Improvement

BAR & AAR During the Development of Operations

The solution and the team

CONTENTS

INTRODUCTION

BAR (Before Action Review) and AAR (After Action Review) is a simple, straightforward set of questions to ask before and after an important piece of work, whether it is preparing for a meeting, engaging with board members, or launching a new initiative. While deceptively simple, these specific questions can have a profound impact on a group's results. These questions help the team who are responsible for completing the piece of work create a shared vision of what success would look like and strengthen their collective thinking to achieve results.

You can think of a BAR and an AAR as bookends between the action. Together, BAR and AAR uses work to build a group's capacity to improve performance by comparing actual results with intended results, exploring the causes of those results, and applying the insights at the next opportunity. This practice, when used repeatedly, improves a team's ability to predict and address challenges in changing environments.

THE PURPOSE OF USING BAR & AAR

The primary purpose of BAR is to make sure that everyone in a group shares the same understanding of what they are trying to accomplish, how they would recognize success, and are actively thinking about how to achieve that. BAR is different from planning; instead, it involves the team questioning what needs to happen for the task to work.

BAR ensures that everyone in the team has a role to play in the success of the task. AAR, on the other hand, helps a group consciously test and refine its thinking and actions after a task has been completed. They will be able to use the results from the task as a guide while there is still time to improve the outcomes of a project or initiative. AAR asks a team to reflect honestly on their actual results compared to what they intended to achieve and to talk about what contributed to those results.

How BAR & AAR Has Helped the Army

The US Army's OPFOR (Opposing Force), a 2,500-strong brigade that assists with getting soldiers ready for battle readiness, is one example of successfully implementing BAR and AAR. OPFOR engages units-in-training in a variety of scenarios, all designed to be the fiercest scenarios that troops will ever face. The BAR and AAR process is based on studying the possibilities before the event, learning from the results and seeking to improve in the subsequent event.

Every month, a new brigade of approximately 4,000 soldiers confront situations, some of which may involve opposing an insurgent army, paramilitary units, or terrorists. All 4,000 soldiers contribute to the success of the operation and the knowledge is learned by them.

A further example is Shell Oil, which began experimenting with AAR meetings at the suggestion of board member Gordon Sullivan. This tool quickly became popular in the organization due to improving processes and outcomes of tasks. While most corporate AARs tend to be less rigorous than OPFOR, those who use BAR and AAR to make efficient shortcuts, smart solutions, and sound strategies will experience the same positive results.

Certainly, Leaware is very different from the Army, but the practices and principles of OPFOR are incredibly useful in organizations where people seek to learn through experience and aim for success. In every project we have developed, we have learned and recorded our learning. This means that every new project and product is better and more efficient than the previous one.

AAR is a mechanism for extracting lessons from one event or project and transferring them to another, and this is at the heart of OPFOR's ongoing success. Part of the success is contributed to learning being an ongoing process and that they are always seeking ways to improve processes.

At Leaware, we believe that continuous learning and improvement should be carried out in all organizations, especially in those where the objective is to develop digital products. This is because digital products need to evolve to remain current. While BAR and AAR is not widely used outside of the Army, Leaware recognizes how it can benefit the software industry and this is what makes our products successful.

When to Use BAR & AAR

BAR and AAR is simple, which means that you can conduct them around any task in just 30 minutes. Complete BAR any time you are about to do something as a team and are not certain what the result is going to be. The BAR will help a team to reflect on past results and what contributed to its success so it can be implemented in future tasks. Complete AAR when there is something to learn from the task that has just been completed, whether it was a victory or a disappointing result. The importance of AAR lies in the continuous improvement of processes and results.

