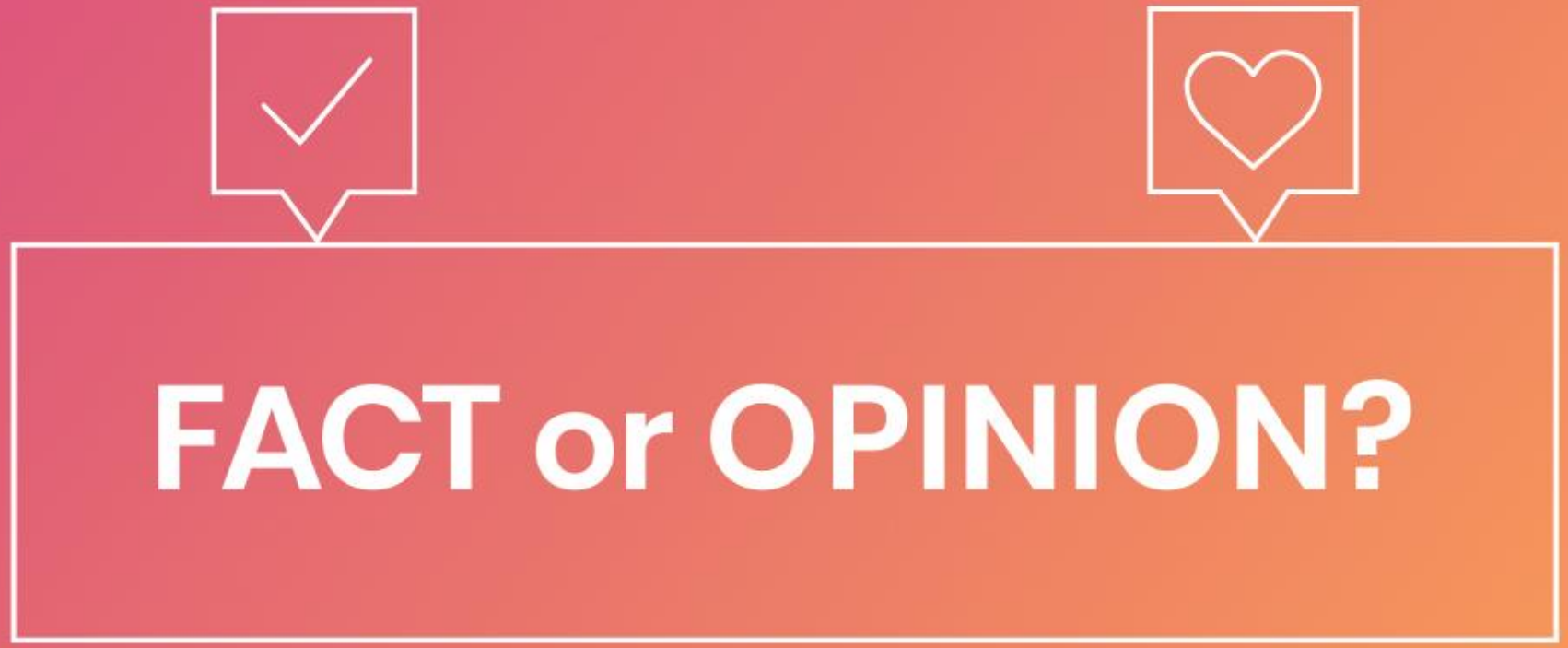


Fact-Based Decision-Making (FBDM) Modelling

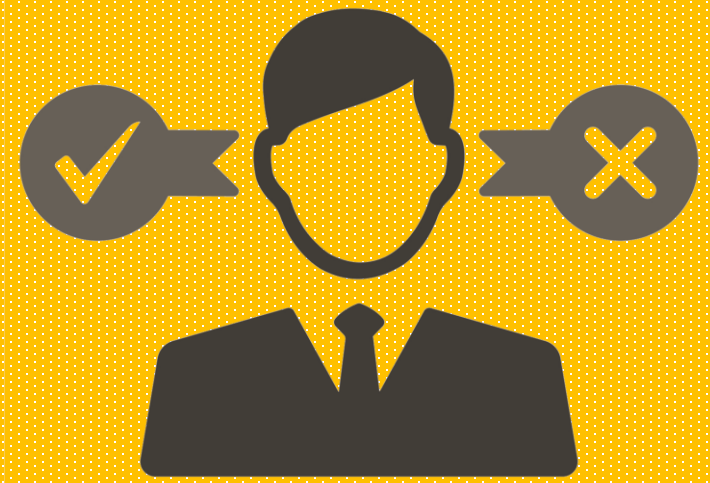
MOVE&DO Consultancy

What is Fact-Based Decision-Making (FBDM)?



Every commercial enterprise carries out various activities and can see the outcome of these activities in their financial statements. When we describe this process like a magic box, it seems like various inputs and labor enter a box, and then, whatever happens inside the box, other products and financial results come out. However, we all know that this is not magic. Therefore, since every result has an explanation, we can plan the process by examining it in reverse according to the results we want to achieve. In fact, what we are doing is we want coffee, we know how to obtain it, we operate the process accordingly, and we get our coffee.





So, let's take a look at the activities inside that box. No activity occurs spontaneously according to the laws of nature. We decide how the processes should work. Moreover, we make many micro-decisions within the processes. Every business purchases various products and services, makes decisions about customers' commercial conditions, determines prices, decides which shelf to put the incoming material in the warehouse, decides