



An Embarrassment of Riches or Curse of Abundance?

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I was meeting with the VP of Manufacturing for a large manufacturer of medical equipment whose organization had gone through a serious search for waste and found an abundance of it. Excited by all of the opportunities they identified, they launched over 40 process improvement teams and waited for the returns to start rolling in! But progress proved to be very slow and nearly twenty-four months later, few of the teams had brought the opportunities to fruition. Realizing the teams were not receiving sufficient management attention, his leadership team decided to focus on the top 27.

These opportunities were really good – yet almost no one was making much headway. So I was asked to meet with each of the teams to help them figure out what they could do differently to accelerate results. The underlying problem was the organization's approach to improvement. What initially had appeared to be an embarrassment of riches, in terms of opportunity, turned into the curse of abundance.

I was reminded of this recently when I saw a lecture on building growth, by Rebecca Henderson, the Eastman Kodak Professor of Economics at the Sloan School. She encountered a similar dilemma hindering the innovation required for growth – organizational overload. As an example, she described sitting in a 12 hour meeting with the corporate leadership for a stream of 26 presentations, which one after another, described really great opportunities for growth. All the projects were very worthwhile and not one was turned down.

When an organization tackles too many improvement projects or innovation projects, the result is change gridlock – a traffic jam that slows everyone down. Even when the project teams are assigned full time – an extremely rare approach – the resources they must rely on for data, information or cooperation in piloting solutions are too busy to help in a timely way. Taking baby steps forward so as not to overwhelm the resources ends up requiring more time and resources overall. The more time that elapses between the start of the project and the end, the lower the return on investment in the improvement or innovation. How does the speed affect the ROI?

For every change project, cost increases with time in two ways. Think of it as a fee that is incurred for every week that passes between start date and end date. First, there is the mental equivalent of “change-over” or “set-up” costs. Every time a person picks up the project after setting it down to do something else, he or she invests time ‘figuring out where we left off,’ re-familiarizing him or herself with the issues, and deciding what needs to be done next. Some of the time, some things are forgotten or overlooked that eventually come back to bite. Second, the more time that passes, the more often a person must ‘download’ information from their own ‘flash memory’ onto status reports and elaborate project plans. These downloads add costs that are not incurred on projects that are executed quickly. For example, a [Kaizen](#) approach incurs very little if any costs of this sort. As the project is analyzed, potential solutions are immediately identified and tested.



But these additional costs pale in comparison to the detrimental impact on the benefits when a project progresses slowly. Whether an improvement or innovation project takes six months instead of six weeks or six days to complete has a huge impact on the point in time at which the stream of benefits begins. The weeks, months or years of benefits that one receives from an innovation or improvement depends on two things: the date the improvement or innovation is implemented and the date at which it becomes obsolete. The latter date is driven by factors entirely unrelated to the date of implementation: such as market changes, competitive moves, technology advances, reorganizations, etc. which have absolutely no relationship to the date at which a process improvement or innovation is implemented. The end point of the stream of benefits, while usually uncertain, is almost always fixed by some future event beyond the control of the project team; only the start date for benefits can be managed by the project team. Every single week of delay in implementation is one week less in benefits.

In organizations with project overload, the larger and more insidious loss of benefits comes from the projects that die before any fruit is born. The pace of implementing improvements **MUST** exceed the pace at which an organization's priorities change or much of the time invested in improvement projects will go to waste because the project is abandoned. Rarely is a project explicitly killed, but frequently organizations put a project 'on hold' to pursue a new hot priority, intending to return to the partially completed project someday, pretty soon. But the new priority is, more often than not, followed and possibly interrupted by yet another top priority and another. An improvement project, once put on hold, will often stay on hold until it withers into dust and blows away – or becomes so stale that when it is resumed, the team starts all over again.

So we know the problem – and it is us, the leadership of an organization. We must do two very challenging things: identify which few opportunities among the many good ones identified will be most vital to the success of the organization and which, in context with the rest, are compatible with the organization's capacity to drive and absorb change.

Selecting the vital few from the many excellent

The old truism is that you must choose the vital few from among the trivial many. But in the real world, leadership must often choose the vital few from among the too many excellent opportunities.

To do so means that you cannot simply look at each opportunity in isolation and decide whether or not it is a good one. Every project absorbs some portion of an organization's capacity for change, so each one must be evaluated in the context of competing opportunities.

A number of different methods can be used by the leadership to prioritize opportunities:

- One of the easiest is the 100 point method – each stakeholder is given 100 points to distribute among the opportunities. The sum of points identifies priorities.



- A more systematic approach is the **Forced Pairs Matrix**. With this method, one sets up a matrix with the opportunities listed across the top and down the left side. Taking one pair at a time, the stakeholders discuss and decide which of two options is the higher priority. The one that is most important gets the mark in its row. If B is more important than A the mark goes in B's row, if A is more important than C, the mark goes in A's row, etc. [Click here to see an example of the Forced Pairs Matrix.](#)

But the 100-point and forced pairs matrix methods do not surface discussion of the different criteria that the leadership team might use to evaluate and choose.