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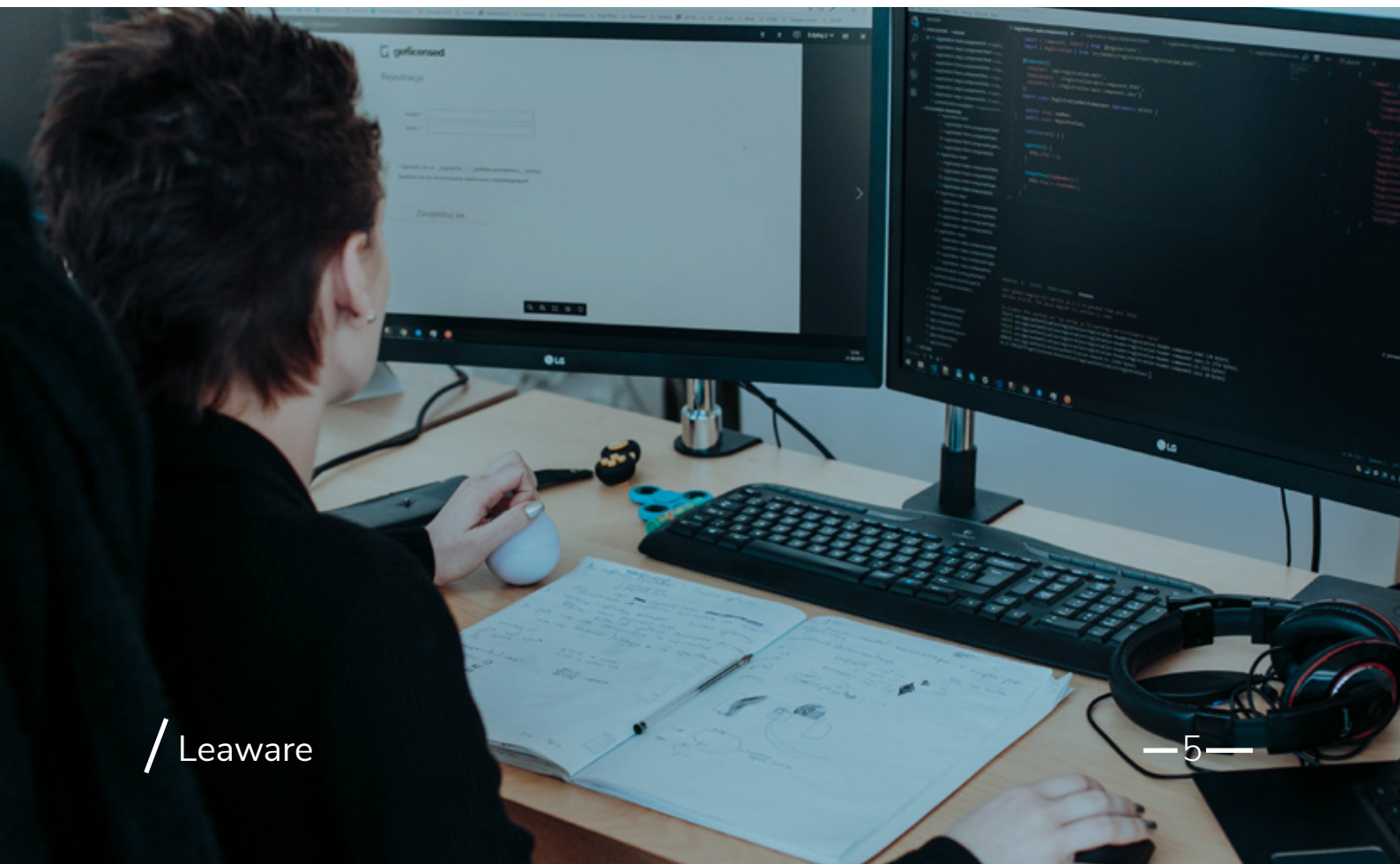
BAR and AAR is most powerful when done repeatedly around small, but important, pieces of work. Keeping the BAR and AAR short and simple makes them fit-for-purpose. Conducting regular BARs and AARs lead to productive meetings and noticeable improvements. The important thing here is perseverance and knowing what is learned.

Completing BAR and AAR repeatedly consolidates the team's learning, monitors improvements being made, and evidences the effectiveness of results.