who will knock on the door of the new customer, which direction and how to improve the business of existing customers, and produces many operational and strategic level decisions. Accordingly, they carry out their activities.

Since each activity uses time and resources, the total activities that can be produced are limited. Therefore, even if an activity is useful, there is likely an opportunity cost to it.





The aim of the FBDM approach is to create the commercial mathematical equation of the enterprise and measure how the strategy should produce the expected result, and to ensure that all decisions taken at all operational levels, and therefore the activities produced, are compatible with the strategy and based on data.

The FBDM approach can be applied not only to the entire enterprise but also to the department and even at the process level.

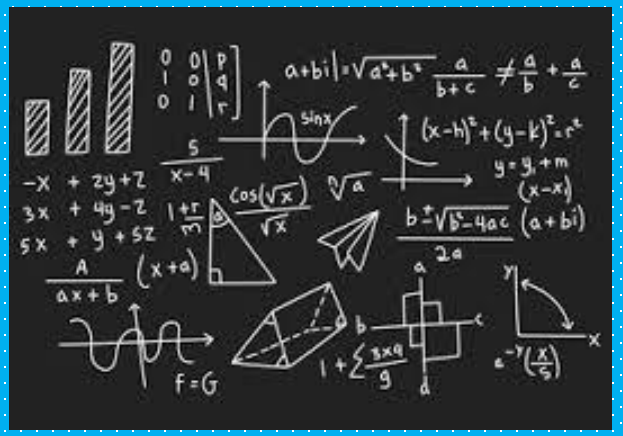
How Does the FBDM Process Work?



Let's consider a business that sells a single product. The basic formula that determines its revenue is simply the number of units sold and the price.

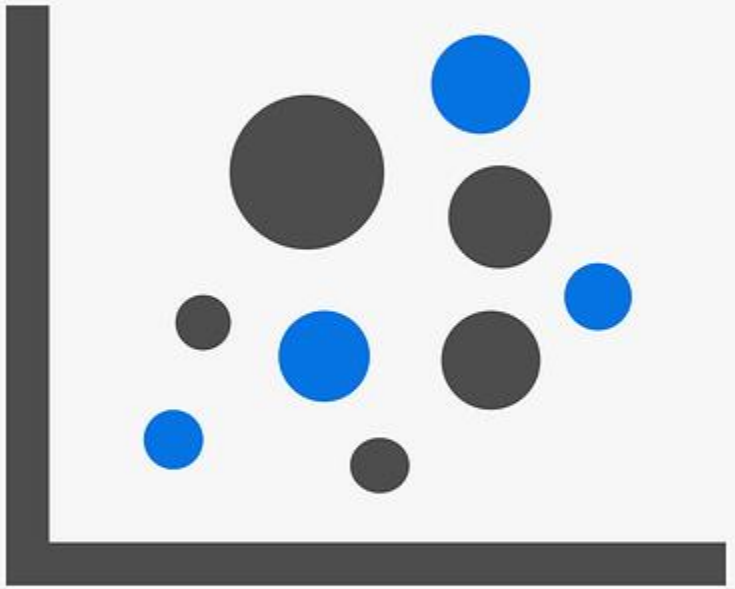
However, this formula alone is not enough to create a decision-making mechanism, so we need to break down each component into meaningful levels.

