



# THE CUSTOMER JOURNEY TO DECISION OPTIMIZATION

## OPTIMIZING CONSUMER EXPERIENCE

## INTRODUCTION

The balance between profitability and risk is vital to lending performance. Decision Optimization may help businesses build decision-making processes that better match their goals and objectives, therefore accelerating success. Decision optimization, like other companies which have effectively enhanced their decision.

making approach, is regarded as a journey with a repeating pattern. Every company tries, learns, and adapts in order to systematically enhance decision making. Smart businesses never stop learning and realise that as market circumstances change or new rivals enter the scene, a technique that looked to be great at one point may need to be altered.

## THE DECISION IMPROVEMENT LIFECYCLE:

Decision Management is a set of methodologies and business processes that allow you to use artificial intelligence (AI) technologies like business rules, predictive analytics, machine learning, prescriptive analytics, and mathematical optimization to optimise and maintain the day-to-day decision making at the center of the process.

The decision improvement lifecycle is critical to maximising the value of decision management. The ability to implement a choice strategy quickly and efficiently, evaluate its success, learn techniques (and what does not), and then enhance your decision making is what makes the difference.

Each iteration gets one further towards progressively optimum decisions and, eventually, real decision optimization.

### Decision Performance Review:

Production data on decision outcomes is analyzed, and the findings of continuing experimentation are taken into account.

### Opportunities Identification:

What modifications are possible to the data, decision method, or underlying analytic models?

### Experimentation:

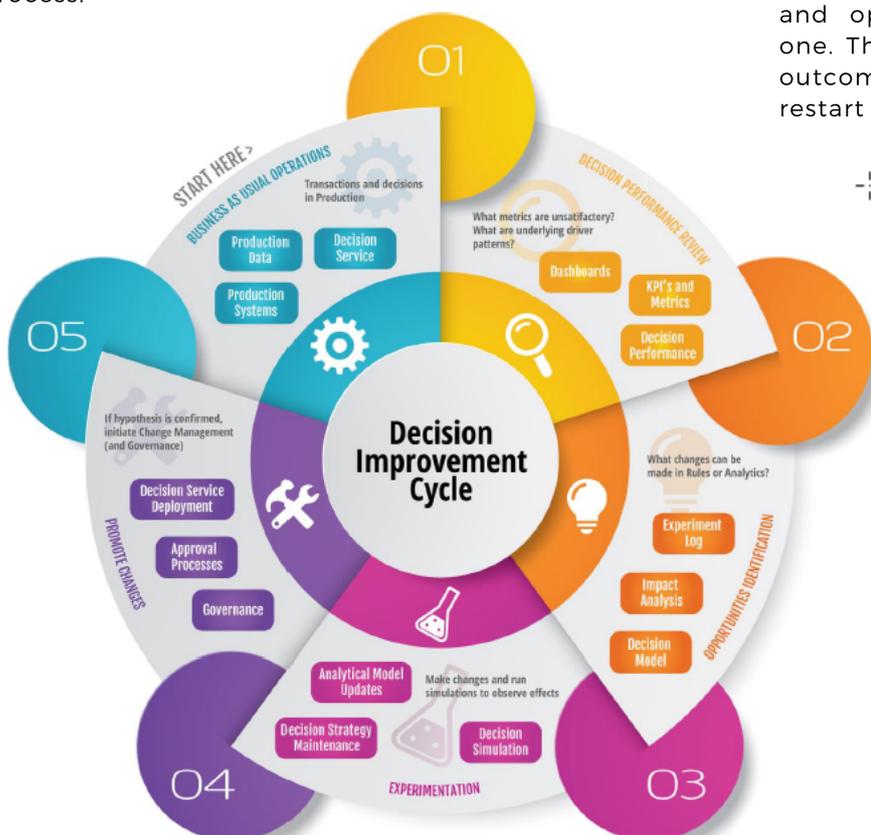
To examine the consequences of the modification, updates to the approach are offered and evaluated using production data.

### Promote Changes:

If the findings are good and there are no undesired, adverse side effects, the improvements are pushed into production.

### Business-as-Usual Operations:

Transactions and decisions are being made. The new strategy is implemented for a period of time, generally just affecting a subset of consumers and operating concurrently with the previous one. This generates new data regarding decision outcomes, which may then be evaluated to restart the cycle.



