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Research Article

Risk-Based Performance Management as a Trend and a Must

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Abstract: The terminology of performance management is very familiar to most leaders and they are responsible for conducting performance management on their own units and their subordinates. The current concept and practices of performance management, however, need to be reviewed and modernized due to VUCA, volatility, uncertainty, complexity, and ambiguity, or TUNA, turbulence, uncertainty, novelty and ambiguity, that potentially leads the deviation of execution and performance from the plan. This paper explores the new development of the models as well as empirical observations of the struggle by various organizations to combine risk management and performance management. As a result, this paper comes up with the proposed operationalization of risk-based performance management as a model for business and public organizations in order to enhance their probability of executing their plans and reaching their objectives.

Keywords: Risk Management, Performance Management, Risky Performance, Risk Appetite, Key Performance Indicators, Key Risk Indicators.

I. INTRODUCTION

The terminology of performance is very familiar to most leaders, specifically to those whose work is related to human resources, such as human resource directors, human capital development managers, and performance managers. However, every leader is responsible for conducting performance management on their own units and their subordinates. They have to sit down to make an agreement on what performance to be achieved, how to achieve it, and the requirements to achieve the performance. The agreement has to be followed by execution, monitoring, and control.

Most modern companies have a unit or department with the responsibility of ensuring the quality of performance management. However, the public sector also has been introducing performance management after the era of the implementation of performance-based planning and performance based budgeting. Every officer is demanded not only to use the resources or input under their authority as maximum as possible but also to ensure the quality of activities or processes, outputs to be produced, outcomes and benefits to be offered, and impacts on their stakeholders.

Current trends create new challenges to performance management. The challenges are well known as VUCA or TUNA. VUCA stands for volatility, uncertainty, complexity, and ambiguity, while TUNA stands for turbulence, uncertainty, novelty, and ambiguity. Both terms, VUCA and TUNA, introduce the facts that bring uncertainty and risk into existence and affect the dynamics of performance management. The more intensive VUCA or TUNA is, the higher the possibility that actual performance may deviate from its planned performance.

The question is how organizations, either business or public institutions, respond to those challenges in order to enhance the quality of performance management? How do organizations combine performance management and risk management into a single model? The paper attempts to answer those questions.

II. CURRENT VIEWS ON RISK AND PERFORMANCE MANAGEMENT

A) Defining Performance

Performance is about the measure of effectiveness and efficiency of strategy, programs, or initiatives implemented by an organization. Effectiveness is related to the achievement of objectives or goals as planned. An employee or a leader may put a lot of effort into reaching their targets. They are considered to fail if they cannot reach their goals. They are called partially successful if they are able to reach a portion of goals or output.

Efficiency is concerned with the level of resources sacrificed to reach the goals. In short, performance is the achievement of organizational objectives. Being efficient means the ability to avoid any wasted resources in order to conduct jobs and reach goals. Wasted resources may be in terms of financial resources, human capital resources, intellectual capital, social capital, environment capital, technology capital, time, and any other kind of resources that have value for stakeholders. Geamanu (2011)



defines economic efficiency as a comprehensive concept of minimizing resources accruing to a unit of effectiveness. The concept of economic efficiency can be applied both to business and public sectors. This definition is similar to that defined by Johnes et al. (2017)

There are at least three kinds of efficiency. Gao et al. (2006) use the terms resource allocation efficiency and operational efficiency in their study of the healthcare system. Rahman et al. (2021) used the term organizational efficiency when they conducted a study on the effective information system organizational efficiency in technical and operational perspectives on both public and private sectors. In essence, the three kinds of efficiency are allocation efficiency, operational efficiency, and information efficiency. In addition, operational efficiency may be divided into two types, i.e. technical efficiency and productive efficiency (see Palmer and Torgerson, 1999).

For goals or outputs that can be quantified, practitioners and academicians combine effectiveness and efficiency into a single measure, which is called productivity. According to the Institute of Cost Accountants of India (2020), productivity is defined as the ratio of output divided by input. Potocan (2006) underlines that in order for an organization to achieve adequate results in terms of operations and behavior, it needs to achieve at least two basic conditions, i.e. to use available resources for the creation of the results adequately and to achieve the results.

Sonnentag and Frese (2005) write an article that provides an overview of the concept of performance. Performance can be categorized into behavioral aspects of performance and outcome aspects of performance. In terms of behavioral aspects, performance is defined as what individuals do as their job and contribute to the achievement of organization goals. Behavioral aspects, then, are basically the process aspects of the organization system performed by individuals in the organization. Outcome aspects defined performance as the results or consequences of individuals' behavior.

Results have several levels, i.e. outputs, outcomes, benefits, and impacts. These levels are familiar to be implemented in the public sector. Outputs are immediate results of behavior. Outcomes are the direct usefulness of output. The benefit is the usefulness of the outcome in solving problems by beneficiaries. Impacts are general benefits by society at large, at the local or national level. For example, a project of building a bridge comes up with the output of a bridge with predetermined specifications. The outcome could be in terms of the people who can use the bridge from one place to another. Benefits could be in terms of easiness, safety, and efficiency of crossing a river. Impacts may indicated in the increase of efficiency and economic growth.

