

Building Program and Project Management Muscles: The Thinking Muscle¹

By Dr. Harold Kerzner

and

Dr. Al Zeitoun

Introduction

Sooner or later, everyone actively involved in project management attends a meeting where they are asked to “think outside the box.” The unfortunate result that often occurs, is that the meeting does not provide the outcome that was expected. Part of the problem is that attendees often get confused or misunderstand the meaning of thinking outside the box.

The metaphor, “thinking outside the box”, implies doing things differently or perhaps unconventionally. The intent is to explore new ideas and perspectives as part of the creative thinking process. The outcome hopefully should generate unique or unusual expectations that may not be constrained by rules or traditions.

The future belongs to organizations that are able to continually create. With all the digital transformation efforts of today, It has become evident, that in the forefront of their successful implementation, is a strong hunger for staying creative, innovative, and maintaining a beginner’s mind.

We learned a lot over the years about the mind, its capacity, and its limitations. Strategically, excellent organizations in the next decade will see a tremendous value in building the thinking muscles of their project leaders and project teams in order to deliver sustained value to their most critical stakeholders.

What most companies fail to realize is that developing this thinking muscle requires an intentional investment. New organizational ways of working could reverse that obstacle. Dedicating time for fresh thinking, blocking off calendars for innovation, and building the culture an environment that rewards ideation, no matter how strange, are all concrete sings of a much more effective future approach to excellence.

¹ How to cite this paper: Kerzner, H. and Zeitoun, A. (2023). Building Program and Project Management Muscles: The Thinking Muscle, *PM World Journal*, Vol. XII, Issue V, May.

The Mind and Thinking outside the Box

Use of the expression, “thinking outside the box”, has been in existence for more than 100 years and became a popular expression used by consulting groups in the 1960s and 1970s, and later in project management during the 1980s and 1990s as we began applying project management practices to projects that required innovation and R&D.

Consulting firms provided their clients with guidance on effective creative thinking practices using the “nine dots puzzle” from a 1914 book by Sam Lloyd entitled the *Cyclopedia of Puzzles*. The puzzle is shown in Exhibit 1. Consultants would ask their clients to connect all 9 dots using four straight lines or less, without lifting the pen from the paper and without tracing over the same line twice.

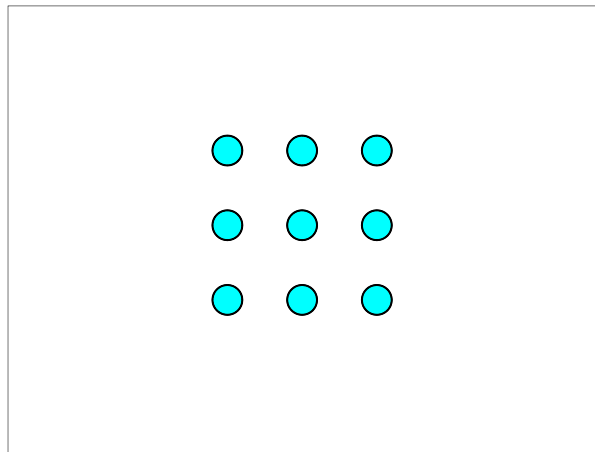


Exhibit 1. The Nine Dots Puzzle

At first, people try solving the puzzle by drawing lines inside the imaginary square created in their minds by the nine dots. The instructions given to the people did not prevent them from drawing lines outside of the box. However, their mind assumed we must remain within the imaginary box created by the nine dots. Eventually they solved the puzzle. The most common solution to the puzzle appears in Exhibit 2.

