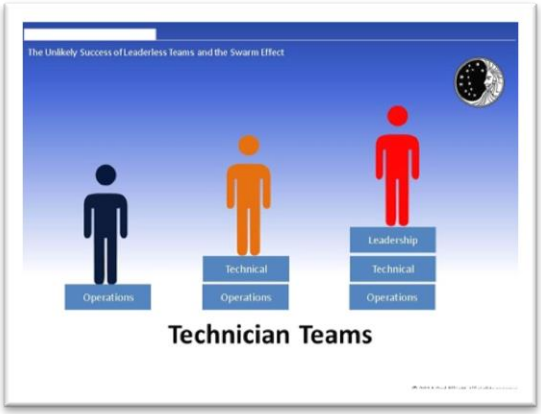
Is it possible that a similar direction setting mechanism is evident at StorServ that emerges when each team connects with that set of other teams it has determined it must coordinate with? These connections had to be incredibly effective at resolving differences and making compromises to achieve the swarm-like integration of all 25 teams. Could it be that the team members who had this responsibility worked harder at it and devoted more time to it than would have a single team leader? Because the rest of the team was depending on them for this one task, did they put more of their focus and energy into inter-team connections than we might normally expect from a traditional team leader who takes on all the leadership tasks?

The most visible missing player was at the next level up. In the classic product development project, there is one manager to integrate all the team efforts. Knowing that ultimate responsibility rests with this

role may relieve team leaders from exerting the level of energy and focus that emerged at StorServ where this role was leaderless from beginning to end. That empty slot was the encouragement for the StorServ team members assigned the interfaces to put more into it, knowing there would be no project overseer to monitor their work or correct their mistakes. Absence was the catalyst for the swarm.

The level of concentrated energy each team focused on their designated "neighbors" is just what the starlings were doing to stay aligned. This swarm effect then allows for "leaderless" direction and less hierarchy. Command and Control hierarchal management exists because it does indeed set direction and allocate resources, but this system requires the cost and lack of efficiency because of the overhead required to run it. Aren't most of the high performing organization designs built on fewer hierarchal levels and more horizontal coordination across processes to counter the insularity and inefficiency of functional silos? It was an accident, but the StorServ swarm did just that. For its short three and a half month life it was among the best of high performance systems I have known.

Lessons from Procter & Gamble



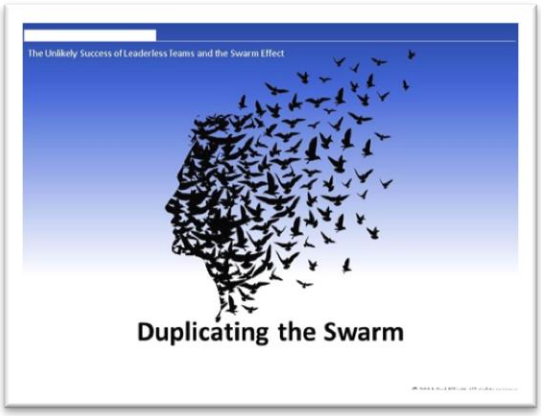
Are there other examples of shared leadership that might help us understand what occurred at StorServ? We've come to embrace, even idolize the latest and greatest organization design approach. But sometimes, what appears leading edge today has actually been in play for decades. The concept of shared leadership is not new at all. In fact, we can go back nearly fifty years – an eternity I know – to find the seeds of shared leadership. In the late sixties Procter and Gamble developed a team based approach that built both technical and leadership skills within the team. Called a technician system the general idea was to optimize the way the work technology and humans interacted for best effect. For example, suppose there are three separate jobs on a work team. Traditionally, one individual is responsible for and fulfills only one of those three. On a multi-skill team, all three individuals are capable of fulfilling the work of all three jobs. Even if all three work the same task at a single point to eliminate a critical path bottleneck, they are free to work individually or collectively on any of the tasks in each (or all) of these jobs, all for the sake of completing the overall work most efficiently.