Sonnentag and Frese (2005) suggest that performance can be considered from three kinds of perspectives, i.e. individual difference perspective, situational perspective, and performance regulation perspective. Individual difference perspective argues that performance across individuals can be different due to the personal underlying factors such as ability, personality, and motivation. Bear in mind that individual performance itself is dynamic. Every individual follows the transition stage and maintenance stage at their job (Murphy, 1989). At the transition stage, the individual comes into a new job with new tasks. Cognitive ability contributes a lot at this stage. At the maintenance stage, an individual has acquired a significant and adequate competencies to perform their jobs. The way the work is a kind of automatic. In order to perform well, individuals need to enhance and maintain three determinant factors, i.e. declarative knowledge, procedural knowledge, and motivation (Campbell et al., 1993).

Situational perspective, according to Sonnentage and Frese, proposes that performance may be influenced by environmental factors that stimulate individual performance. Environment factors include expectancy, reward and punishment system, perception of equity and fair treatment by organization, and leadership factors. The performance regulation perspective, on the other side, stresses the process of doing or performing individual roles and tasks. This is about mental model, management process, and feedback. The mental model is related to the way an individual approaches problems to reach solutions. The management process is related to planning, determining goals, executing, monitoring, and controlling individual to perform their roles and tasks. Feedback is related to the way feedback is given and points to be stressed in giving feedback.

There is another way to consider perspectives of performance. There are three performance perspectives, i.e. short-term versus long-term performance, past versus future-oriented performance, and performance versus risk. Short term performance is important to ensure an organization is able to produce and provide important ingredients to survive and operate. The main short-term ingredient is cash flow from operations. Short term performance is also important as the control of the organization that it is on the right track toward predetermined goals. Long-term performance, on the other hand, is crucial to ensure that the organization produce something in order to enhance the sustainability or ongoing concern of the organization.

Past performance is concerned with anything as the results of past activities and the results are related to current goals. Future-oriented performance is results or indicators that can be used as the drivers of future goals. The performance versus risk perspective stresses the importance for any organization to consider not only results that are in line with future goals but also any event that may potentially deviate the predicted results deviate from planned goals.

It is important to underlie that performance must be derived from the demand of stakeholders to make organizations look good, even great, in their eyes. This means that organizations must be able to identify their stakeholders in terms of their needs or demands and their capacity to influence the organizations. Organizations need to respond differently and appropriately according to at least those two factors. In general, stakeholders of a business entity at least include customers, employees, management, board of directors, shareholders, suppliers, and government. Stakeholders of a public institution may include constituents or citizens to be served.

B) Defining Risk, Risk-Free, and Risky Performance

People define risk differently. Some focus on downside risk. In this perspective, a risk is an event that may lead to potential loss. An event itself is defined as unplanned, unwanted, something to take place. Another focus on upside risk, i.e. an event that provides opportunities for the organization if it is ready to exploit, gives additional benefits. Opportunities in this definition refer to additional opportunities outside those that have been identified in the planning process that aim to reach goals.

Figure 1 shows the illustration of risk. An Organization determine its objectives or goals and prepare a plan to reach them. There are possibilities that events may occur alongside the execution of the plan. Those events potentially deviate from actual results from objectives or goals.



Figure 1: Risk

Academicians and practitioners are now concerned with speculative risks, not only pure risks. Speculative risks are events that may cause potential loss or gain. As mentioned above, speculative risks have both upside as well as downside risks. Pure risks, on the other hand, are events that may affect an organization to suffer potential loss. In other words, pure risks only consist of downside risks.

The beauty of risk is the fact that organizations can measure and manage them. Risks may be voided or reduced if they exceed the risk appetite determined by the top management of the organization. They may be retained if the risks are at a safe position or below risk appetite. Even more, risks may be deliberately allowed to exist in an organization because the consequence of risk is far below the benefits if the organization is ready and able to exploit the opportunities inherently available within the risks.

In a perfect world, everybody can do anything they plan and reach their purposes or goals without any deviation. This is a risk-free condition. In terms of performance, you will attain the planned goals and objectives perfectly.

Those who work as portfolio managers. The terminology of risk-free asset and risk-free return is very common. A risk-free asset is an asset that provides a certain return to investors. Some argue that an asset that provides a risk-free return has zero standard deviation of its return (see, for example, Chen, 2021). Most people use Treasury Bills to represent a short-term risk-free asset and Treasure Bonds to represent a long-term risk-free asset. Some argue that those assets can be treated as risk-free assets because they are issued by a sovereign that is free of risk.

The above concept of a risk-free world indicates that an investor who, by a treasury bill or bond, will receive a certain level of return with certain because the investor knows the promised return before the investment is executed, and the government is assumed never to fail to pay their promise.

This risk-free world may be reflected in the organization that conducts activities to reach its goals. The organization is in a risk-free world is it can achieve its goals for certain, without any chance of deviations.

The risk-free world, however, is under challenge. Let us think again of the portfolio world with T-Bill or T-Bond as risk-free assets. Some challenge the real meaning of being risk-free. The assumption that the government will certainly pay their promise limits the definition of being risk-free only in terms of liquidity risk. This assumption is questionable nowadays. Conceptually, a government with an amount of debt that is more than 60% of GDP has a low-quality creditworthiness. The higher the percentage, the higher the possibility that the government cannot fulfil its obligation to pay its debt, including the interest

rate. Practically, some countries are currently considered as high risk due to the crisis, COVID-19, and fast development of the technology environment that cannot be responded to properly. The crisis of 1997 indicated that some countries could not pay their debt or default. This also happened to local governments or municipalities that released municipal bonds. This means that being free from liquidity risk is now questionable.