For example, we can break down the number of units sold into the number of customers and the average number of products purchased per customer in the next stage. Then we can further break down the number of customers into the percentage of shoppers who buy from us in the target area and the average purchase into the per capita consumption rate in the area. Of course, this example is quite primitive, and real-world applications are more comprehensive.



A broad formulation is also created that encompasses revenue, product costs, operational costs, and financial costs.

The variables in the resulting equation are examined. It is determined whether these variables are internal or external factors, which processes they are affected by, which factors they influence, how their values affect other variables, and what the hygiene factors are. Additionally, the possible damages that each factor can cause due to incorrect decisions are predicted. Based on this, limit values and metrics that can serve as an early warning system are identified. A prediction model is also developed to determine which metrics should be tracked to forecast the future values of the variables.

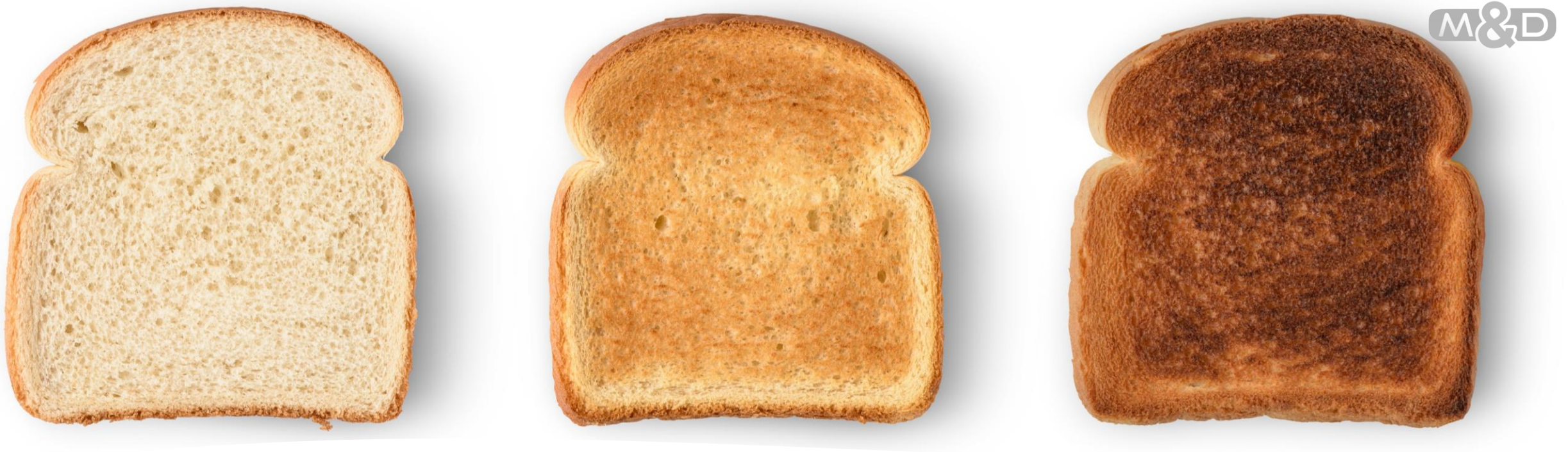


- The conditions under which the formula will remain up to date and which values need to be checked to determine whether it is up to date are determined. The formula is divided into operational processes and tools are developed to assist decision-making at the operational level.

