

Designing and Delivering Breakthroughs

At some point in your career, you were probably on a team that produced a breakthrough. Think back for a moment – there was a time when you had to produce what looked like an impossible – or at least, highly improbably – outcome. Given your resources and understanding at the time, you didn't know how you were going to pull it off. But you and your team said, "We don't care – we're going to do this." And you did!

What allowed you to do that? What did you provide, even if it was unknowingly, that led to "doing the impossible?" And what did producing that breakthrough allow for? What did it provide to you, your team, and your organization? What became possible as a result of producing that unlikely outcome?

There has been a fair amount of research on breakthroughs. Some people take the position that innovation cannot be deliberately planned. "You can't schedule inventions." Others argue that breakthroughs do not occur by design, but are rather accidental and random, a matter of luck. (Nayak and Ketteringham, "Breakthroughs," 1986.) We reject these conclusions, and have proven that breakthroughs can be deliberately planned and executed. (For more on this approach, see "Managing for Breakthroughs in Productivity" by Allan L. Scherr, January 2005.)

In this paper, we are going to look at the conditions for breakthrough, how to design a breakthrough result, some principles for producing breakthroughs, and a simplified framework for getting a team on the track toward breakthrough. We'll also present some cautions about undertaking this approach. Throughout the paper, we will insert real-life stories about clients who undertook breakthroughs. These sections are titled "On the Field."

What is a Breakthrough?

The term "breakthrough" has been bandied about in the literature of management and leadership for the last decade or more. Even slight improvements in work or results come to be labeled a breakthrough. And many, many organizations, from software to video games to NASA to NGO health organizations have co-opted the word for their work. (There is even a taxidermy magazine called "Breakthrough"!)

When we say "breakthrough," we mean a result that is created under a very specific set of conditions, as follows:

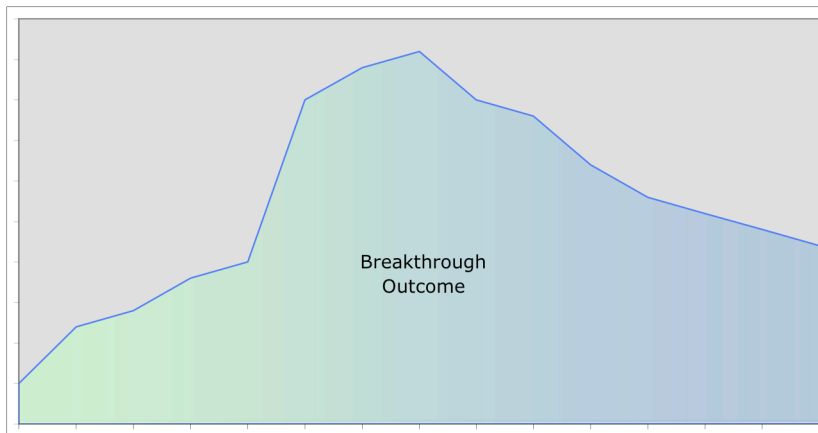
1. Not predictable from past performance, even highly successful past performance; a quantum leap in results; a result that is discontinuous with the past

2. Produces significant value in terms of forwarding the organization’s vision and/or goals
3. Creates a new reality for the organization about what is possible
4. Is committed to in advance, without knowing how.

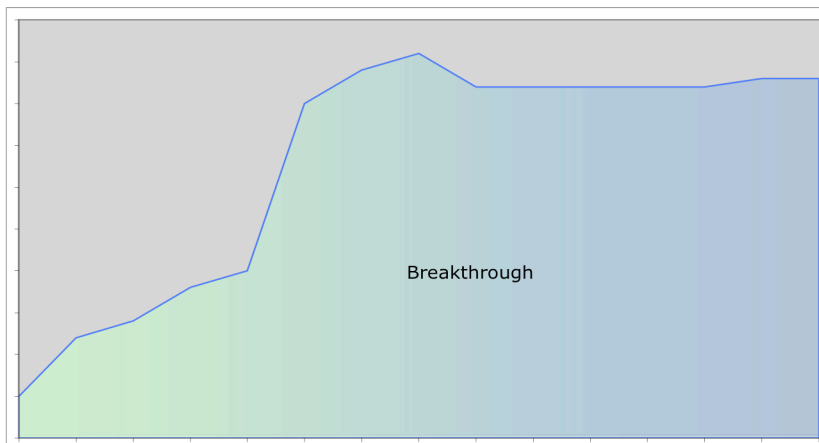
Some notes about these conditions:

- You can’t have #1 without clear measures in place, including measures for the results that would be produced under “business as usual” conditions.
- You can’t have #2 without a clear view of the organization’s vision, mission and goals.
- #3 is the difference between a breakthrough and a breakthrough outcome. It is possible that a result can be produced that is beyond what is predictable, but has no lasting effect on the organization’s view of what is possible; it is, therefore, the organizational equivalent of what for an individual would be a “peak experience.” A breakthrough, on the other hand, includes one or more breakthrough outcomes and leaves the organization at a new level of possibility in performance. (See diagrams below.)
- Regarding #4: if it’s not committed to in advance, it’s a happy accident, not a breakthrough.

We’ll talk more about these notes as we discuss the conditions for breakthrough and designing breakthroughs in this paper.



Breakthrough versus
Breakthrough Outcome:
Performance Over Time



Conditions for Breakthrough

You may now be thinking, “Wow, this sounds great! How do I get some breakthroughs?”
Read on!

There are several conditions that must be in place for a breakthrough to be realized:

- A breakdown (circumstantial or declared)
- Tolerance for risk
- Commitment (versus promise)
- Choice
- Teamwork

Breakdown

A breakdown is simply a situation in which the actual outcomes fall short of the committed goals. A breakdown occurs whenever there is a gap between what we said we would do and what actually happens, or what we can reasonably predict will happen, given past experience and current knowledge (if the project is still underway.)

Clearly, if we are using all our experience and all our knowledge, and we are still falling short, we have to do something differently in order to reach our committed goals. In other words, the resolution of a breakdown must be a departure from the past – it requires something extraordinary, unprecedented ... a breakthrough.

The bigger the gap, the bigger the potential breakdown. And consequently, the bigger the potential breakthrough.

A breakdown can arise in one of two ways:

- **Circumstantially:** outside forces cause a slippage in results. These outside forces can be changes in technology, changes in the marketplace, lack of resources, natural disasters, etc. For example, in the 80s IBM was singularly focused on making and selling mainframe computers – and suddenly, personal computers appeared in the marketplace, and IBM was not prepared to meet the sudden change in demand.
- **By declaration:** things may be going along fine, but the commitment is increased to a level significantly beyond the predictable, ordinary outcome. This type of breakdown is intentionally created and is not a result of circumstance.

On the Field:

A client of ours was in the automotive accessories industry where, if sales were flat or slightly above last year, you were doing well. Our client decided to double sales in one year. This created a breakdown – the company was performing to the industry average, the people were already performing at their best, and no one knew how to double sales. Using this technology, they declared a breakdown, designed a breakthrough project to double sales, and in one year doubled sales and increased their profits by a factor of 10, without adding any new sales staff.

It is important to note that, once a breakdown exists, whether circumstantially or by declaration, the experience of those involved is virtually independent of the way the breakdown is created. People are just as upset and uncomfortable either way. If you are planning to use breakthrough methodology on your projects, it is important to remember the “break” in “breakthrough.” People will be taken outside of their comfort zone, forced to think and act in new ways, and this normally makes people uncomfortable. A breakdown forces people to look beyond past experience and knowledge to new ways of thinking and acting – and that is where both breakthroughs in results and individual development reside.

A common misinterpretation of breakdowns is that they are negative, and reflect on the competence of the people involved. In our view, breakdowns are to be celebrated. Every breakdown teaches you something about the project, the process, and the results. It tells you what won't work, and can highlight new directions to take. It can even point to a new possibility that you hadn't considered, that might be the solution. As Thomas Edison said, *“Just because something doesn't do what you planned it to do, doesn't mean it's useless.”*

Tolerance for Risk

Clearly, this approach requires a significant tolerance for risk. Successful organizations often give high priority to the minimization of risk and the maximization of predictability. The typical emphasis in project management is on avoiding breakdowns, and consequently avoiding risk. One effective strategy in traditional project work is to design the outcomes to be as safe as possible. This is inappropriate, however, if unprecedented, extraordinary results are to be achieved.