White and Haghani (2021) argue that a risk-free asset cannot be obtained within the last 70 years. So called risk free assets may go default due to inflation, taxation or repudiation. An alternative to providing a risk-free asset is by designing a shadow, ersatz, or pseudo-risk-free asset by combining risky assets. However, since a pseudo-risk-free asset that is expected to provide certainty and equivalent return to the investor is designed on the basis of historical data, the definition of a risk-free asset is still doubtful. This is because past data do not always have exactly the same behavior as future data. In other words, a pseudo risk-free asset may not perform as risk risk-free asset in the future investment period.

Investments to others than T-Bill and T-Bond certainly contain various risks. Risks associated with portfolio investment are not merely liquidity risk. Other risks may include price risk and interest rate risk. Investment in foreign assets may include other risk, such as exchange rate risk and political risk.

Again, using the above argument to be implemented in companies or other organizations, it is obvious that there is no such risk-free risk performance to be achieved by any organization. Every business is a risky business. KPIs that represent organization performance are not free from risks. Activities or initiatives also face various risks. Furthermore, VUCA, volatility, uncertainty, complexity, and ambiguity potentially disturb activities to be performed and KPIs to be reached.

Harvard Business Review provides explanations and examples of VUCA (Bennett and Lemoine, 2014). Volatility is the tendency to change around a certain point, standard, or target. Large volatility represents the vast dynamic and nature of swing around the standard. Uncertainty is a condition with a lack of predictability and provides surprises due to the low sense of awareness and understanding of risk events. Complexity is a condition with multiple forces that confound the issues. There is no clear cause-and-effect relationship among the forces. Ambiguity shows the haziness of reality because of the mixed meaning of conditions and causes end-effect confusion. This may result in the potential of misreading the condition.

Let paradox be added to VUCA. Paradox means a self-contradictory and logically unacceptable conclusion. The development within the last three years indicates that every organization need to consider this issue. Since Covid-19 broke out, every organization has been realizing the fact that the implementation of remote working, online activities, work from home, and work from anywhere is real and very possible. From the first day WFH and WFA were introduced, offices became so quiet. Most people, and mostly the young generation, such as millennials, happily work from various locations alone. It is important to underlie the word alone as the result of IoT, the Internet of Things. In this situation, the business of technology that fulfil these needs grows rapidly.

At the same time, the same people who work as solitary, independent workers in fact, need to meet others because they are social beings that always need to interact with others. Therefore, businesses that provide opportunities for those who work as solitaires, including the millennial generation, are also growing, such as café, music concerts, group trips, etc. These businesses are the paradox of IOT businesses explained above.

Figure 2 shows the comparison between risk-free versus risky performance. The left side shows the risk-free performance, while the right side shows the risky performance.

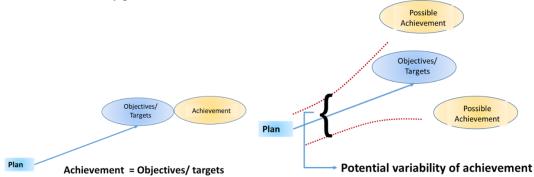


Figure 2: Risk-free versus risky performance

In the first step, an organization determines plans and targets. Under risk-free conditions, the plan can be executed without any deviation, and targets can be achieved by one hundred percentage with certainty. Under risky conditions, the plan may not be able executed exactly as planned. There may be deviation due to VUCAP, VUCA, plus paradoxes. As an impact, the actual results may deviate from planned targets. The right picture shows the dotted lines above and below the straight line. The distance of the dotted lines indicates the level of risk. More distance means higher risk faced by the organization to reach its objectives or targets.

Let's define the performance of an organization in two terms, i.e. business performance and risk performance. Business performance is related to the things to be achieved by the organization. The things could be in terms of objectives, targets, goals, or KPIs. Risk performance, on the other hand, is related to the achievement of confidence level of business performance. Both definitions of performance stress that business and risk performance cannot be separated because they are linked to one another. They are two different faces of the same coin.

Those who hold positions as managers or work in human resources or human capital departments should be familiar with the terms of business performance. Business performance is derived from the demands of stakeholders that have different interests. Those stakeholders include external as well as internal stakeholders. For example, shareholders or founders of the organization may request financial healthiness, profitability, and growth of the organization. The government may request an organization to contribute to economic development and social cohesion. Tax office demands organization to pay tax at due time. Customers need to be able to solve their problems by using products provided by the organization. Employees demand secure, progressive, wealthy, and healthy work.

Organizational business performances are broken down or cascaded to lower levels in the organization until the lowest level and every employee. Risks may happen at any activity, objectives, or goals at any level, from top to bottom of the organization. As a result, the organization needs to integrate all risks of the entire organization to determine whether total risks exceed the risk limit, risk appetite, or risk capacity. By doing that, the organization not only attempts to reach its business performance but also risks performance.

III. FROM PERFORMANCE MANAGEMENT TO RISK-BASED PERFORMANCE MANAGEMENT

Let's start with a quite long definition of performance management. Management itself is about POAC or planning, organizing, actuating, and controlling activity. Some prefer to use PDCA which stands for plan, do, check, action activity. Performance management, then, is defined as a PDCA process that is communicated and conducted regularly and continually between superiors and their team or subordinates that starts from pre-assignment, during the assignment, and post-assignment within a year in relation to the agreement of objectives to be achieved, role to be held, duties and activities to be conducted, and competencies to be mastered as part of the achievement of organization's objectives and vision.