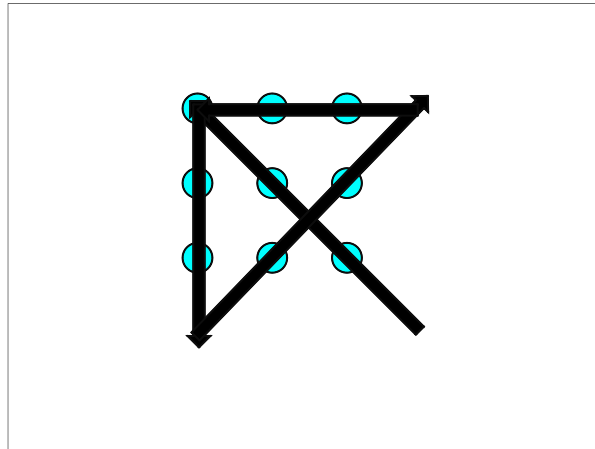


Exhibit 2. Solution to the Nine Dots Puzzle

The puzzle is used to show how our minds work. We often build a box in our mind where the nine dots become the sides to the box, and we are unable to see the white spaces outside of the nine dots. We then believe that the lines must be drawn within the box bounded by the nine dots. This immediately places constraints on finding the best possible solution and limits how we think.

Many of the problems project teams need to solve do not have boxes surrounding the problem. But our mind creates boxes with boundary conditions based upon experience that makes it difficult to find the best possible solution in a reasonable amount of time.

This is a key reminder to watch for signals that might be inhibiting the performance of program/project teams. It also brings to the surface the criticality of watching the assumptions we make as we approach our initiatives' work. There is a danger when we don't clearly distinguish between what is a real and what is a made-up project constraint. Developing a string thinking muscle gives us an edge to protect this important creativity ingredient of the initiatives' delivery equation.

The Project Management Boundary Box

Modern project management practices have existed for more than 50 years. During most of this time, the focus was on traditional projects that began with well-defined requirements, a statement of work, a business case, and possibly a highly detailed work breakdown structure. The PMBOK® Guide defined the first domain area as requirements definition which is where we created the box. Simply stated, most project managers soon began to believe that all traditional projects begin with the boundary box shown in Exhibit 3.

The boundary box in Exhibit 3 could also contain risks, assumptions, constraints, organizational process assets, and enterprise environmental factors. These project management elements make up the boundary box and have a significant impact on how we think about new projects, especially those projects requiring creative thinking.

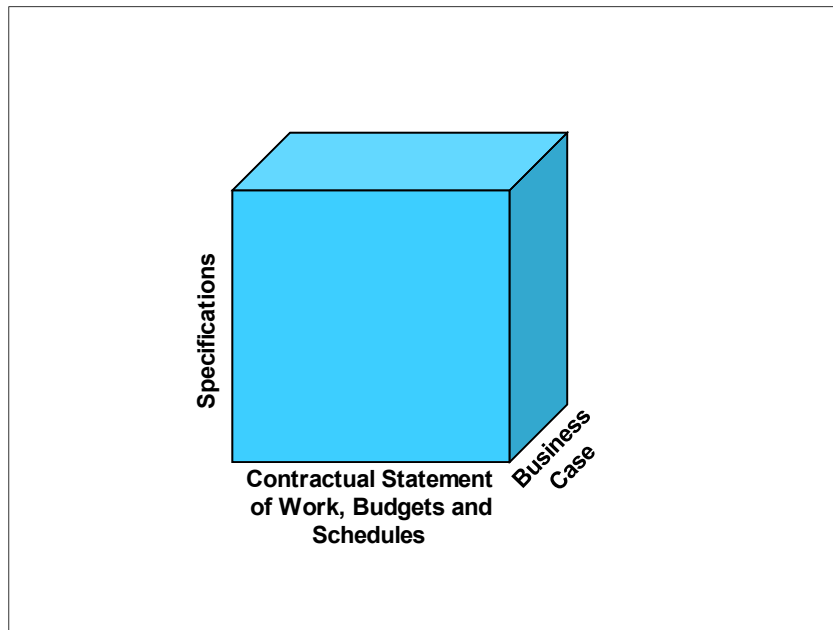


Exhibit 3. Traditional Project Management Boundary Box

When project managers are asked to think outside the box, regardless of whether the project being considered is traditional or requires some degree of innovation, their mind focuses on the boundary box and the elements it contains. This is largely due to how we trained project managers for decades. This usually results in convergent thinking.