All of these processes are customized and sustained depending on the unit and company that is working on them. The fundamental approach is based on determining which factors and processes affect business results to what extent, developing decision-making mechanisms for these processes, and developing observation systems to monitor progress.

To explain with a simple example, the more products a wholesaler has in their portfolio, the more chance they have of meeting customer needs perfectly. However, excessive inventory has negative effects in terms of operational costs, working capital, and operational complexity. The aim of FBDM is to identify the importance of portfolio strategy in this example and produce mathematical solutions to manage it optimally.





Stages of FBDM Process

The Fact-Based Decision-Making (FBDM) model cannot be applied as a one-size-fits-all approach to all businesses. It is customized according to the characteristics of each individual business. Since modeling may vary from project to project, it is not possible to provide a process plan that applies to all projects, as it is an entity that can take shape as details are examined. However, based on its common features, a flow projection can be made for the modeling process.

1-Clarifying Expectations

First and foremost, expectations for the business, unit, or process being worked on must be clear. At the end of the day, we need to create a realistic goal for the unit we are working on in a conscious and healthy way. For example, for a company, this expectation could be the ratio of the profit earned to the sum of equity and net operating capital being higher than the market's long-term interest rates, while avoiding downsizing and maintaining balanced risks with the market, or for a warehouse operation, the target for the cost of storage area and labor for unit production can be set.





2-Job Analysis

The activities in the relevant unit are broken down into parts and the flowcharts of all related processes are created. The relationships in these charts are identified, and the factors they affect and the results they influence are determined. Decision-making points in processes are identified, and potential risk points are anticipated.



3-Evaluation of Resources

Resources that are deemed to directly affect the performance of the unit being worked on are examined. These resources can be stationary assets, such as production facilities or vehicle capacity, or other resources depending on the complexity of the processes, such as an evaluation of the talent pool of human resources or an evaluation of financial capacity.