Aguinis (2013) defines performance management as a continuous process of identifying, measuring, and developing individual as well as team performance that supports an organization's strategic objectives. Armstrong (2000) defines performance management as a strategic, integrated process of reaching organization success by continually enhancing the performance and capabilities of individuals and teams that contribute to the success. These definitions essentially have the same meaning as the definitions explained above.

The aforementioned definition of performance management has at least five main components. Firstly, communication. It is about the interaction between superiors and their subordinates or teams in order to build trust and understanding. Communication is conducted from before the superior gives assignments, and subordinates and teams start working. Both sides need to communicate openly and objectively.

Trust and understanding are very crucial because both sides, i.e. superior and their team or subordinates collaborate for a long time as long as they are in the unit. They need to agree on roles, duties, activities to be conducted, and objectives to be achieved. Objectives need to be SMARTER in the members' eyes. SMARTER is an acronym that stands for Specific, Measurable, Attainable, Reasonable, Time-oriented, Encouraging, and Rewarding. Team members or subordinates need to feel comfortable with the objectives to be given, and they are expected to fully accept the challenges. This can happen if both sides trust each other.

SMARTER itself could be unique to every person. Something specific to one person may be considered general by others. While terms of measurable tend to be clear for everybody, the meaning of attainable could be differently understood. Someone may be confident that the objectives assigned to them can be attained, while others feel a lack of confidence to be successful. Some others may be confident to reach the objectives but be reluctant to take responsibility due to a lack of motivation. Some team members may not have strong motivation to work because they do not clearly know the consequences of achieving or not achieving the objectives.

Misunderstanding, misconception, and collaboration between superiors subordinates and team members can be overcome only through good communication. For this reason, every employee has to have a certain level of skills. Even more, those who hold structural positions have to master communication skills as a necessary requirement.

Secondly, roles. Every employee in an organization has roles that are described in a document called job description. It elaborates some key information such as the function of the position, roles of the job holder, objectives of the position, authorities, and interactions with other positions within the organization as well as with outside stakeholders.

Every component written in the job description must have a linkage with strategic aspects of the organization, i.e. vision. Mission, strategic objectives, and values. These strategic objectives must be cascaded from the top to the bottom of the organization. Every employee has to understand the roles, and every manager has to ensure that subordinates and team members understand and accept the job description.

Thirdly, the management process. Management process is about PDCA, plan, do, check, and action. All four activities in the management process are conducted continuously, to some extent consecutively, and in many cases interactively. The PDCA mechanism needs to be applied in performance management on the basis of two important requirements, i.e. positive, constructive, trust communication and clarity of roles.

PDCA needs to be implemented formally and informally (Palermo, 2017). The formal mechanism is important because an organization is a legal entity. Therefore, various activities, including PDCA in performance management, have to follow a formal mechanism that is accepted legally. However, a formal approach in performance management makes the relationship between superiors – and subordinates become so rigid that the organization may lose its flexibility and personal connections. Therefore, informal mechanism needs to be taken into action to make communication fluid, connection-relation-collaboration becomes stronger, trust building easier, and performance better than if the organization merely depends on formal mechanisms.

Fourthly, timing. Performance management is conducted all the time from the first time an employee joins the organization until termination. More specifically, performance management must be communicated continuously or at least regularly. Managers have to know when to conduct a meeting with the team or subordinates to agree on the performance to be achieved, the ways to achieve, and competencies as the requirements to achieve agreed performance. Managers also need to know when to monitor the progress, give feedback and feedforward, and take necessary actions if employees deviate from their roles. Managers also need to know the right time if the performance agreement needs to be reviewed and revised.

Fifthly, objectives. As previously mentioned above, objectives are important in performance management. It is important to underlie that objectives must be accepted by both sides, i.e. employees and managers. Both sides also need to ensure that the objectives support the achievement of objectives of higher positions, objectives at the organization level, and ultimately organization's vision.

The objectives assigned to an employee have to be in line with the role of the employee. In addition, in order for the objectives and role to work properly, the employee needs to occupy not only competencies but also support from the organization. The supports include equipment needed to run the job and authority to make decisions and to manage certain organization resources.

It is important to stress that effective performance management needs a strong, active role of the line manager of every department and support from the human resources department. Line managers have to have a strong sense of belonging to performance management and take accountability. Every manager has to communicate clearly and involve every employee effectively to ensure that performance management belongs to everybody, not only managers and the human resources department. Every line manager is responsible for any deviation from the performance of their job as well as their unit. Managers are also required to ensure the objectives are in line with the organization's values and purposes. Sometimes, an organization needs assistance from external parties in designing performance management that is unique and specific for every organization. Companies within the same industry and compete with each other, for example, have different performance management, objectives, ways to reach the objectives, etc., because they have unique and different strategic aspects. The uniqueness is not only between competing organizations but also between units within an organization. Fletcher and William (1992) and Armstrong (2000) agree that these points are crucial for good performance management.

Under a risky world, performance management and risk management need to be applied hand in hand to make organizations confidently perform well to execute planned initiatives and programs and to reach goals and objectives. In a simple statement, RBPM, risk-based performance management, is the synergy of PM, performance management and risk RM management (Creelman and Smart, 2013). In a simple equation, RBPM is equal to PM + RM.

How does the RBPM equation work in real life? Let's start with the RBPM methodology provided by Smart (2021). This methodology consists of three parts, as shown in Figure 3, i.e. framework, process, and tools. The left side of RBPM methodology is the framework. The center of the RBPM framework is the probability of execution. Another term appropriate to express the center of RBPM is the confidence level of execution. High probability means a high confidence level.