Obviously, commitments to aggressive goals with the potential for large breakdowns have high risk associated with them. Unfortunately, breakthrough results cannot be achieved by playing it safe. Big commitments and big outcomes will almost inevitably bring big breakdowns.

This has clear implications for the relationship of management and the breakthrough team and project. Management must approve of and be a champion for the team, the process and the outcomes, and be willing to support the team by removing obstacles and providing resources, if necessary.

Commitment

In the section on breakdowns above, we alluded to the role of commitment in breakdowns. A breakdown is only perceived as a breakdown in relation to a commitment that has been made.

For example, if you are taking a Sunday drive, exploring the countryside, with no plans to be anywhere at any particular time, and you make a left turn instead of a right, that's not a breakdown – it might even be a pleasant little adventure! But if you are driving to a meeting with your boss and you make a wrong turn – that can be seen as a breakdown. You have a commitment to be at a certain place at a particular time, and now you run the risk of getting lost and possibly being late. That's a breakdown.

Commitment in this case needs to be unequivocal. It can't be based on any circumstances, because if it is, and the circumstance goes away or is invalidated, the commitment will also be invalidated. This does not mean that commitment takes on the character of a death march, or a "produce the result no matter the cost" engagement. There can be independent commitments alongside the commitment to the breakthrough that include not working overtime, taking vacation, or maintaining a healthy balance between work and home life, that are all important in the pursuit of breakthrough.

Commitment versus Promise

It's important to distinguish between a commitment and a promise. People are sometimes intimidated or unwilling to make a commitment to a breakthrough, because they think it is the same thing as guaranteeing a result that they cannot see how to produce. Clearly, that would give a smart person pause! But a commitment to a breakthrough means, "I am going to play this game to win." It does not mean, "I am promising to deliver this result." The difference between commitment and promise is also important to distinguish in the results your team or division promises to the larger organization. Many teams we work with have two outcomes for a project: the result that they promise to the larger organization, which they will deliver on, and the breakthrough result for which they are playing. This breakthrough result is not published or announced in their budgets or strategic plans, but is an outcome to which people have committed which will take them beyond their promised results.

On the Field:

A division of a Fortune 50 company had already reduced their revenue and profit targets to their parent company, and was considering reducing them a second time. They conducted a session with their top 40 executives to determine what, if anything, they could do to turn the situation around. In two days, they created 18 new initiatives that turned into actionable projects, and populated them with leaders and teams committed to their success. In addition to seeing the overall business differently, they began to see their relationships inside and outside the organization in new ways, set clear priorities, bring new levels of focus to their work, and develop a compelling communication program. This work led them to re-commit to the original business plan. Year-end business results actually exceeded their original plan, which was quite aggressive, by just over 10%. In every subsequent year, they have promised one set of results to the parent company – and designed critical and significant projects for breakthrough, which has allowed them to exceed their business plan every year since.

Choice

People have to be offered an authentic choice about making a commitment to breakthrough. Commitment is possible only when people are given a free choice. If you can't say "no," then your "yes" has little or no meaning. Giving people a choice to make a commitment is an unfamiliar concept in many organizations – the view is, "You work for me, you'll do as I say," or "You're accountable for this result, it's your job." If you are embarking on a project where people are outside of their comfort zone and are learning to work together in new ways, it's best to make sure they are authentically committed to the project, the results and the team.

We do not ask people to make commitments beyond reason, and we have found that the best way to ensure people are committed is to simply ask them, “Are you committed to this?” If they are, great! If not, there are no penalties for not participating. You want people on the team who are authentically committed to the breakthrough and are not doing it because they have to or were told to.

Teamwork

We don’t know if this is a fact or not, but we believe that teamwork is required to produce a breakthrough. There is something about the magic of people working together toward a goal bigger than they can see how to produce that makes breakthroughs possible.

Of course, there are some rules for the team to follow. Perhaps the most important one is to listen generously, like all ideas are possible. This kind of conversation is called “green-lighting” or “blue sky” or “a possibility conversation.” The surest death-knell for a breakthrough idea is someone who says, “We tried that before and it didn’t work,” or “we’ll never be able to do that.” For this kind of teamwork, the “devil’s advocate” needs to stay home – or at least stay silent! (See the section below on “organizing principles for breakthrough” for a fuller discussion of how to work as a team on a breakthrough project.)

