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Asset Management

STRATEGY of



by Roberto Barrera

Asset Management Seen as a Chess Game



Chess is a challenging game that tests a player's ability to think methodically and strategically in order to beat an opponent. It involves specific knowledge and skills, along with a strategy. Engineers could probably say with confidence that all the attributes used to win a chess game are applicable to their work. They are especially prevalent when maintaining equipment. Chess attributes can help you successfully implement effective asset management strategies and help you win the game against your competitors.

When implementing asset management in an organization, it is not always about the tools and the systems available. In today's world, organizations have recognized that it is essential to use other dimensions to help with the implementation. This article explains these "out of the box" dimensions mentioned in PAS55 Standards for Asset Management and compares these attributes to chess strategies.

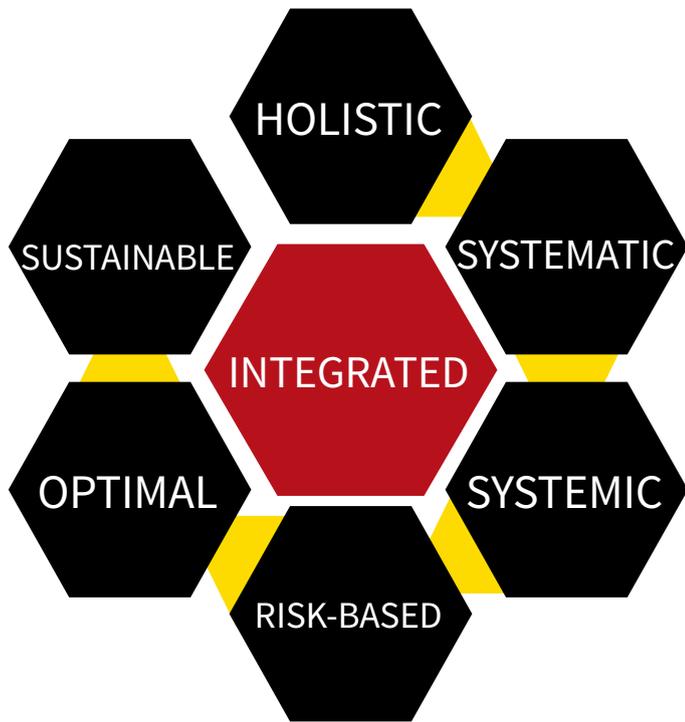


Figure 1: Key attributes for successful asset management implementation (Extracted from PAS 55-2:2004)

In a chess game, players need to evaluate the position of all chess pieces and plan for immediate and future actions to reach the strategic objective: Maintain the king's safety. The king is considered the most important asset on the chessboard and should be defended and protected. In order to accomplish this, players take into account different factors, such as the value of other assets and the position of all the pieces on the chessboard, to establish a strategy that leads them toward the main objective. This type of planning requires a disciplined approach to minimize the loss of pieces and defend the king, keeping him alive. Similarly, based on PAS55, effective implementation of asset management requires a disciplined approach to enable an organization to maximize value and deliver strategic objectives through managing its assets. This needs to be accomplished over their entire lifecycle to "keep them alive."

In chess, strategic players set up all moves from the first to the last. Whenever they move a piece, they often have planned for many moves ahead and account for many potential moves. Similarly, in asset management, it is necessary to consider the entire lifecycle of the assets. This includes the selection of appropriate assets during the design phase, efficient operations and maintenance of those assets, and adoption of an optimal renewal and decommissioning program. An effective asset management strategy will provide many benefits associated with several key principles and attributes during the entire lifecycle of the assets.

Figure 1 shows the seven key principles and attributes associated with the benefits of asset management.



Holistic: In chess, a holistic approach involves the use of all 16 pieces with their respective moves along the chessboard. Similarly, in asset management, the strategy must be multidisciplinary (all the pieces) and focus on all the different points of view and options (all possible "moves") in order to win. If you play only with

the pawns, or in this case with a few stakeholders at your organization, it is unlikely you will gain victory. By using all your pieces in an aligned organization, you increase your odds of winning. By aligning and using all departments with one purpose, you are able to explore every move and decide your best strategy.