The ability to execute strategy to reach objectives depends on two main components, i.e. strategy execution – performance management component and appetite alignment – integrated risk management. The first component stresses that organizations have to elaborate strategy and strategic objectives into units' objectives and various initiatives and programs to support the achievement of the unit objectives. The proper cascading process of strategic objectives and strategic initiatives ensures the execution of units' initiatives and the achievement of units' objectives means the success of strategy and the achievement of strategic objectives. For this to happen, the cascading mechanism is the key.

Organizations need to translate units' objectives into individuals' objectives. Individuals' objectives are then translated into KPIs. Every employee and manager controls their performance based on the KPIs assigned to them.

The second component, appetite alignment – IRM, suggests that organizations need to translate risk appetite into the IRM process. The purpose is to ensure organizations that there are no risks beyond appetite; otherwise, organizations will get into trouble. IRM take the role of ensuring that all risks are managed properly and put organizations in a safe condition. All risks are at the calculated, acceptable level. There is the possibility that risks may be beyond risk appetite. This is described briefly later on based on Figure 6.

Smart (2021) suggests four enablers for both strategy execution – performance management component and appetite alignment – IRM. Those four enablers are value, driver, accountabilities, and culture. These enablers make those two components work efficiently and effectively. Drivers are also known as business factors, i.e. the key factors to be mastered and executed to create and enhance value. Every organization has its own value drivers. Low-cost carrier, for example, very much depends on efficiency as a factor. High-class cars, on the other hand, advanced technology is one factor among other factors. Different value factors or drivers derive different strategies and risks. Organizations have to ensure that the factors are translated into a proper strategy and risk appetite as the basis for developing performance management and risk management.

Accountabilities, according to Smart (2021), are meant to be authorities that consist of four categories: i.e. accountabilities or being accountable, responsibility or being responsible, being consulted, and being informed. Someone who is accountable is the one who has the authority to manage certain resources and make decisions. Accountable persons can say yes or no to a certain decision and become the ones to achieve something, such as results or process. Someone who is responsible has the job of implementing or doing something assigned to them. While a consulted person is involved in decision-making before the decision is made, an informed person is given information on the decision, process, or results after the decision is made and executed.

Value as an enabler encourages organizations to identify value being created, enhanced, or protected by the organization as well as by every unit or individual in the organization. Value is a benefit that can be offered to stakeholders, both internal and external stakeholders. Customers may get value in terms of the benefits of using the product, either goods or services or a combination of them, provided by the organization, and this benefit may be measured in terms of the ability of the product to solve the problem or need of the customer. The government reaps the benefits in terms of taxes and jobs created to reduce unemployment. Organizational perspectives may consider value in terms of financial capital accumulation such as profit, cash surplus, or increase in net assets, social capital, environment capital, market capital, brand strengths, etc.

Culture, or more precisely risk-based culture, is about the way everybody does things to execute decisions and to reach objectives while, at the same time, always considering risk embedded in decisions and objectives to be managed properly.

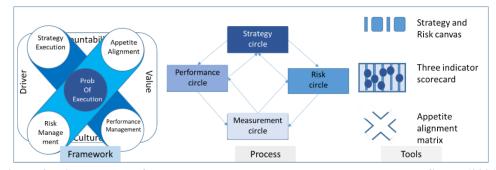


Figure 3: Risk-based performance management methodology suggested by Smart (2021)

The second part of the RBPM methodology is the process. It is about translating strategic objectives into smaller, deliverable objectives assigned to every unit or individual within the organization. To do that, there are four circles within the RBPM process, i.e. strategy circle, performance circle, risk circle, and measurement circle.

The first circle, i.e. strategy circle, means that top management defines a strategy or strategic plan that is in line with risk appetite. Some individuals in top management may have high ambitions to reach a high level of objectives, while others may take a conservative position by setting a low level of strategic objectives. In the end, they have to compromise the strategic objectives to be set and cascade the strategic objectives into more executable objectives. Both strategic as well as operational objectives must be within risk appetite.

The second circle is about the performance circle. Strategic objectives are detailed into operational objectives to be assigned to each unit. Units, as a consequence, develop initiatives and conduct the initiatives in order to achieve operational objectives. Every unit has to watch the risks that may happen and take necessary actions. Units are also required to monitor the progress of initiatives and the achievement of operational objectives. Any deviations must be evaluated and become the basis of review or revisions on either operational objectives or initiatives. Any revision must be informed to a higher position and ensured that the revised initiatives and operational objectives are still fully aligned and support the strategic objectives.

The third circle, i.e. risk circle, is about implementing a risk management process. The purpose is to ensure that risk is within risk appetite. Again, it is possible that some risks are allowed beyond risk appetite in certain conditions, as explained later and referred to in Figure 6.

The measurement circle, as the fourth circle, is about assessment and indicators to be used to evaluate the effectiveness and efficiency of those three circles. Smart (2021) suggests three indicators. They are KPIs, key performance indicators, KRIs, key risk indicators, and KCIs, key control indicators. KPIs are related to operational as well as strategic objectives. KRIs are related to risk-taking and risk profile. KCIs are related to the effectiveness of control.

The third component of RBPM methodology suggested by Smart (2021) is about tools. He suggests three main tools. They are strategy and risk canvas, appetite alignment matrix, and indicator scorecards. He also adds four additional tools that consist of four quadrant risk matrix, process alignment matrix, initiative alignment matrix, and accountabilities matrix.