If the work has been broken up into smaller teams or sub-groups, people’s commitment has to be to the overall project, not just their part of it. If one group is proceeding rapidly and meeting all their milestones, and another group is falling behind, it is useful to consider that the entire project is at risk, not just the part that is behind schedule. This is a case where it is really “one for all and all for one.”

Sometimes, two groups reach an impasse because they have become attached to different perspectives about how to move forward. In this case, the parties have become more committed to their point of view than to the breakthrough outcome, which is, in itself, a breakdown. The logjam can be broken with no compromise to the original commitment. Resolving it takes a skillfully facilitated conversation using the organizing principles, as well as a firm stand for the breakthrough and the committed results.

On the Field:

Two geographically distant groups of this international magazine publisher came together to determine a systems architecture (mainframe vs. client server) to automatically integrate client preferences with special editions of magazines. Each group was championing a different architecture, and both groups were “dug in and prepared for war.” After determining the major strategic issues, and the unique abilities, advantages and disadvantages, and unknown factors of each system, both groups were able to see the essential design of a workable system. They then broke into teams to create overall designs that would incorporate the unique advantages of each system. They created three distinct designs, all of which the entire group could see as an effective systems architecture. This intractable problem, which had taken up months of the company’s time, was resolved in two days. The sponsor declared that the thinking generated new combinations of ideas that were not present when they started.

Designing Breakthroughs

We've talked a lot about the necessary conditions for breakthrough - a breakdown, whether circumstantial or declared, tolerance for risk, commitment, choice and teamwork. Once those are in place, how do you design a breakthrough?

Setting the Parameters

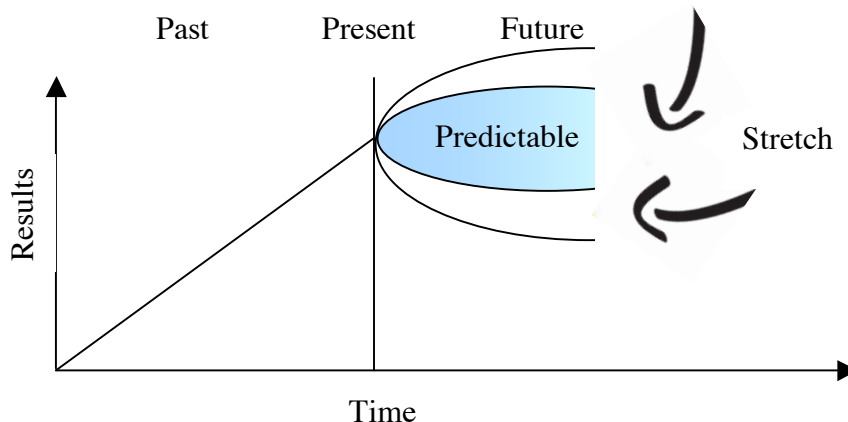
A key factor in creating breakthroughs is setting the parameters for the breakthrough accurately and with precision. Failure to design the parameters rigorously leaves the project – and the person managing the project – with no platform from which to create the breakthrough.

Predictable and Stretch Outcomes

While predictability is never certain, given good historical data and a reasonably stable base of past performance, future results can usually be predicted with a good degree of accuracy. Generally we define two levels of predictability – which we call “predictable” and “stretch.” We make this distinction because “predictable” has come to mean “a sure thing,” and anything beyond that is considered a “stretch.” We use “predictable” differently. In this situation, it does not mean, “I can sit back and put my feet up, and it will happen without much intervention from me or the team.” On the contrary, we define the predictable as that which can be produced by applying current and/or available knowledge to a) do more, b) find an improved way to do it or c) find a different way to do it. These have come to be known in business as “working harder,” “working smarter” or “doing more with less.” In other words, achieving the predictable means bringing all your good ideas, knowledge, skill and experience to bear.

By this definition, stretch results are achieved by working *much* harder, *much* smarter, and require *much* more, *much* better and/or *very* different variations on what has been done before.

Both the predictable and the stretch outcome rely on the smart business use of what is already known – in other words, they are based in the past, on what has worked (or not worked) before.