These technicians began a progression of learning new skills that allowed them to take on more and more of the total set of tasks for which their team was responsible. The more they learned the more valuable they were to the team because of their increased flexibility. At the top level of progression they were able to take on the coordinating tasks and leadership tasks once owned by the supervisors. These included coordinating the inter-team and cross-functional interfaces that StorServ was also able to manage effectively. Some of the teams evolved to the point that all the members had achieved the highest level leadership skills. This breeds a greater appreciation for the challenges of the work that

others do, a greater understanding of how various tasks must fit together, and ultimately, a greater sense of cooperation.

My friend and P&G alumnus, Dave Hanna, writes about his first technician system experience and the relationship between the number of qualified leaders on a team and the performance of the team. “In the initial year of operation, the teams’ production results were directly correlated to the number of team members who volunteered to be coordinators: the nine coordinator team was on top, the four coordinator team was next, and the one coordinator team was third.”

Procter & Gamble enjoyed productivity gains of 35 to 40 percent in the plants that embraced this high performance system, a system that built more leaders who constantly focused on what needed to be done for the team’s success. While StorServ shared leadership in a distributed way, it appears that it’s the “we are in it together” swarm of leaders at both companies is one common element leading to high performance.

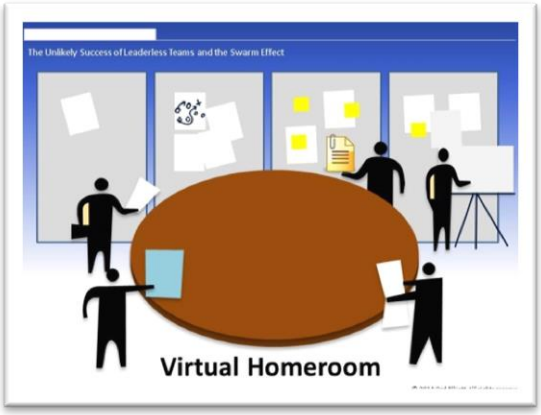


Duplicating the Swarm

Can this swarm effect be duplicated in other organizations? Was StorServ a fluke, a lucky one time occurrence? P&G’s multi-skill teams required a long term apprenticeship at each stage, from each specific job skill set through to leadership and interface management. This time intensive process is not transferable to ad-hoc teams unless there is already a trainer or qualified team leader ready to surrender their job when the team is ready. The StorServ teams had several advantages despite their leadership talent gap. They were narrowly focused from the outset and had help defining their charter (albeit in only a half day), and it was made clear that they would need to interface with other teams in the larger project. Another advantage was that they were all co-located and could meet in the same room.

How do you develop the benefits of this kind of early orchestration that blossoms into the swarm effect without external intervention? How do you distribute leadership tasks without some initial training? Consultants and mature companies are able to train team leaders and build comprehensive team infrastructure that is geared for success. But ironically, the missing leadership talent and initial confusion at StorServ was the catalyst for developing their swarm. Certainly eliminating team leaders is not a desired first step. But selectively allocating some of the leadership tasks across the team might be one of the ways to build “swarm strength” team and inter-team collaboration.

Did the obvious talent weaknesses at StorServ actually served to put such a conscious effort in to overcoming them that their level of coordination was well above what is considered very good at most companies. Could it be that distributed teamwork, where everyone on the team has at least one leader task responsibility, is the secret ingredient that creates these superior inter-team connections – connections essential for achieving swarm capability?



Luckily the StorServ teams were co-located and could meet daily in the same room, an advantage at P&G as well. That is no easy task to duplicate in today's dispersed and global environment. What I suspect is also required to build "swarm strength" is a "virtual homeroom" that simulates a team who are all in the same room working full-time on one project. It must be easy to enter, simulating the feeling of showing up at work with everyone together face-to-face. It must highlight workflow interdependencies where all the project information "papers" the walls. It must have the tools to sustain the ongoing problem-solving and decision-making necessary to reduce dependency on managers for updates and interface problem solving. But this is easily said yet much harder to do.