As mentioned above, it is possible that an organization may take risks beyond its risk appetite. Figure 4 shows this possibility. Everson et al. (2017) give an explanation of the relationship between target, risk appetite, and performance as adopted in this figure. Figure 4 adds the explanation of the possibility that performance will go beyond its target, and, as a consequence, the risk profile also moves far to the right.

Risk appetite is set below risk capacity, and risk profile is taken below risk appetite. It means that the organization sets the target at a calculated, manageable risk level. The organization is allowed to set the tolerance of the target between dotted lines a) at the left side of the target and dotted line b) at the right side of the target.

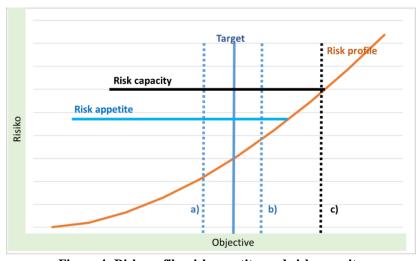


Figure 4: Risk profile, risk appetite, and risk capacity

The performance between dotted lines a) and b) is still acceptable by top management from a performance and risk point of view.

What will the organization do if sudden opportunities appear and the organization is highly confident to exploit the opportunities, while the opportunities bear certain risks that draw the performance move to the far right to the dotted line c)? If this happens, the risk profile increases so substantially that the risk profile goes far beyond risk appetite and is very close to risk capacity.

In this case, top management may decide to accept the opportunities to enhance the performance and automatically increase the value. Top management may decide to accept this challenge as long as the mechanism to make such a decision is available and the decision is made properly by those who are accountable.

IV. THE PROPOSED OPERATIONALIZATION OF RISK-BASED PERFORMANCE MANAGEMENT

In relation to the RBPM methodology developed by Smart (2021), how does the RBPM mechanism in a practical level? Figure 5 shows the step-by-step RBPM mechanism that follows the PDCA approach. Before starting the PDCA mechanism, RBPM can be implemented if everybody in the organization knows clearly about the roles. The roles are derived from organization policy and structure. The policy determines the direction of the organization, do and don't, and becomes the source of work mechanism until SOP or standard operating procedures. Organizational structure defines the division of roles, responsibilities, accountabilities, and authorities held by each individual in the organization. The understanding and acceptance of the roles indicate the clarity of the roles. Every manager has to ensure this clarity; otherwise, confusion may take place later on along the PDCA process.

Note that RBPM works within the strategy and strategic objectives determined by the organization as the requirement for every manager to start the RBPM process. Referring to the Smart approach, the strategy circle has been completed before the performance management circle and risk management circle can be conducted. Strategy circle is a separate activity and conducted in advance before a performance and risk management circles.

The first step of the RBPM mechanism is PLAN. At this stage, managers and their team or subordinates sit down together to review vision, strategy, and strategic objectives. These three documents become the main sources of developing agreement between them, and the agreement is formally documented. They develop a plan that covers operational objectives, targets, initiatives, and programs. They need to make sure that those items on the plan bear risks under risk appetite. If they find risks beyond risk appetite, they need to revise the plan, develop risk responses to reduce the risk severity, or exploit risks if the risks are related to opportunities, as shown in Figure 4.

The agreement covers specific items that can be operationalized. The items include KPIs and KRIs. Following Smart (2021), besides KPIs and KRIs, the agreement may include KCIs. Besides that, managers, their teams and subordinates also need to agree upon the development program needed. The purpose is to enhance the competencies or capabilities of team members and subordinates to conduct initiatives and to reach KPIs, KRIs, and KCIs.

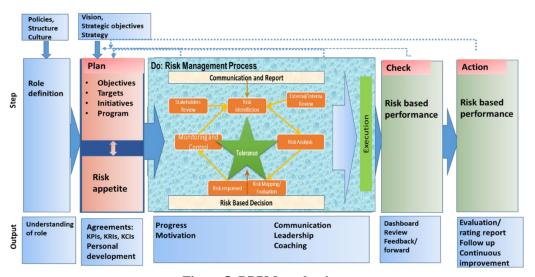


Figure 5: RBPM mechanism

At this step, the organization may develop various forms or dashboards as tools to monitor the progress of activities and performance conducted by individuals. The performance to be monitored covers both business performance and risk performance.

The second step of RBPM is DO. At this step, individuals perform their tasks in order to reach business performance as well as risk performance. It means that individuals execute the agreement at the PLAN stage. Managers support the team and subordinates to execute the PLAN and, at the same time, execute their own plan agreed with their superior.

At this step, collaboration between managers and, team members and subordinates is very crucial. Individuals must keep themselves motivated to do their jobs and reach both business and risk performance. However, self-motivation is sometimes difficult. For this reason, managers need to support and help individuals under their authority to have proper motivation. There are various approaches that managers, such as good communication and a suitable leadership style, can implement.

It is important to note here the role of risk management in executing the agreement. The quality of risk management in conducting performance management is its ability to manage risks within the organization's appetite and tolerance. In a simple statement, the role of risk management is firstly to avoid or reduce surprises to take place while the organization is performing its roles to achieve objectives. Academicians and practitioners define surprises as events that potentially cause the organization to suffer losses. This can be done through prevention to reduce the probability of events taking place, preparation to reduce the impact of the events eventually taking place, and other mitigation measures.