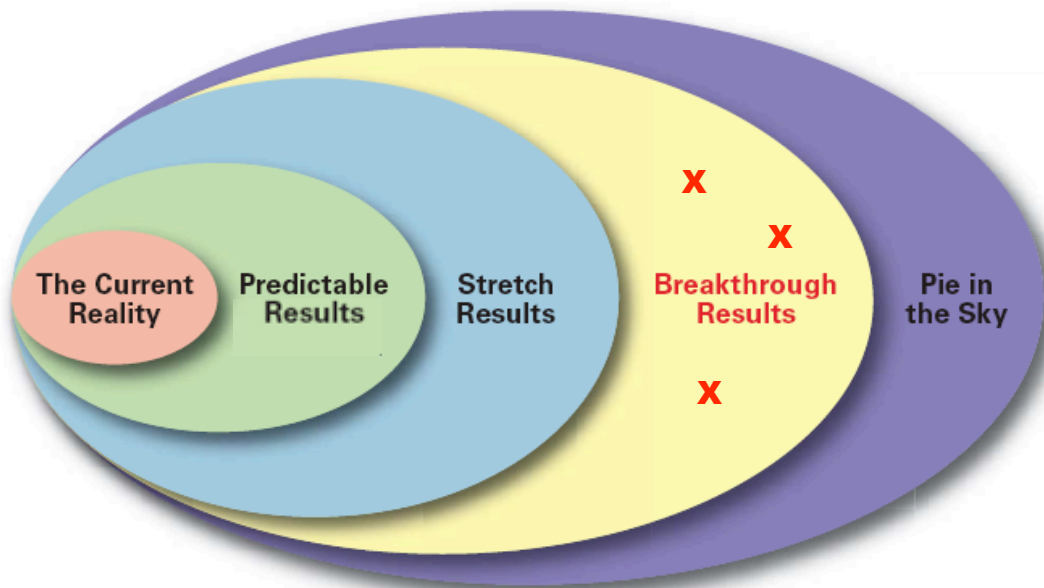
The analysis of predictable and stretch outcomes can highlight flaws and deficiencies in current methods of tracking and measuring results, which is valuable in its own right. A rigorous definition of the current conditions and likely outcomes is a vital prerequisite to establishing the boundaries of breakthrough. (See the notes about conditions for breakthrough on page 2.)

Once past performance and the predictable future have been determined, art and judgment take over from managerial science. The first judgment to be made is to determine what constitutes the outer limits of “predictable” – including stretch. Where you place the border between predictable and breakthrough will have real business consequences. If the border is too low (i.e. the predictable outcomes are very low), some projects will be taken on as breakthrough when they could be done using conventional methods, and some projects will never be undertaken because they will seem impossible. Considering that breakthrough methodology can be a labor-, time- and capital-intensive undertaking, at least at the outset, this could be a costly mistake. Set the border too high (almost everything is considered predictable), and some projects will be undertaken by conventional means when breakthrough is really called for. The probability of success in this situation is low.

There is no hard and fast business rule for setting this boundary. In the end, it must be approached as a business judgment.

“Pie in the Sky”

In addition to predictable and breakthrough, there is a terrain of outcomes we call “pie in the sky.” This is the stuff that, while it might be great, is actually impossible. The art of breakthrough is to set targets that are far enough into the field of breakthrough to allow for shortfalls that are still beyond what is predictable and establish a new possibility, without straying into “pie in the sky” territory.



Measuring Success

We mentioned at the beginning of this article that you can't have a breakthrough without clear measures in place, including measures for the results that would be produced under "business as usual" conditions. This is crucial, because, once a breakthrough has been produced, it starts to look like the most likely occurrence possible! In other words, what was unpredictable and over and above "business as usual" at the start of the project will have become possible, and even probable. People will forget that it was a breakthrough when you started, including the people who worked on it! So to measure the success of the breakthrough, it is critical to have accurate and believable metrics in place, including a clear definition of the difference or gap between predictable and breakthrough outcomes.

It is also important to remember that "breakthrough" is a range of outcomes – anything beyond the realm of "stretch" counts as a breakthrough. If a project has a predictable outcome of 5, a stretch outcome of 7, and a breakthrough of 20, what would you say about a result of 10? (This is a trick question.) It's a breakthrough, and deserves to be celebrated as such. Any result beyond 7, the stretch outcome, is a win. People, and especially bosses, tend to forget this. Feel free to point out that, by coming in at 10, you have doubled the predictable results, and improved on the stretch by over 40%!