- A **Prioritization Matrix** lists the opportunities down the left side and the decision criteria across the top – with either equal weight or different weights. This method surfaces more consideration and discussion about why one should favor one opportunity over another. Options are then given a score of 1-5 or sometimes a 1, 3, or 9 based on how well they meet the criteria. The better it fits the criteria, the higher the score. The totals can be summed or multiplied across. [Click here for an example of a prioritization matrix.](#)

These are just three methods for prioritizing opportunities, any of which can be useful in sorting through the options to identify the best of the best. But none of these take into account organizational capacity. They consider neither how many resources are required nor what part of the organization would be required to drive or absorb the change.

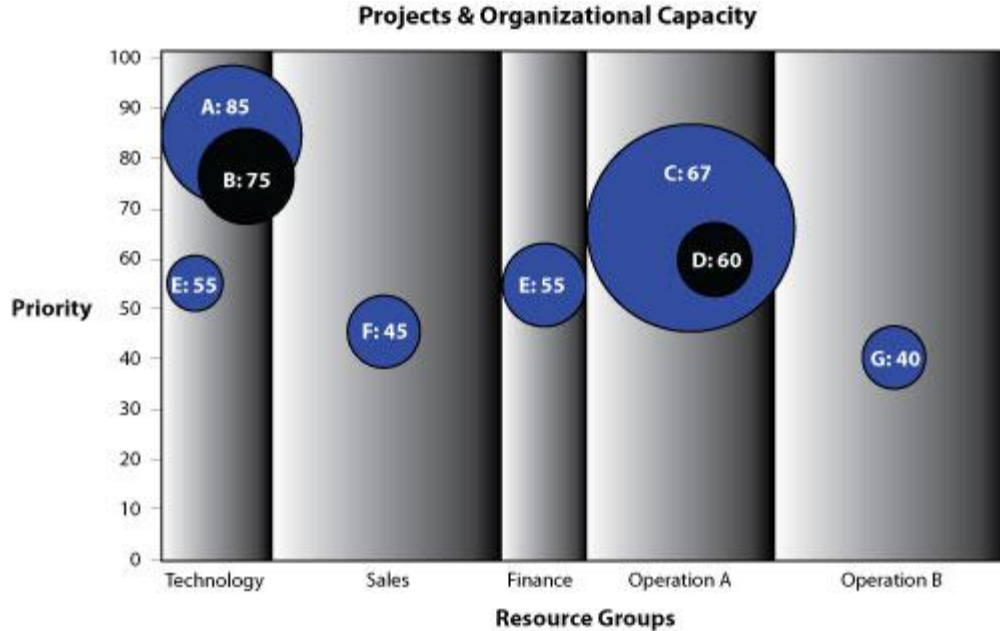
For that you need to add another dimension.

Incorporating Organizational Capacity

To handle the complex and inter-related questions required to optimally choose among projects, it is helpful to visually display the information about the relative qualities of the opportunities: both the priority as well as the organizational capacity requirements.

The following method lays out the organization visually and maps the improvement opportunities according to both the priority for the organization and the area of the organization that the resources must come from. In the following map, the columns depict the relative magnitude of resources available in the different functional groups. Notice that Operation B has more capacity than Operation A, and both Operations groups have more resources than the technology group or the finance group.

The y-axis shows the relative priority scores based on a prioritization matrix. The spheres higher on the y-axis represent projects with higher priorities. The spheres are labeled with the priority score. The sphere's position on the x-axis shows what functional area the resources would come from (Sometimes a project draws from two or more functional groups – such as project E which requires resources from both Technology and Finance.) The size of the sphere indicates an estimate of the resources and time required. The larger the sphere the more resources required to accomplish the opportunity.



Examining the improvement or innovation opportunities from this perspective provides a much richer understanding of the trade-offs available. In this example, the top two priorities (Projects A and B, with prioritization scores of 85 and 75, respectively) draw from the same small resource pool (Technology), so we see that although both are excellent opportunities, we cannot effectively accomplish both. If we were to try, resources would be spread too thin and results would be significantly delayed. The third largest opportunity (Project C) would consume a very large portion of Operation A's capacity and might interfere with daily operations. It may be wiser to select the project with a slightly lower priority score (Project D) that would be much less disruptive to the resources. Project E has a score of 55, and might be the third choice, but draws on two functions with relatively constrained resources. The opportunities scoring 40 and 45 are sixth and seventh in relative priority, but may be better choices because of the availability of the required resources. These departments would have an easy time accomplishing these projects expeditiously so that the benefits of the process improvement can begin accruing.

A visual analysis like this one enables the leadership team to make wise choices to select the most important priorities that can be accomplished without causing the organizational gridlock that undermines many improvement efforts.

Hopefully these tools will help you identify and select the vital few from a range of good opportunities. It's not always easy to view an abundance of seemingly good choices as a problem. But with abundance comes the responsibility of analyzing the options, considering the impact each might have on resources and capacity, and then choosing the one that's truly the "best of the best."