Convergent thinking is the process of finding workable solutions to a problem based upon what you have done on previous projects, the majority of which were mostly traditional and constrained by the boundary box. Divergent thinking is generating new ideas and new possibilities that may fall outside of the traditional project manager's boundary box.

Building a new type of thinking, requires training and a disciplined effort to create a mindset shift. The past does not equal the future, is a very accurate description here for having to dismantle limiting beliefs about what is needed in the management of projects into the future. Program and project teams have to operate very strategic in the choices they make about what to keep and what to dismantle in what they had traditionally believed to be important excellence thoughts. This is the foundation of proper program and project management successful future practices.

The Future Challenge

The challenge we are now facing is finding a way to eliminate or manage the boundary box in the early stages of some projects and get project team members to perhaps think differently. When we ask people to “think outside the box,” there is the belief that a box exists and must be considered.

While this expression seems harmless, it does leave people with the impression that there are boundary conditions that must be considered as reference points when coming up with ideas and recommendations. This means that you must consider procedures, rules, and standards established by others rather than having the freedom in selecting options that you might otherwise prefer to do.

There are several ways to consider the impact of the boundary box. The two most common ways are to:

- Eliminate any discussion of a box
- Allow the box to remain, but change the way that people think about ideas and recommendations

Removing the Box

For projects that require innovation and creative thinking, there is a valid argument that the expression “think outside the box” should not be used because of its self-limiting effects on the way that some people might think. Team members should think as though a box does not exist at all. The valid argument is that removal of the box allows people to break old habits, think and conceptualize differently, and be willing to admit and accept the fact that failure can occur. This should then allow them to think about everything that is possible and discover the best ideas.

Experienced project team members, when thinking about new ideas, almost always ask themselves immediately, “How much time will I have?” and “How much money will I have?” These two statements have been imbedded in their thought process for years and are not easily removed. For people asked to come up with new ideas, they must either assume that a box does not exist or be told that a box does not exist.

Getting people to recognize that there is no box will be challenging. Some psychologists try to convince people to “burn” the box in their mind. Unfortunately, there are some people who are afraid of having their ideas criticized and not considered, and others who are afraid of the risks and repercussions if their ideas are accepted and result in a failure. These people may be afraid of the risks in not considering the existence of the box and will need to be taught how to remove or destroy the boundary box in their thinking.

The boundary box acts as a comfort zone for many people. Removing the box may remove people from their comfort zone, and this could limit their ability or desire to come up with the best creative ideas. However, the boundary box may have the advantage of generating many new ideas. Unfortunately, the ideas may not be specifically related to the problem at hand. The ideas not related should still be recorded and stored in knowledge repositories or information systems for future consideration.

Allowing the Box to Remain

Getting people to think differently requires that they remove the constraints that may impede their thinking ability. To do this effectively requires a somewhat structured analysis of how people generally think beginning with an understanding of the environment in which people are expected to be creative. As an example, some companies prefer to have brainstorming meetings composed of only diverse groups that do not include subject matter experts and whose group members would not be responsible for implementing any of the ideas considered. The reason is that these people may have good ideas but might feel intimidated to present their thoughts when they see experts sitting beside them.

Another option is to have a diverse group that include both non-subject-matter experts as well as experts, consultants, and project personnel that may be responsible for implementation of the ideas. The diverse group does not need to be composed of people with high IQs or previous experience with certain types of projects. The ideas brought forth by diverse group participants may motivate others in attendance that persist in thinking inside the box to think differently, look at the problem from a different perspective than they normally might, and come up with totally new ideas rather the traditional or expected ideas.

When we say, “think outside of the box,” we imply that we want to be different, but may unintentionally introduce ambiguity by eliminating possible boundaries to a problem. People may then become confused as to whether to now focus on higher levels of quality, new products, new customers, new markets, new services, etc.

There are several ways to eliminate the ambiguity. Perhaps the most common way is by clearly defining the purpose of the meeting when inviting people to attend. Define the problem at hand and the intended outcome of the meeting and encourage people to think up ideas prior to attending. At the start of the meeting, define the intent of the meeting once again and the ground rules for the meeting.