Critical Success Factors

We've adapted these from Allan Scherr's article on "Managing for Breakthroughs in Productivity," because they reflect our views on the subject.

When certain factors are in place, teams seem to be able to handle breakdowns and get to breakthrough results with more velocity and effectiveness. These critical success factors are:

1. The project must be a real project: a team effort to produce a specific result by a specific time. The Apollo Project's goal of "putting a man on the moon and returning him home safely to the earth" by the end of the decade is a classic example of a powerful, precise, concise and inspiring project definition. The project must also be something that is needed and wanted, and not just made up to try out a new technique for producing results. Management, as well as the project team, must be willing to take risks for the project to succeed.
2. Management must be committed to the successful completion of the project. Say a team has taken on a project to double their productivity. If management thinks a 20% increase is sufficient, their willingness and effectiveness in helping the team resolve breakdowns will be diminished, and the tendency will be to lower the goals rather than figuring out new ways to achieve them.
3. The people working on the project must have a conviction that substantial breakthroughs are possible – even if they do not know how to achieve them. Without this commitment, there is no basis for embarking on the project. The good news is, almost everyone we have worked with is convinced that extraordinary gains in results

are possible. In fact, working in this way and producing substantially new outcomes is very satisfying, and people report that their work on breakthrough projects is some of the most fulfilling of their careers.

4. The project team should have a good sense of what outcomes they can expect by doing things the way they already know how to do them. In other words, what results will “business as usual” give you? Remember that a breakdown is the gap between what can be predicted, or what has happened, and the committed outcome, so there can be no breakthrough without that gap, and there can be no gap unless the current situation or predictable outcome is accurately delineated.

Creating a Breakthrough Project

Creating a breakthrough project is best done as a facilitated meeting. It takes well-honed skills to keep the conversations on track and not get stuck in the pitfalls of the current culture, what is known or believed about the project, the team and the outcomes, and what is seen as possible and probable. There are also ground rules or organizing principles that must be followed by the team, in order to maximize the chances of success. For this article, we’ll address the organizing principles, and then present the actual design of the project as a simple flow chart without detailed explanation.

Organizing Principles

These organizing principles are essential for a breakthrough project, and will make any project run more smoothly. We recommend them as ground rules for any teamwork (they work well at home, too!)

1. *Generous Listening*: Listen for what’s possible. Listen for the new future that is being created when someone is speaking. Don’t get hung up right away on “how can we do that?” or “that will never work.” At some point, those perspectives will become valuable, but they can also shut down possibility and restrict the ideas of the team to what they already know how to do – and as we have seen, a breakthrough happens when we accomplish something we didn’t know how to do.
2. *Point of view*: Consider that all points of view are valid. Encourage people to say what they see. Realize that everyone has a different perspective, given their history, experience and place in the organization, and that all of that can be useful as you are designing and delivering a breakthrough. Design your team to take advantage of as much diversity of view as you can get. Include people who represent all the stakeholders in the outcome of the project – for example, if it’s a product, consider including people who will be using it, making it, selling it, warehousing it. They will all have a contribution to the eventual outcome.
3. *Source of Action*: We know that action is the source of results – no action, no results. But what is the source of action? It is how we perceive the situation. Our perceptions

and interpretations are critical in determining what actions we take. This is why we said above that people on a breakthrough project team must have the conviction that a breakthrough is possible – or they won't take any action to produce it. Think about it – say you are playing sandlot softball, and the point is to hit the ball when it is pitched to you (forget about strike zones and such for the moment!) If someone pitches the ball 6 feet over your head, you probably won't even swing at it, because it will look “un-hittable.” Same thing in a breakthrough project – the game has to look winnable or people won't want to play it! The job of the project leader is to keep people believing that the breakthrough is achievable, even though no one knows how to do that yet.