The role of risk management is also to exploit events that provide opportunities to enhance the possibility of reaching objectives. Even more, these sudden opportunities provide chances for organizations to enhance the achievement beyond targets through exploitation, risk enhancement, risk sharing, or at least risk acceptance. Good risk management makes the organization ready to help an organization create or enhance value above the performance target until the organization's risk profile is close to the risk appetite or even the risk capacity beyond which the organization may potentially face extreme risk (COSO, 2017).

Minimizing surprises and exploiting opportunities will enhance the confidence level in conducting activities and reaching business performance. An Organization may have a very low confidence level because of the lack of information or lack of managing risk. Statistically, the acceptable confidence level is at least 90%. This level of confidence is considered as low level. Organizations may need to increase this level to at least 95%. At this level, the organization accept the probability of 5% mistakes. If top management is conservative, they may increase the confidence level to 99%. It means that they allow mistake only 1% chance.

Academicians and practitioners agree that risks may take place across units in an organization. This is the reason why they give IRM, integrated risk management, to the concept and practice of risk management today. The name was merely risk management t the era of individual, separate, or silo processes of risk management. In that era, every unit managed its own risk without considering the cause-effect of risk across units. In the modern era, IRM, more acknowledged with ERM or enterprise risk management, has been accepted and implemented by various types of organizations, both business as well as public sectors.

IRM is basically a process and method that is systematically, continually, and consistently implemented by an organization in order equally to minimize surprises or shocks and to exploit sudden opportunities that contribute to the achievement of organization objectives and, ultimately, vision. It is important to stress the words systematically, continually, and consistently because IRM is not an ad hoc activity. IRM must be conducted together with every decision-making and execution. Organizations must provide a proper mechanism, structure, policy, and guidance in order for everybody in the organization to apply risk management systematically. IRM is also a continuous activity and needs continuous improvement to maximize the support of IRM in decision-making and execution.

It is also important too underlie the equal treatment between minimizing surprises and exploring sudden opportunities. Most organizations today give more attention to surprises than to sudden opportunities. This can be seen through the documents and discussions on risk management. Top management is more concerned with the possibility of targets not being met than with the possibility of results above targets. If results are below targets, top management could be challenged by BOD, commissioners, or authority above the organization and considered as not capable of managing the organization. Top management tends to avoid this kind of negative consequence. Therefore, they tend not to give more attention to positive risks or sudden opportunities than to negative risks or surprises. However, top management has to be encouraged to consider sudden opportunities with equal treatment as they consider surprises.

Besides consideration of surprises and opportunities, IRM also needs the integration and connection between strategy, operation, and program until competencies and capabilities are acquired by the organization. This integration approach ensures that the concerns of the organization, top management, and every employee are the same. All their concerns are linked to the

achievement of strategic objectives and the execution of strategy, programs, and activities. Integration is also concerned with the connectivity and synergy of objectives and programs across directorates, departments, and units that support each other. Organizations that are able to implement this integration approach have really implemented IRM, integrated risk management (see Marchetti, 2012).

The process and method to minimize surprises and exploit sudden opportunities, on the one hand, and to integrate implementation of risk management vertically and horizontally also apply to performance management. Organizations need to improve the quality or maturity of IRM to ensure the contribution of IRM to performance. Based on his research, Pickford (2017) proposes that organizations with higher risk management maturity or quality produce better performance than those with lower maturity.

The role of the IRM process is to ensure that the planned and agreed objectives and goals can be reached with a high confidence level and, at the same time, initiatives and programs can be executed with high probability. Within the IRM process, every risk owner has to get involved in reviewing stakeholders, reviewing external and internal conditions, identifying risks, assessing or measuring risks, mapping and prioritizing risks, responding to risks, monitoring and controlling risk profiles after being responded to, and communicating and reporting risks. The IRM process has to be conducted consistently, continuously, systematically, and using an integrated approach.

The third step is to CHECK or monitor. Managers set regular meetings within a year with those under their authority to review and discuss the progress and to ensure there are no crucial issues outside the plan. The progress covers both activities and performance. Crucial issues include the validity of assumptions behind the plan, deviation of actual works compared to planned activities or initiatives, and deviation of business as well as risk performance from expected. The discussion may also cover potential deviation for the rest of the working period to anticipate any possibility that the planned work will not be able to be executed or agreed business as well as risk performance potentially cannot be reached.

Managers may use forms or dashboards as the source of information and as the basis of discussion with every single individual. The meetings for monitoring need to be conducted regularly. Some agree on daily, weekly, or monthly meetings depending on job characteristics, location, and the maturity of team members and subordinates. There are possible outputs from the discussion as the monitoring step, such as an agreement to continue if there is no significant deviation, improvement of the support by managers or organizations, more development for individuals, or proposed revision of the plan.

The fourth step is ACTION. At this step, the organization evaluate the performance of every individual in the organization. It may use the rating system to give scores for business and risk performance to individuals. The result of the evaluation gives valuable information for the organization to take several possible actions. In relation to every individual, the organization uses the rating result to treat employees fairly in terms of compensation, career, and development.

Information collected from the monitoring step may be used to improve the RBPM mechanism. Figure 7 shows the arrows from the DO, CHECK, and ACTION steps back to the PLAN step. This means that feedback and revisions are possible to improve the achievement of performance within a year as well as part of continuous improvement of the RBPM mechanism.