## Organize Your Current Practice:

The most typical method for most businesses to start this journey is to analyse and standardise existing processes. This begins with knowing what is currently being done, what works and what does not. A decision strategy based on “best practises” is established as an outcome. Implementing an existing process encapsulates where you are right now. Professionals believe that in order to build anything superior, you must first understand where you are. Building a decision model of the choice you want to change, such as the assignment of an initial marketing offer to a prospect or a collections strategy, is one of the most successful ways for capturing existing behaviours. Current procedures frequently rely on past static segmentations and categorizations. The goal of this technique is to allocate consumers or transactions to certain groups and categories before deciding on an action. Because these techniques are immobile, they are prone to being overrun by events. Some decision-making techniques totally disregard the issue of conflicting aims and the resultant tradeoffs, rather concentrating on enhancing a single metric. Organizations frequently lack full data, making it difficult to determine how the present strategy would apply to all consumers, let alone what would happen if changes were implemented. Unfair data is very prevalent, particularly as a result of selection bias. Most businesses lack data on persons who were not chosen for consideration, as well as on the relative performance and outcomes of various actions or methods.



## Improve your Decision Strategy:

Every organization's route to decision optimization is unique. These journeys, however, have certain characteristics. Each component can be used alone, and there are several potential sequences. Some groups handle one at a time, while others tackle many at the same time. Each of the four aspects described below indicates a specific approach to improve your decision-making process:

- Decision performance monitoring
- Data-driven segmentation
- Experimentation framework
- Predictive analytics and machine learning

### Decision Performance Monitoring:

One advantage of validating your decision strategy is that it increases your ability to monitor how you made judgments and how each option performed for you. Every time, the total conclusion of the choice strategy—the customer treatment chosen—is documented for each consumer. This data may now be augmented with a knowledge of why the choice was made the way it was. This decision strategy information may be connected to business outcomes, resulting in a feedback loop for ongoing development.

### Data-driven segmentation:

You can model the impact of the change before adopting it into your decision strategy. Establish a new, data-driven version of your decision strategy and validate it against a big historical data collection. Compare what you did at the time to what the new approach would recommend, and determine whether clients would be treated differently. Because your plan is now dependent on data analysis, you must set a regular update schedule. Because data is always being collected, the patterns in your data will vary over time. Regular data reviews and assessments of your data-driven segmentation are required to guarantee that you do not go out of sync with your data and, as a result, with your consumers' real behaviour.

**Experimentation framework:**

The discrepancies between the methods can be highlighted by static analysis. Simulation using historical or synthetic data can demonstrate the potential differences in results. However, there is no alternative for on-the-job training. The only way to acquire reliable data on what individuals will do when they are handled in a specific way is to treat them in that way and monitor their reaction. Specific aspects might be designated as the topic of experiments inside a decision approach. Several alternative methods for making such sub-decisions can then be developed and utilized to support various experimental designs. Customers are assigned at random to one of many techniques.

**Predictive Analytics and Machine Learning:**

Data analysis to generate data-driven segmentation is a valuable tool for enhancing decision-making processes. Data regarding past performance may be transformed into insights that can be used to improve decision making using predictive analytic techniques and machine learning. These probabilities may be incorporated into decision making by modifying the method based on the possibility of a risk or opportunity. Business experts can assess which parts of a decision strategy could change as a result of a given forecast and then advise on the needed level of accuracy. Data scientists can then examine accessible internal data—as well as data from outside the company—to create a prediction model that will be used in decision-making.

**Decision Optimization:**

Decision Optimization is the application of mathematical methods to determine the optimal decision strategy given an organization's data, limitations, and objectives. Most companies have numerous restrictions when it comes to making decisions, such as regulatory frameworks, finances, or policies. They also have competing goals such as profit, attrition, and bad debt. By implementing the above-mentioned gradual changes, you may collect a wealth of information about your consumers and the impact of your actions. All of this is consumed by Decision Optimization, which seeks the best possible decision approach.

Numerous business benefits may be obtained by implementing Decision Optimization:

- Focuses on the results of various decisions, the factors that have the greatest impact on company performance.
- Identifies options that match your aims and restrictions – whether it's complying with a rule or making the most of limited resources.
- As a result of being able to swiftly compare alternatives, it simplifies the business process, highlights important profit drivers, demonstrates how to deal with possible challenges, and reveals possibilities
- Produces a substantial return on investment. Published case studies demonstrate yearly profit increases of 5% to 30% or more, with ROIs of higher than 10:1. These are the types of figures that may make or break a company.