4. *Context, process and content:* Creating organizations where breakthrough is part of the fabric of producing results requires developing competencies that cannot be achieved by providing teams with additional knowledge (*content*), or new ways and means to work together more cooperatively (*processes*) alone. It requires the inclusion of a third domain, *context*, to determine what shapes peoples' actions and what will need to be designed and implemented in order to have their actions be consistent with the breakthrough and the vision for the future that it makes possible. Developing people who can successfully lead breakthrough teams has to include and go beyond the traditional domains of increasing skills and competencies and also beyond redesigning processes. Leaders of breakthrough teams work to establish a new context in which breakthrough business results become possible. This is why we recommend expert facilitation for breakthrough projects and teams.
5. *Co-creation:* Co-creation and collaboration are critical for breakthrough results. Increasing diversity in points of view, and helping people work together toward a committed outcome, will increase the likelihood of success.
6. *What is obvious, isn't:* We tend to not communicate things that are obvious to us because we assume they are obvious to everyone else as well. We get into conversations where someone doesn't agree with us, or “see things our way” and we are inclined to defend our point of view, explain it more, sell ... without noticing that we haven't asked them what they see (something may be “obvious” to them!) Pay attention to things that are obvious to you and make sure you communicate them to others. Do this even when it seems unnecessary and make sure others understand precisely what you mean.
7. *Establish and Interrupt:* It is worth considering that everything we say and do both establishes something and interrupts something. The job of a breakthrough team is to establish a new way of working together, new ideas about what might be possible, and a new level of results. You also have to be responsible for what you are interrupting when you take on breakthrough – be careful to honor the past and not have the breakthrough invalidate any of the work or teams that have come before you. A breakthrough is always an interruption in “business as usual.”

8. *Earned and Granted Trust*: Committing to a breakthrough requires a new kind of trust among team members, and the team and management. When we are creating something new, we can never have enough earned trust to get the job done, because we are working in realms where no one has any past experience or knowledge.

Granted trust is required when working in the domain of breakthrough.

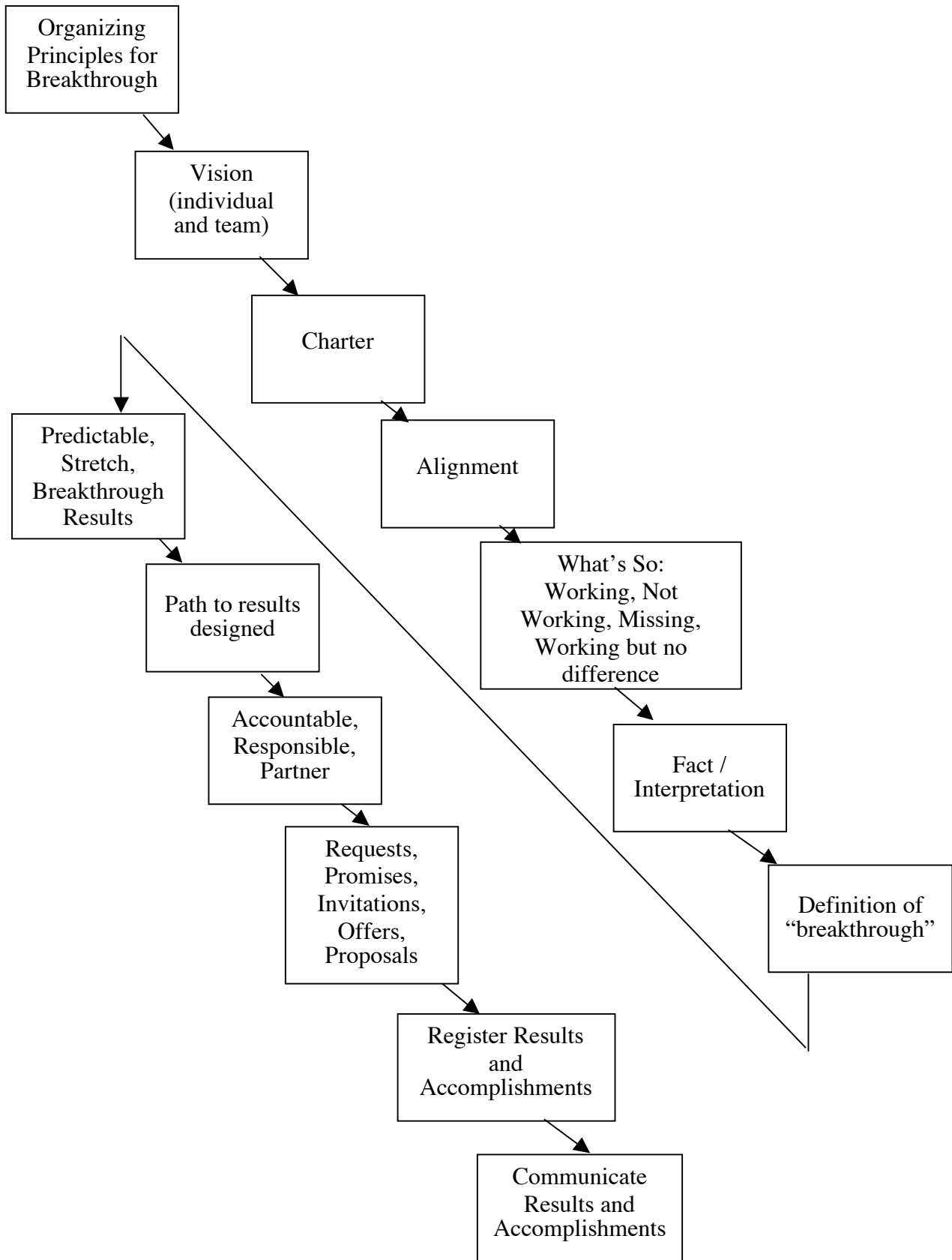
- ***Earned trust*** may be increased or decreased by intentional deeds or by unforeseen circumstances. We may trust a friend who has been consistent in keeping his/her promises or we may trust a business associate who performs to high standards. We may also trust without having had a direct experience. When we go to a doctor who was recommended to us by someone we have known for a long time, we invest a degree of trust in the new doctor, even though we do not know the doctor personally, because of the recommendation and possibly because of the diplomas and certificates on his/her wall. In either case, earned trust is based in the past, whether in past deeds or on credentials.
- ***Granted trust*** is distinct from earned trust. The most striking difference is that granted trust is non-contingent and non-transactional. That is, granted trust is not established or affected by deeds or by circumstances, and is granted on an all-or-none basis. Granted trust is a *commitment*; it is given in one's word, and it is absolute. One grants trust based on shared commitments. When we grant trust, we are saying that the other person's deeds will be seen in the context that the person is trusted, and actions that seem to be inconsistent with their commitments or promises will be held as mistakes rather than as occasions for a withdrawal of trust. Granted trust could be said to require an act of faith; it creates a playing field of great freedom but also great responsibility.