V. CONCLUSION

RBPM is called a trend and a must because of several facts. The first fact is the availability of literatures on RBPM that is still very rare. Books on performance management are plenty. Books on risk management are many. But books that combine both aspects of management are still difficult to find. The second fact is that even though some organizations have implemented RBPM, the application is still very limited. For example, risk-based performance is only applied at the top level in order to evaluate the overall performance of the organization. Organizations that have implemented RBPM still need to expand the tools in order to enhance the probability of execution and the confidence level of the achievement of objectives.

The third fact is the rapid, unpredictable changes in internal as well as external factors that strongly influence business performance. Volatility, uncertainty, complexity, ambiguity, and paradoxes demand organizations not only focus on business performance but also risk performance. Social change, the dynamics of generations, democratization, globalization, and social concerns of young generations are supported by IoT, the Internet of Things. Young people nowadays tend to be loyal to professions, not organizations. This requires organizations to rethink the ways they treat employees.

A great RBPM provides various benefits for individuals, managers, as well as organizations. For example, individuals may get benefits in terms of the clarity of career, personal development, and wealth. Managers may get benefits in terms of personal development and a healthy work environment with individuals under their authority. Organization reaps the benefits in terms of the achievement of strategic objectives and, ultimately, vision with high confidence.

VI. REFERENCES

- [1] Aguinis, H., 2014, Performance Management, 3rd edition, Pearson New International Edition.
- [2] Armstrong, M., 2000, Performance Management: Key Strategies and Practical Guidelines, 2nd edition, Kogan Page.
- [3] Bennett, N. and Lemoine, G.J., 2014, What VUCA Really Meen For You, Harvard Business Review, accessed at What VUCA Really Means for You (hbr.org).
- [4] Campbell, J. P., McCloy, R. A., Oppler, S. H., & Sager, C. E., 1993, A theory of performance. In E. Schmitt, W. C. Borman, & Associates (Eds.), Personnel selection in organizations (pp. 35–70). San Francisco: Jossey-Bass.
- [5] Chen, J. M., 2021, Capital Asset Pricing Model, Encyclopedia, pp. 915–933, available at https://doi.org/10.3390/encyclopedia1030070
- [6] Committee of Sponsoring Organization for the Treadway Commission, 2017, Enterprise Risk Management: Integrating With Strategy and Performance, Volume 1, pp. 46 54.
- [7] Creelman, J., and Smart, A., 2013, Continuous Turbulent Time: The Case for Risk-based Performance Management, Risk-Based Performance Management: Integrating Strategy and Risk Management, Palgrave Macmillan, pp. 1 22.
- [8] Everson, M.E.A., Chesley, D.L., Martens, F.J., Bagin, M., Katz, H., Sylvis, K.T., Perraglia, S.J., Zelnik, K.C., Grimshaw, M., 2017, Principle 11: Assess Severuty of Risk, Enterprise Risk Management: Integrating with Strategy and Performance, Committee of Sponsoring Organization for the Treadway Commission, pp. 72 78.
- [9] Everson, M.E.A., Chesley, D.L., Martens, F.J., Bagin, M., Katz, H., Sylvis, K.T., Perraglia, S.J., Zelnik, K.C., Grimshaw, M., 2017, Principle 6: Analyzes Business Context, Enterprise Risk Management: Integrating with Strategy and Performance, Committee of Sponsoring Organization for the Treadway Commission, pp. 46 54.
- [10] Gao, J., Campbell, J., and Lovel, C.A.K., 2006, Equitable Resource Allocation and Operational Efficiency Evaluation, International Journal of Healthcare Technology and Management, January, pp. 142 167.
- [11] Geamanu, M., 2011, Economic Efficiency and Profitability, "Studia Universitatis Vasila Goldies" Arad, Economic Series, accessed at https://www.researchgate.net/publication/265814327
- [12] Marcetti, 2012, Enterprise Risk Management Best Practices: From Assessment to Ongoing Compliance, John Wiley and Sons.
- [13] Potocan, V., 2006, Business Operations Between Efficiency and Effectiveness, Journal of Information and Organization Science, January, pp. 250 262.
- [14] Johnes, J., Thanassaoulis, E., and Silva, M.C.A., 2017, Efficiency in Education, Journal of the Operational Research Society, April, pp. 330 338.
- [15] Murphy, K. R. 1989. Is the relationship between cognitive ability and job performance stable over time? Human Performance, 2, 183–200.
- [16] Palermo, T., 2017, Risk and Performance Management: Two Sides of the Same Coin?, LSE Research Online, London School of Economics.
- [17] Palmer, S., and Torgerson, D.J., 1999, Definitions of Efficiency, BMJ, National Library of Medicine, 378 (7191), accessed at Economics notes: Definition of efficiency PMC (nih.gov)
- [18] Rahman, H.U., Kodikal, R., Nawaz, N., and Hariharasudan, A., 2021, Effective Information System and Organizational Efficiency, Polish Journal of Management Studies, December, pp. 397 – 413.
- [19] Smart, A., 2021, The Risk-Based Performance Management Methodology, White Paper, accessed at https://www.researchgate.net/publication/355203066
- [20] Sonnentag, S. and Frese, M., 2005, Performance Concepts and Performance Theory, Psychological Management of Individual Performance, John Wiley and Sons, pp. 3 26.
- [21] White, J., and Haghani, V., 2021, No Place to Hide: Investing in World With No Risk Free Asset, Elm Partner, available at https://papers.srm.com/sol3/papers.cfm?abstract_id=3903372