In these types of creativity meetings such as brainstorm sessions, it is important that people refrain from criticizing ideas until all ideas are identified. Listening to the ideas of others may generate ideas for others in attendance even if they still envision the boundaries in the box. When each idea is evaluated, it is important that people view the evaluation as constructive criticism rather than personal criticism. It is during the selection and evaluation of ideas when the information within the “box” becomes critical.

Some organizations prefer breaking the meeting into two parts. In the first part, people are encouraged to think freely, and all ideas are listed but not prioritized or evaluated. In the second part, the ideas are then evaluated. This is where the boundary box becomes important and may be useful in selecting the best ideas, provided that the correct constraints are identified in the boundary box.

Without a boundary box, you may end up with more ideas than expected, and it could become very time-consuming and discouraging for meeting participants to choose from many options. With too many options, people feel overloaded with information and tend to make poor decisions when trying to arrive at the best alternative. Important information is often overlooked as an excuse for speed. With some form of boundary box, the choices are usually fewer, the problem is clear and better understood, and there is a greater likelihood of selecting an option that has a good chance of success.

The Fear of Failure

We have shown thus far that there are advantages as well as disadvantages to both allowing the box to remain or trying to remove the box. But before deciding which choice is best, we must consider one more critical question: “Why was the box created?” The answer most often relates to the way that some people react to the possibility of project failure.

When you work in a project management environment, you learn quickly that not all projects will be successful. Projects that involve innovation, R&D, and advanced levels of creativity generally have a higher failure rate than traditional projects that start out with well-defined requirements. People are generally willing to accept project failure and the result is that they tend to try harder on the next project. However, if people are afraid that failure might be directly related to their performance on a project, they may try to work the same way that they did on previous successful projects rather than new ways of working.

In this case, the boundary box becomes a cushion, acting as a comfort zone, that may help workers avoid any personal pain resulting from failure. This means that, if a personal fear of failure exists, people might believe that they should not try to identify ideas that are drastically different from those that fit into the boundary box created from successful projects.

What is often not discussed or considered when asking people to think and work differently, is the way that we demonstrate sensitivity to human needs of the team members during these meetings. Previously, we said that, when conducting a brainstorming meeting, we should ask people to refrain from criticism of ideas in the early stages. This is a form of sensitivity to human needs. Sensitivity also includes convincing people that criticism of ideas in later stages should be interpreted as constructive rather than personal criticism. People should also be made aware of the fact that some projects will fail, and this should not be directed to anyone personally. Effectively administering human sensitivity practices during idea generation may eliminate the need for any discussions about thinking out of the box.

THE PATH FORWARD

Shifts in how we work and how deliver value, require developing a new thinking muscle. Any true transformation towards excelling in the future, will be affected by the quality of thinking across the organization and its program/project teams. Executives need to demonstrate the importance that these thinking muscles continue to be developed and grow.

There are advantages and disadvantages in using the metaphor, “think outside the box.” The approach taken is dependent upon the type of innovation being sought, experiences of the team members, and the risks the organization is willing to accept. In the future, one standard approach will not work in all situations because of the way that people think.

Demonstrating sensitivity to human needs will ease the pain and make people feel comfortable about bringing forth good ideas.

It is with adaptability, creation of an open thinking culture, and the effective use of human connection, that the program and project management practices, will continue to demonstrate their future strategic impact. Just like the great notion of leaders speak last, highlighted by Simon Sinek, it is critical in the future of work, that we have the spaces to contribute fresh thinking, develop creative solutions, and intentionally decide on the right balance between applying a box or no box.