Due to their simplicity, BAR and AAR can be used across a network of partners working together on a shared goal. Having this practice gives everyone a shared learning language and sensibility.
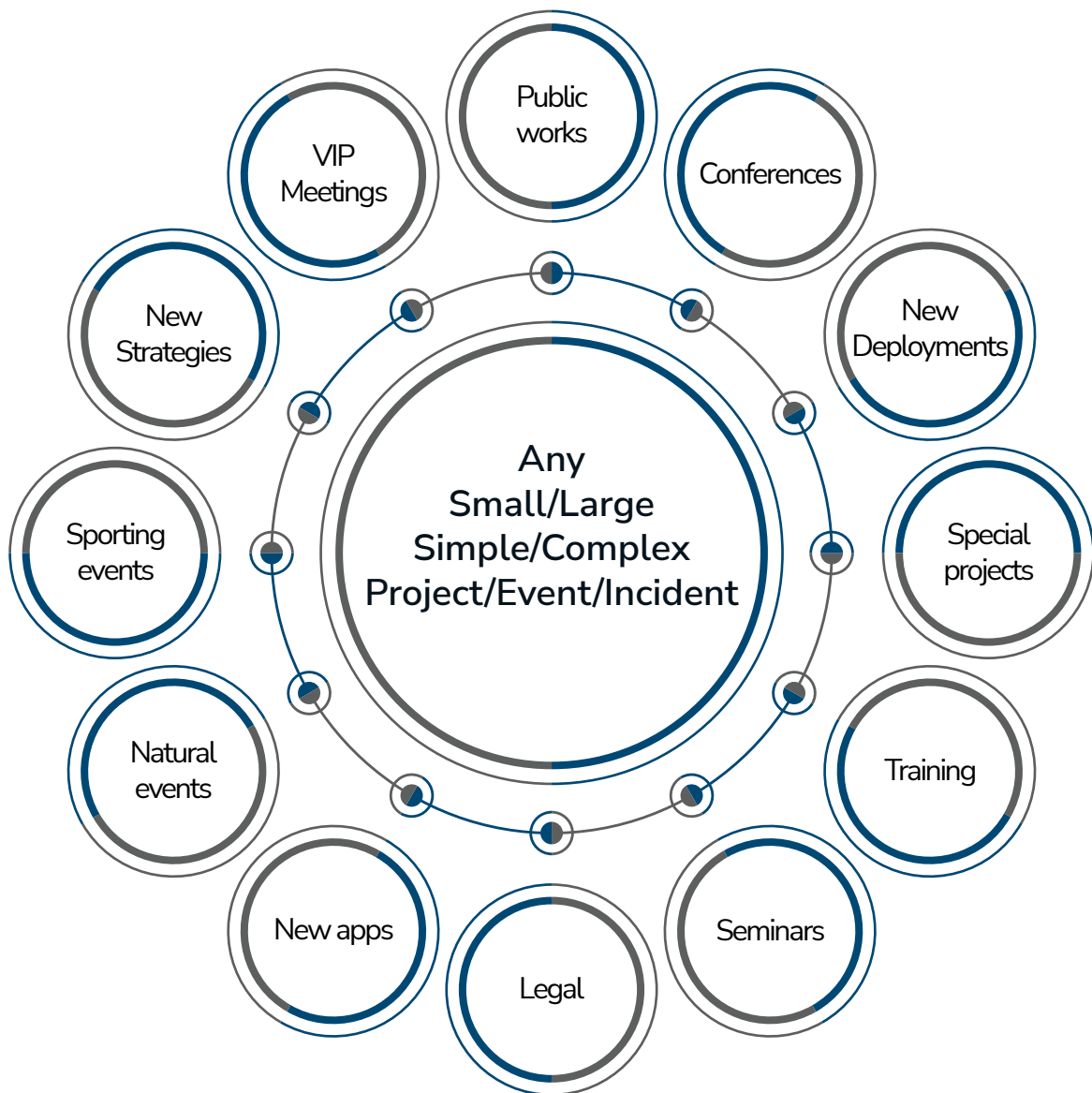
EXAMPLES OF BAR & AAR IN PRACTICE

BAR and AAR can be used by anyone in a company for any piece of work. When individuals in these roles use them to work toward a shared goal, it creates a learning ecosystem where results accumulate.