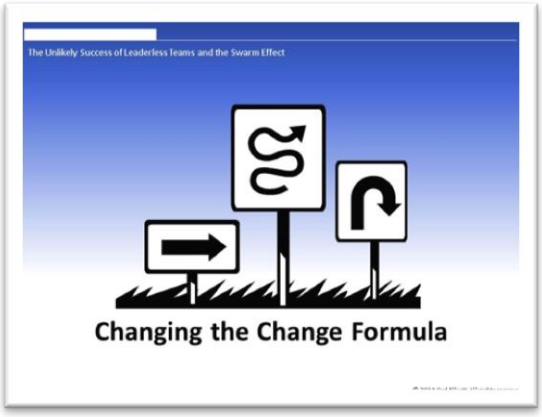
While there are many more ways to connect today, they come with their own distractions and often too much information to focus a team effort and the interface management necessary for multi-team and cross-function alignment. Social media has been successful at getting input from a large population quickly, but has not provided focus or direction – witness Twitter fatigue and noisy surround sound. More sophisticated collaborative and project tools are emerging, but it is often difficult to keep team members engaged in the online forum. More often I'm told that email becomes the default standard for interaction. These email threads become long and continuity dissolves in overcrowded and cluttered inboxes. The team focus and efficiency that lays the foundation for building the swarm is lost.

While more collaboration platforms are emerging that provide this level of sophistication to focus the flow of work and filter unnecessary information, they do not always get used as intended, nor are they ubiquitous and accepted practices in the global workplace.

Facilitating the homeroom capability enhances the chances for distributed leadership and the swarm effect. For a Team Leader who does distribute some of the leader tasks it means there is less need to take on all the traditional leader responsibilities, freeing time to focus on more difficult problems or longer term issues. It reduces dependency on hierarchal management to ensure accountability. It limits the silo effect and encourages cross-function engagement. It replaces hierarchal command and control with integrated team and function collaboration. Over time it flattens organization structure as focus and accountability are managed from the bottom up. More surprisingly it causes organization change without the resistance associated with typical change initiatives.

Changing the Change Formula

The chances a change effort will succeed is described by a formula developed decades ago. Success or the readiness for change is a function of the difference between a vision of how things could be and dissatisfaction with status quo plus knowledge of the first steps required to initiate the change which must exceed the resistance to change, depicted algebraically as: RFC = (V – D) + K > R



Borrowing from StorServ's unlikely success, it is enticing to speculate on what this suggests for an unorthodox formula for change. The traditional approach to change involves participation from those affected and often includes training augmented with compelling reasons.

Such an approach would start with the senior management determining whether they wanted to build a less hierarchal and "siloed" organization, centered instead on distributed leadership and self-managing networks. Typically you would expect resistance, especially from some of the functional managers whose careers would be threatened and who would need to embrace a new and different concept of manager. The next step would be to engage those in the trenches likely affected by the change to understand their concerns. Then a team would be selected to do the design work, followed by more meetings to communicate the change. Only then would the implementation be started. At this point you might still expect varying levels of support or obstruction.

True the frustration of being told what to do and the resistance that goes with it are usually replaced by the opportunity to influence the outcome and to take on responsibility for the success of the implementation. Information and ideas do come from the bottom up, but decision making and direction still are reserved for executives who tailor the inputs and authorize what does and what does not become part of the larger change initiative. And the journey is a long, time consuming process. Often you hear "it gets in my way of doing my job" and indeed, the time commitment of those engaged in the change is often substantial.

But what if the more basic, survival approach taken at StorServ is the path to change? Then the organization changes to become more inter-connected and flatter without needing to advertise and develop a change strategy. This is a planned transformation to a more leader-full, less hierarchal organization without the heavy artillery required by the typical planned change process. If there is no need to introduce a change initiative, nothing to advertise to conjure up resistance, it is unlikely there will be a visible challenge to simply building team infrastructure.

In most new construction projects, sidewalks are put in place at the outset to keep people off the grass. But if they aren't positioned where folks are most likely to tread, the grass will get walked on anyway. Years ago, when the university I attended built a number of new structures, instead of pouring sidewalks when they had finished, they waited until after the next winter, when the paths that students naturally

took had been clearly beaten across the lawns. This was a lesson for me in creating infrastructure without generating resistance.