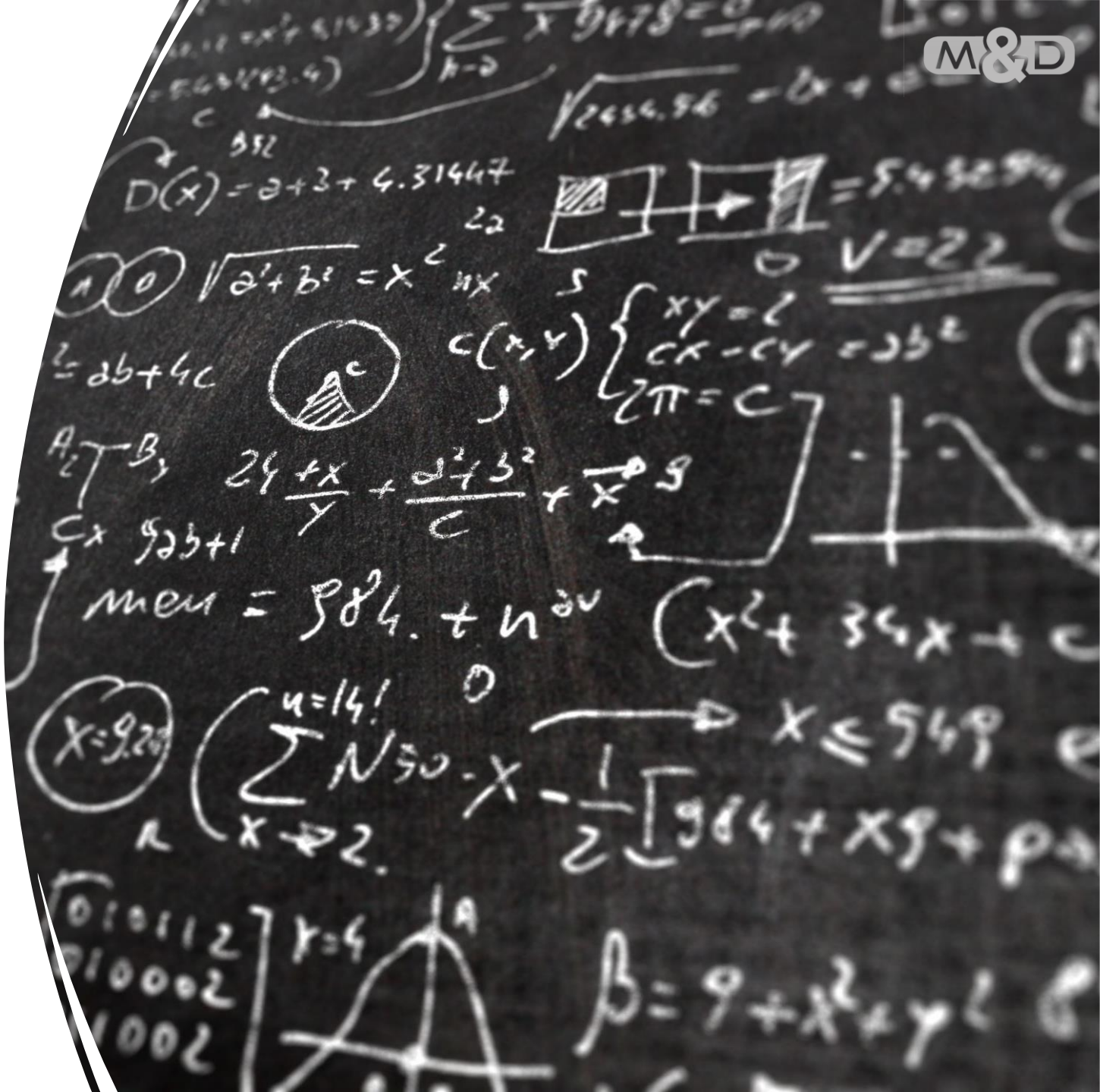


4-Understanding External Factors

The external factors affecting the unit being examined are investigated. When considering the size of the business, this can roughly be thought of as conducting a market research study.