We apply the BAR and AAR methodology in each of our projects at Leaware at each stage of the development and design process. We regularly conduct BAR and AAR, consolidating our learning throughout. From the lessons that we learn through each development, we improve our processes and develop better digital products.

Strategy

A company can hold multiple BARs and AARs as part of their annual planning process. The BAR and AAR will focus on both the process itself, any lessons learned from the past year, and grants to inform the year ahead. A company can use BAR and AAR to prepare and reflect on conversations to advance their thinking in alignment with what's happening on the ground.

Using AAR in companies as a way to manage future solutions is an extremely effective technique because the results are strongly perceived. OPFOR treats every task as an opportunity to learn, how to approach a task, and how to think. The idea behind the review is to generate assets with knowledge, where learning is strengthened in every aspect of the team. The lesson is learned when it is successfully applied and measured.
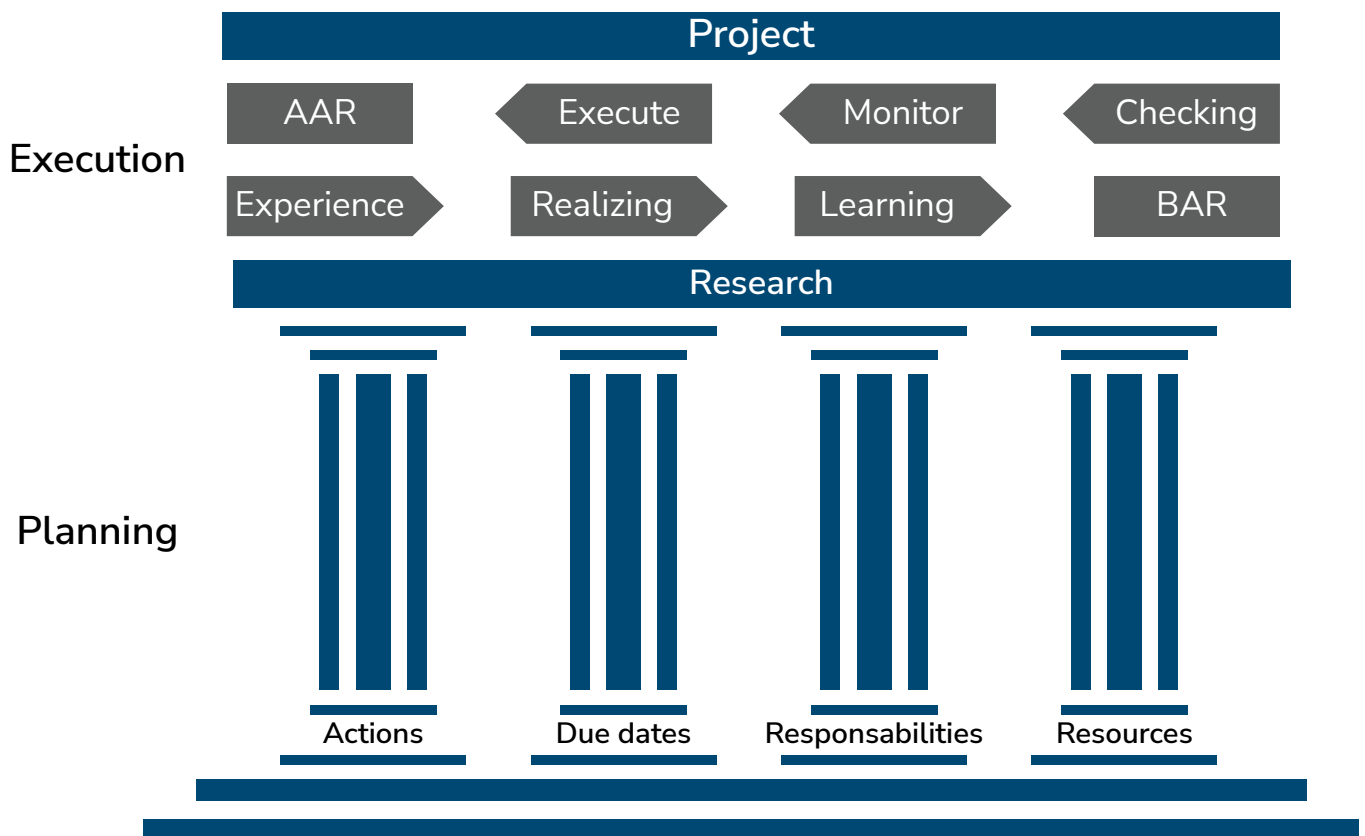
Benefits of BAR and AAR