Flowchart for Leading a Breakthrough Project

Because leading a breakthrough project reliably requires skilled facilitation, we don't want to present a cookbook approach (in other words, follow the recipe and it will come out great!) There are many factors that can derail the project, not the least of which is bumping up against the corporate culture! Our experience shows that, while there is a common framework for designing and delivering breakthroughs, each project has its own unique challenges and potential pitfalls. Consequently, we present the framework on the next page as a flowchart, so you can see the common actions and flow of the design.

We find it best to conduct breakthrough projects in several sessions. This gives the team time to learn and practice the organizing principles and design the project in the sessions, while doing the real work of producing the results between the sessions. Each session can be a forum for deepening the learning and integrating it into the work of the team, as well as exploring, learning from and turning around breakdowns.

Leading a Breakthrough Project



Caveats and Cautions

We'd like to close this article with a few "lessons learned" from working in the domain of breakthrough for the last 15 years. These might be considered caveats and cautions, or sound business advice for those who are contemplating taking on this project methodology.

- Not everything is good for breakthrough. Just as not every outcome requires a team to produce it, not every outcome requires a breakthrough. Most of what we do in our jobs is well understood and can be produced using predictable, reliable methods that have worked in the past. Don't use the tool unless you need it.
- Remember that a breakthrough is a range of outcomes, and anything over stretch is a win. We can't stress this enough. Don't be disappointed if you "merely" double your productivity when you were going for tripling it.
- Remember the "break" in breakthrough. A breakthrough will interrupt established norms of business and processes, and can establish heightened expectations for possible results. Be responsible for what you are establishing and interrupting when you undertake breakthrough outcomes.
- Be sure to celebrate – and communicate - the wins in your breakthrough project. Include the measurable outcomes, but also register what was learned along the way, what is now possible that wasn't possible before the breakthrough, and how the team and individual members developed themselves to produce these extraordinary outcomes.