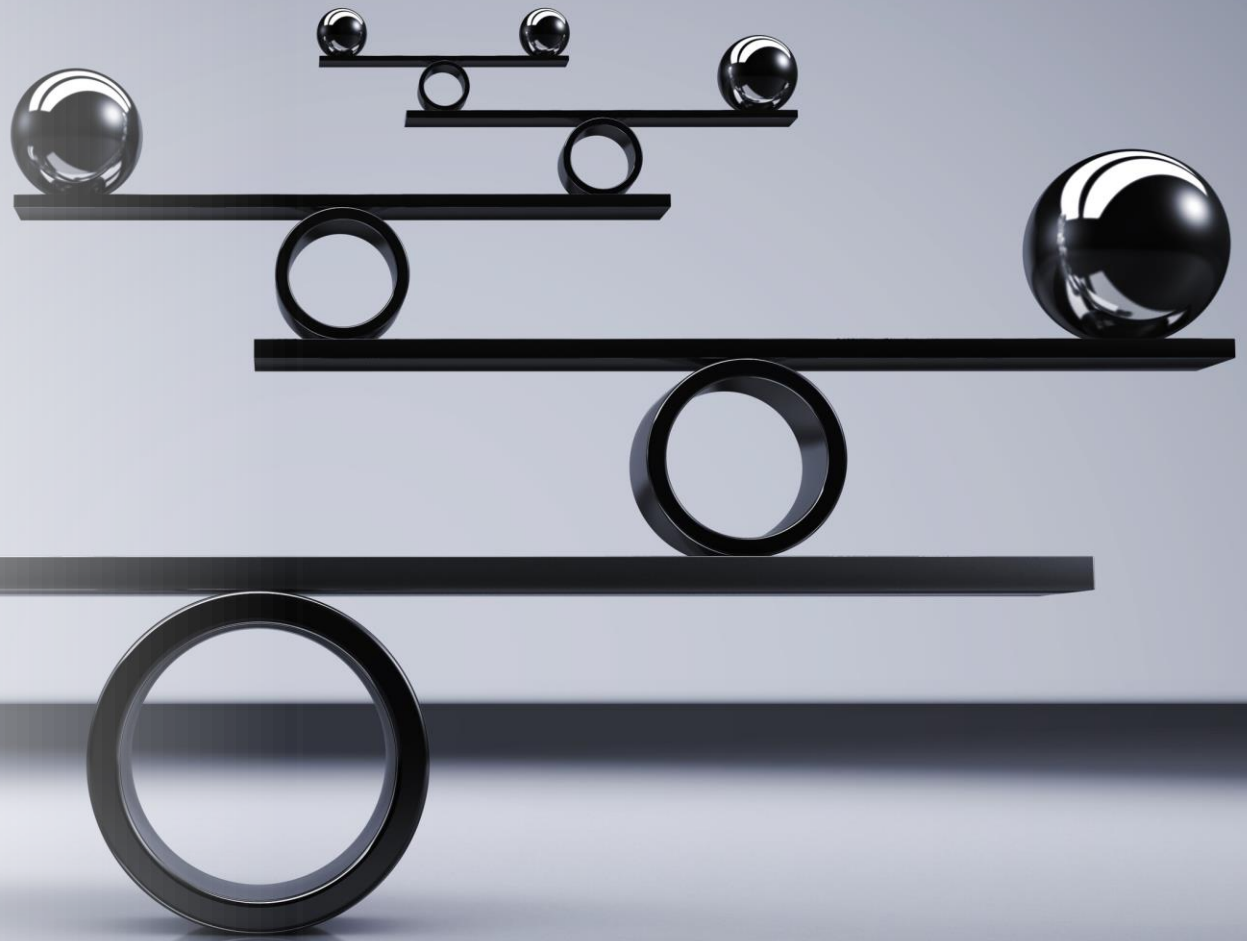
5-Formulation

Expectations, business processes, resources, and external factors are combined to form the equation for the relevant unit. At this stage, further research may be needed to reach a healthy conclusion. The conditions under which the formula will continue to be valid are determined, and tools to be used to verify the formula's validity are identified.



6-Clarifying the Unit Strategy

Based on the resulting formula, combinations that can achieve the desired expectation are identified, and alternatives are evaluated to create the basic strategy. During this evaluation, feasibility of the alternatives and the material and time investments required are also taken into account.



7-Planning

Under the light of the determined strategy, business processes are redesigned, decision-making points are determined, and guidance is created on how metrics will be evaluated at these decision-making points. For example, taking the purchasing example mentioned above, a schema where alternatives can be scored is created, and each factor in this schema is evaluated with a separate weight score. This schema creates a dynamic structure, and changes in factors such as credit limit, interest rate, stock level, or order level that can affect the decision also affect the weights of the metrics.



8-Establishment of Database, Reporting, and Decision-Making Tools

Starting from the expectation for the unit being worked on, necessary inputs are provided to establish an effective data system that will cover even the lowest-level business processes. Selected software solutions are determined based on the intended goals, and databases, reporting tools, and decision-making tools are installed accordingly.