BAR and AAR efficiently aligns the team's intent and their plan, anticipates challenges, and establishes an agile posture for execution. Planning the project and establishing the pros and cons of a strategy is an important step. This is because the risks, resources, and opportunities for success that the application of the plan may have in search of meeting objectives are evaluated. This shows what has been done and ensures that the team learns from the outcome. Benefits of BAR and AAR are:

• Develop the comprehensive capabilities of all team members.

• Improves the budget by constantly evaluating progress.

• Seeks the representation and integration of the organization's processes.

• Optimizes processes.

• Learn by doing and evaluating.

• Teams are prepared for risks and have an effective response to potential situations.

• Teams are open to opportunities for improvement to understand that each experience generates opportunities to improve.

What Will You Do Next Time?

If your organization repeatedly engages in very long projects containing multiple stages (like software development), you will quickly realize that next time can mean two different things. Sometimes, you want to use what you've learned in the next stage of the same project, but sometimes you want to use it in the same stage of the next project. Breaking the project down into smaller tasks helps to ensure the quality of the stages. Its purpose is to evaluate whether particular actions will improve the practice. At Leaware, we practice continuous learning with continuous improvement, ensuring the quality of the products that can be developed.

Speaking of responsibility, it's helpful when documenting this review to add who's name the action needs to be carried out by. Sometimes it means ensuring that things are done differently next time, and sometimes it means taking a specific new action in between projects to fix a problem at its root cause. Without well-defined assignments, it's very easy for the actions to be agreed upon in the AAR, only to find at the next review that no actions have been completed.

Project

Execution	AAR	Execute	Monitor	Checking
	Experience	Realizing	Learning	BAR

Research

Planning

| Actions | Due dates | Responsabilities | Resources |

WHY APPLYING BAR & AAR PUTS THE COMPANY IN A GOOD POSITION

Every company, team, and project will almost certainly have varying levels of planning, implementation, and evaluation. However, we've condensed the best practices from OPFOR and Shell, which apply BAR and AAR successfully.

Teams should commit to holding brief BAR and AAR sessions, keeping things simple at the beginning and gradually developing the process. This may mean adding rehearsals, knowledge-sharing activities and systems, richer metrics, and other practice-specific aspects, such as the implementation of practices and continuous reviews to demonstrate improvements.