Systematic: In order to win the chess game, a rigorous rational, methodical and structured way of playing is used. In an asset management strategy, using a systematic approach allows you to promote consistent, repeatable, and auditable actions and decisions. An approach lacking a systematic plan promotes chaotic decisions, like in a chessboard, resulting in losing the game. Before the game begins, there needs to be an organized plan to guarantee standardization on every move made during the "game" lifecycle. As in chess, asset management needs to be implemented and managed in an organized, planned and consistent way.



Systemic: All chess pieces must be put in the game. In asset management, the pieces are all your assets. All assets must be globally considered and managed. Consider all elements that add or reduce value to avoid confusing or ambiguous strategies that could affect reaching your main objectives. The same way a chess game cannot be won using only bishops or knights, organizations should not use only individual assets, nor isolate and manage them separately. Consider all assets, including their performance and risk (i.e., cost) of losing them.



Risk-Based: On the chessboard of asset management, all risks have to be evaluated. All decisions, actions and plans must be based on this risk-based approach. Pieces cannot be moved and actions cannot be executed if the probability of an expected outcome is unknown. Once the risks have been identified, resources, costs, effects and actions must be considered and prioritized in order to implement necessary control measures. And all of this must be done before choosing the next move. A good asset management chess player is characterized as a proactive person. This person is always looking three or five moves ahead. Thinking this way can avoid additional costs to health, safety and the environment.



Optimal: In addition to considering risks in both chess and asset management, every decision and move made must ensure the least impact to the other pieces on the board so they can continue the battle and survive short- and long-term challenges. Asset management plans must include clear methods to obtain the best results from the assets. In order to do this, it is necessary to examine all factors, such as cost, risk, performance, durability, availability and reaction time. All these factors need to be compared, analyzed and balanced to guarantee optimal results.



Sustainable: Good chess and asset management players do not win by making random moves. Thinking before every move and maintaining a strategy can ensure them victory in the long term. Every single move on the chessboard will impact the entire lifecycle of a chess game. In asset management, you must consider all long-term consequences of short-term activities. In chess, when good players make a move, it usually has a long-term effect. However, when the contender counterattacks, the player initiating

the move must be prepared to maintain or modify the strategy. In asset management, taking the first action or decision will have long-term consequences. Adequate provisions should be maintained for future requirements or changes. These often include environmental, financial, or human performance adaptations to improve and sustain the strategy over the entire lifecycle without loss.

“ By aligning and using all departments with one purpose, you are able to explore every move and decide your best strategy. ”



Integrated: By definition, integration is the combination of two or more things to create something new. For asset management this means all parts must be combined and aligned. It's the same in chess. It is very important to recognize interdependencies between the pieces in a chess game. In asset management, integrating individual capabilities increases the possibility of achieving success. Winning the game requires a combination of individual attributes coordinated to deliver a team-based approach. In chess, a player can't win by only using knights and pawns. This would compare to using only supervisors or human resources personnel in an organization. To win the game or be successful in an implementation, the player must use all

the attributes of all the pieces. Often, some pieces might need to be sacrificed, others will be exchanged, others may hide, but all with a purpose to win the game.

Similar to an effective asset management strategy, a skillful chess player uses a holistic approach to integrate all the different attributes during the lifecycle of the game. In chess, after the opening moves, the player starts unfolding the plan or strategy to reach the specific objective of winning the game. Many players will resign even before the end of the game. This resignation happens when the strategy and implementation are not effective or were not adapted to the circumstances of the game.

The same resignation can happen during an asset management program. The lack of consideration of key principles can create barriers that will make the asset management implementation harder or impossible. In addition to not considering the key principles outlined in the PAS55 suite of standards, there are other factors that can promote failure of an asset management strategy. These risks include: not knowing what assets you have and their capabilities (lack of knowledge in the capabilities of your chess pieces); lacking or exceeding maintenance (under/over use of chess pieces); employing improper operations (game rules ignorance); and underestimating your asset capabilities (undervaluation of the power of your chess pieces).

When considering an asset management strategy, consider the game of chess. Preparation, along with holistic integration, can help produce a successful outcome and keep your king alive.



Roberto Barrera is an EE with 19 years of maintenance experience. During his career he has worked with a variety of different industries and recently, Roberto has worked in all plant lifecycles and developed extensive knowledge about customization, implementation and management of maintenance and reliability programs. He works at GP Strategies as a Manager and as an M&R Engineer. www.gpstrategies.com

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