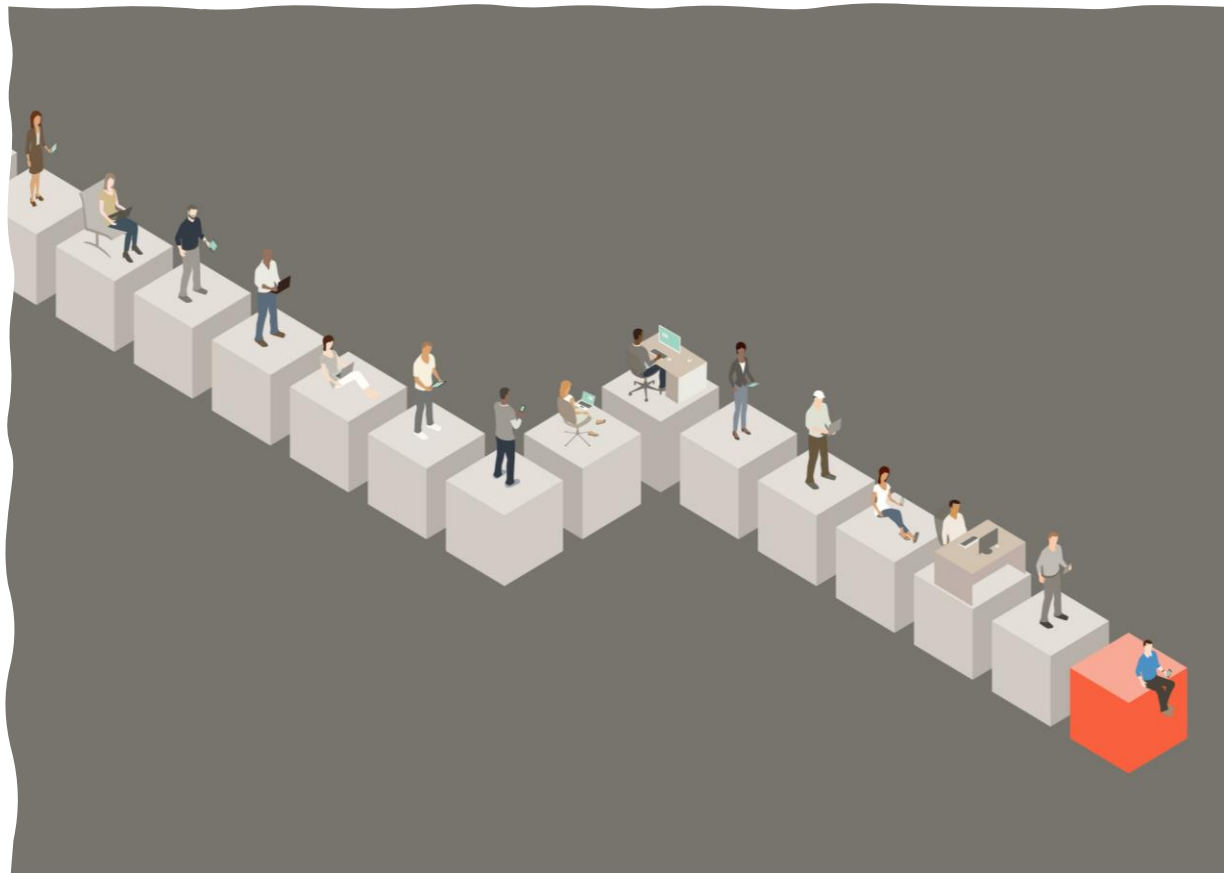


9-Cultural Change

Analytical decision-making processes are a living culture. In order for the model to remain current, it needs to progress with rational revisions in line with changes. Otherwise, it will become detached from reality over the years, resulting in an obsolete decision-making mechanism. Therefore, the most important component of this decision model is for the business to internalize Fact-Based Decision-Making culturally. For this purpose, necessary training programs are organized within the business.