There was no conscious strategy to build a high performing system at StorServ. Dumped into teams, the mostly young engineers stared at what seemed to them an impossible challenge. There was no attempt to win them over to a new organizational concept. Only the steps of building the team charter and roles are front and center. If this process is seen as just helping me do my job, there could be some resistance to that element of "new" but hardly as visible or tangible as a major restructuring. The StorServ team members just wanted to keep their jobs. Those steps taken to survive transformed them into the swarm.

The Management Barrier

Constructing a swarm is clearly not an easy task which is made all the more difficult because of the "great management wall." We know these self-managing networks that emerged decades ago at P&G, and in an ad hoc way at StorServ, provide sufficient coordination and leadership to fill the manager role? But the biggest barrier will come from those managers who would be displaced because their jobs have been absorbed by the teams below them. This was true at P&G decades ago and still is today – this amazingly high performing system stalled beyond the first line supervisor.

Formidable blockers, too, are the functional siloes whose insular linings have a history of interfering with horizontal processes. As Keith Lawrence, a friend and veteran of P&G told me, "when the going gets tough, the tough get functional, and it's even more apparent today with a struggling economy." That's a shame because there are organization performance consequences for limiting distributed leadership.

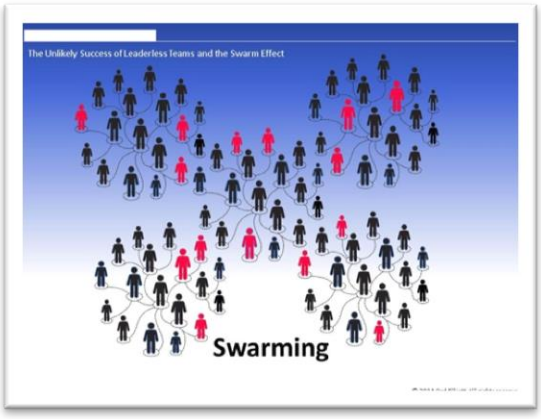
Hierarchal progression may define the careers managers aspire to, but it does not necessarily correlate with the amount of management or coordination actually required to support the work. In fact, when the management system is built before identifying the critical processes, the artificial boundaries defined by the management system may form barriers to the work processes rather than help coordinate across them. If teams can perform much of their own coordination, there is less or no need for immediate supervision, which means less or no need for as many managers.

There may be good reason for the boundary when a manager, not the team, has a level of knowledge and experience to help solve problems, envision a possible path, or determine direction, especially when the situation is unclear. But this determination is rarely addressed because we are conditioned to creating management jobs where we feel there needs to be accountability and one point of control, instead of thinking about building most of these tasks into the teams. Not assigning a management role creates the fear that there will be a loss of control, with no one to ensure that the job gets done. Overcoming this

fear and the inertia of relying on one person to keep all the pieces together is as big a barrier as our prevailing concept of what a successful career looks like.

Summary

What can we conclude? An accident happened, a swarm formed and a high performance system emerged. Astonishing success followed. Can this be intentionally duplicated in other organizations? Distributing leadership and building "homeroom" capability with exceptional inter-team connections are essential prerequisites. Those are the elements that create capability. To move forward the executives and managers who hover at the boundary must not just allow it but embrace it.



No doubt the odds of "swarming" becoming a best practice are stacked against it – unlikely yes, improbable perhaps, but this doesn't mean it can't happen. We've seen that when a major corporation takes on a new way of organizing and demonstrates success, there are many others that follow. Witness the technician system at Procter &Gamble or Six Sigma at General Electric. It only takes one standing tall to start the "wave." I end with a question for you to consider, "what would you do if you saw a competitor starting to swarm near you?"

Author Biography

Dr. Ord Elliott brings more than 40 years of experience as an executive, consultant, and entrepreneur. He has successfully navigated complex political and cultural landscapes, advising executives on a broad set of business challenges from Fortune 100 companies to early stage start-ups. He is the author of several books and publications, including *The Future is Fluid Form: Practical Steps for Designing Flat, Flexible Organizations* and *The Warrior's Silence*. For information, visit Ord's blog or ordelliott@gmail.com