While the specifics of BAR and AAR will vary depending on the company, four fundamental things are required. The team that completes the BAR and AAR profit first and foremost. While the full AAR is completed after the task is complete, preparing for the AAR begins right at the beginning of the task. Future actions must be directly linked to lessons. The leader of the team who is conducting the BAR/AAR review must hold everyone accountable for learning, notably themselves.
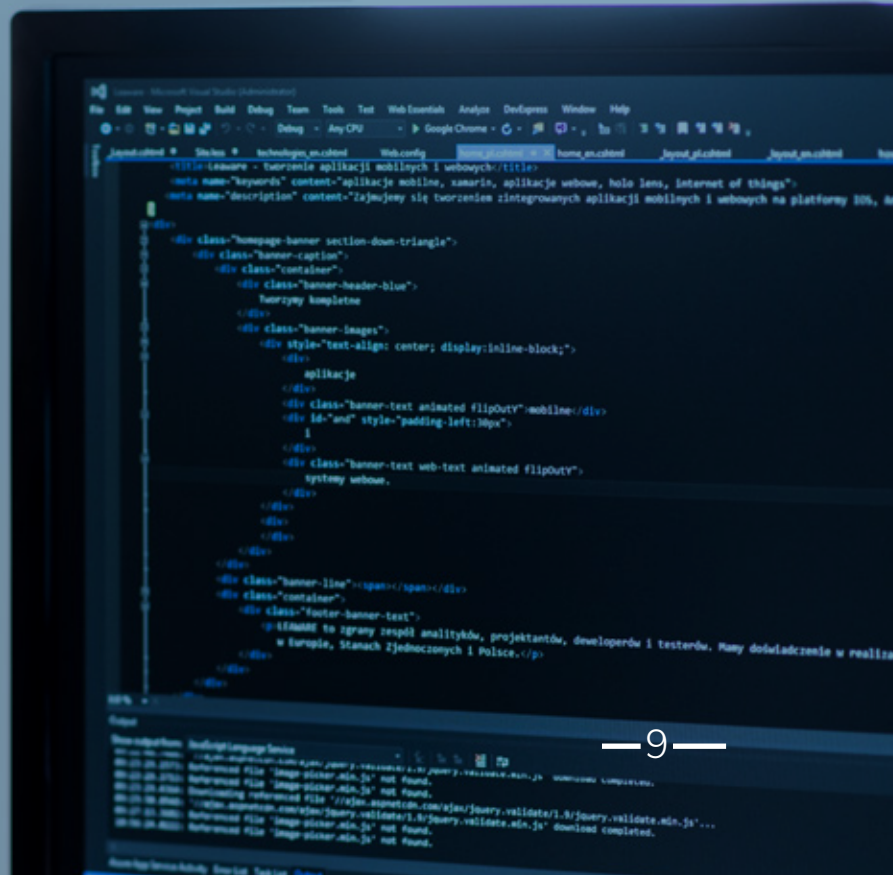
LEAWARE DELIVERS PROJECTS THANKS TO BAR & AAR

While other teams can have different common methods for organizing projects and delivering the first versions of the product they are developing, Leaware makes sure everybody knows what the goals are, what the current stage is, what the current bugs and issues are, and how to fix them. The team agrees on what has been done and what the outcome is. If there is any change, all team members are made aware.

The constant communication with the client and the team solves potential issues proactively. Delivery dates are followed and there is a low chance of problems arising. For new members of the Leaware team, staff are trained in BAR and AAR, as part of our mandatory training package. This is done to improve the quality of the final delivery and is a way to fix potential issues before the launch of the first version of the product.

During the testing stages, everything has been analyzed and previsions are prepared by using BAR. If there is an unexpected outcome during testing, the AAR will help to fix it and will make the team aware of the issue. This helps with clearing the path to get a smooth, functional product, according to the vision and needs the project requires. This helps Leaware to deliver the right products on time and with the right functionalities. We can check potential opportunities and issues that can be corrected. The projects become learning experiences and are of high-quality thanks to lessons learned from BAR and AAR.

CONCLUSION

AAR improves an organization's ability to perform in a range of situations by building tight feedback cycles between thinking and the task. The ability to learn lessons is more valuable than any single lesson in a fast-changing world. Companies can obtain this capability by learning from OPFOR's techniques. The BAR consolidates what has been learned from past experiences and seek to emphasize the actions that must be carried out before acting to ensure that the improvements identified before are effective.

Thanks to BAR and AAR, Leaware has been able to deliver more than 100 successful projects in the last decade. By implementing these techniques, we ensure that every process is registered and thus we can measure indicators of the digital products that we develop. With this, we ensure the continuous improvement of our products.

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Since 2010, LEAWARE has been helping start-ups and already established companies build and develop their digital solutions, making them grow, boost their businesses, and succeed.

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