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About the Authors



Harold Kerzner, Ph.D., MS, M.B.A

Senior Executive Director for Project Management
International Institute of Learning
New York & Florida, USA



Dr. Harold Kerzner is Senior Executive Director for Project Management for the International Institute for Learning (IIL). He has an MS and Ph.D. in Aeronautical and Astronautical Engineering from the University of Illinois and an MBA from Utah State University. He is a prior Air Force Officer and spent several years at Morton-Thiokol in project management. He taught engineering at the University of Illinois and business administration at Utah State University, and for 38 years taught project management at Baldwin-Wallace University. He has published or presented numerous engineering and business papers and has had published more than 60 college textbooks/workbooks on project management, including later editions. Some of his books are (1) Project Management: A Systems Approach to Planning, Scheduling and Controlling; (2) Project Management Metrics, KPIs and Dashboards, (3) Project Management Case Studies, (4) Project Management Best Practices: Achieving Global Excellence, (5) PM 2.0: The Future of Project Management, (6) Using the Project Management Maturity Model, and (7) Innovation Project Management.

He is a charter member of the Northeast Ohio PMI Chapter.

Dr. Kerzner has traveled around the world conducting project management lectures for PMI Chapters and companies in Japan, China, Russia, Brazil, Singapore, Korea, South Africa, Canada, Ireland, Germany, Spain, Belgium, Poland, Croatia, Mexico, Trinidad, Barbados, The Netherlands, Sweden, Finland, Venezuela, Columbia, United Arab Emirates, France, Italy, England, and Switzerland. He delivered a keynote speech at a PMI Global Congress on the future of project management.

His recognitions include:

- The University of Illinois granted Dr. Kerzner a Distinguished Recent Alumni Award in 1981 for his contributions to the field of project management.
- Utah State University provided Dr. Kerzner with the 1998 Distinguished Service Award for his contributions to the field of project management.
- The Northeast Ohio Chapter of the Project Management Institute gives out the Kerzner Award once a year to one project manager in Northeast Ohio that has demonstrated excellence in project management. They also give out a second Kerzner Award for project of the year in Northeast Ohio.
- The Project Management Institute (National Organization) in cooperation with IIL has initiated the Kerzner International Project Manager of the Year Award given to one project manager yearly anywhere in the world that demonstrated excellence in project management.
- The Project Management Institute also gives out four scholarships each year in Dr. Kerzner's name for graduate studies in project management.
- Baldwin-Wallace University has instituted the Kerzner Distinguished Lecturer Series in project management.
- The Italian Institute of Project Management presented Dr. Kerzner with the 2019 International ISIPM Award for his contributions to the field of project management.

Dr. Harold Kerzner can be contacted at hkerzner@hotmail.com



Dr. Al Zeitoun, PgMP, PMI Fellow

Global Future of Work Executive
Siemens DI SW
Ohio & Maryland USA



Dr. Al Zeitoun is a Future of Work, business optimization, and operational performance excellence thought leader with global experiences in strategy execution. His experiences encompass leading organizations; delivering their Enterprise Digital and Business Transformation; guiding fitting frameworks implementations; and using his empathy, engineering insights, and collaboration strengths to successfully envision new business models and execute complex missions across diverse cultures globally.

In his current role with Siemens, he is a Senior Director of Strategy responsible for driving the global program management practices, Masterplan governance, and enabling the Strategy Transformation portfolio processes and priorities.

In his position, as the Executive Director for Emirates Nuclear Energy Corporation, Abu Dhabi, UAE, he was responsible for creating the strategy execution framework, achieving transformation benefits, governance excellence, and creating the data analytics discipline necessary for delivering on the complex country energy mission roadmap.

At the McLean, USA HQ of Booz Allen Hamilton, Dr. Zeitoun strategically envisioned and customized digitally enabled EPMO advisory, mapped playbooks, and capability development for clients' Billions of Dollars strategic initiatives. Furthermore, he led the firm's Middle East North Africa Portfolio Management and Agile Governance Solutions.

With the International Institute of Learning, Dr. Zeitoun played a senior leader and global trainer and coach. He was instrumental in driving its global expansions, thought leadership, and operational excellence methodology to sense and shape dynamic ways of working across organizations worldwide. He speaks English, Arabic, and German and enjoys good food, travel, and volunteering. Dr. Al Zeitoun can be contacted at zeitounstrategy@gmail.com