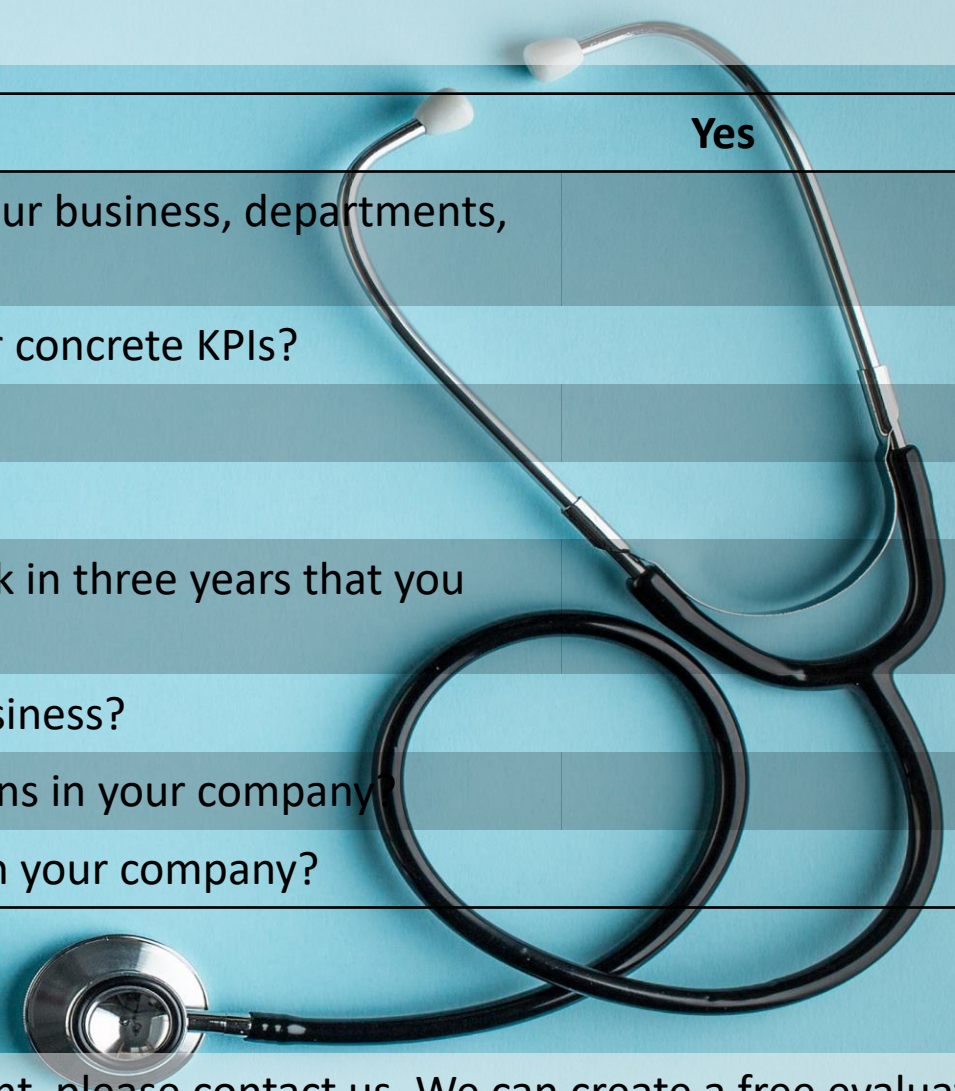




It is important for experts to carry out all of these processes. To ensure the smooth progress of the processes, a broad-minded perspective is required, but at the same time, it is important to have a correct understanding of the dynamics of the job. Therefore, it is important for those who are advancing the processes to ask plenty of questions, question the truthfulness of the answers they receive, and arrive at the correct equations. Otherwise, it may lead to unrealistic results or being trapped in an accepted reality.

For your business, you may want to consider undergoing an FBDM process. To assess whether this is necessary, please review the following questions. If you cannot easily answer "yes" to all of the questions, it is likely that there are some areas that could be improved.

	Yes	No
Do you have concrete KPIs that show your expectations for your business, departments, and processes?		
Do you have benchmark comparisons where you analyze your concrete KPIs?		
Is your business performance in line with your expectations?		
Do you have clear steps and reasons for growth?		
Are you encountering less than one medium or large-scale risk in three years that you have not accounted for?		
Are your employees effectively using the database in your business?		
Can your employees take initiative and make effective decisions in your company?		
Are numbers being used sufficiently when making decisions in your company?		



If you would like to conduct a more comprehensive assessment, please contact us. We can create a free evaluation test specific to your business and assess the state of your decision-making mechanisms together.

Contact Us

Thank you for considering Move & Do Consultancy and our FBDM product. If you have any questions or would like to learn more about how our services can benefit your business, please don't hesitate to contact us. You can reach us through the following channels:

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We look forward to hearing from you and helping your business achieve its goals with FBDM.