Zoho Desk

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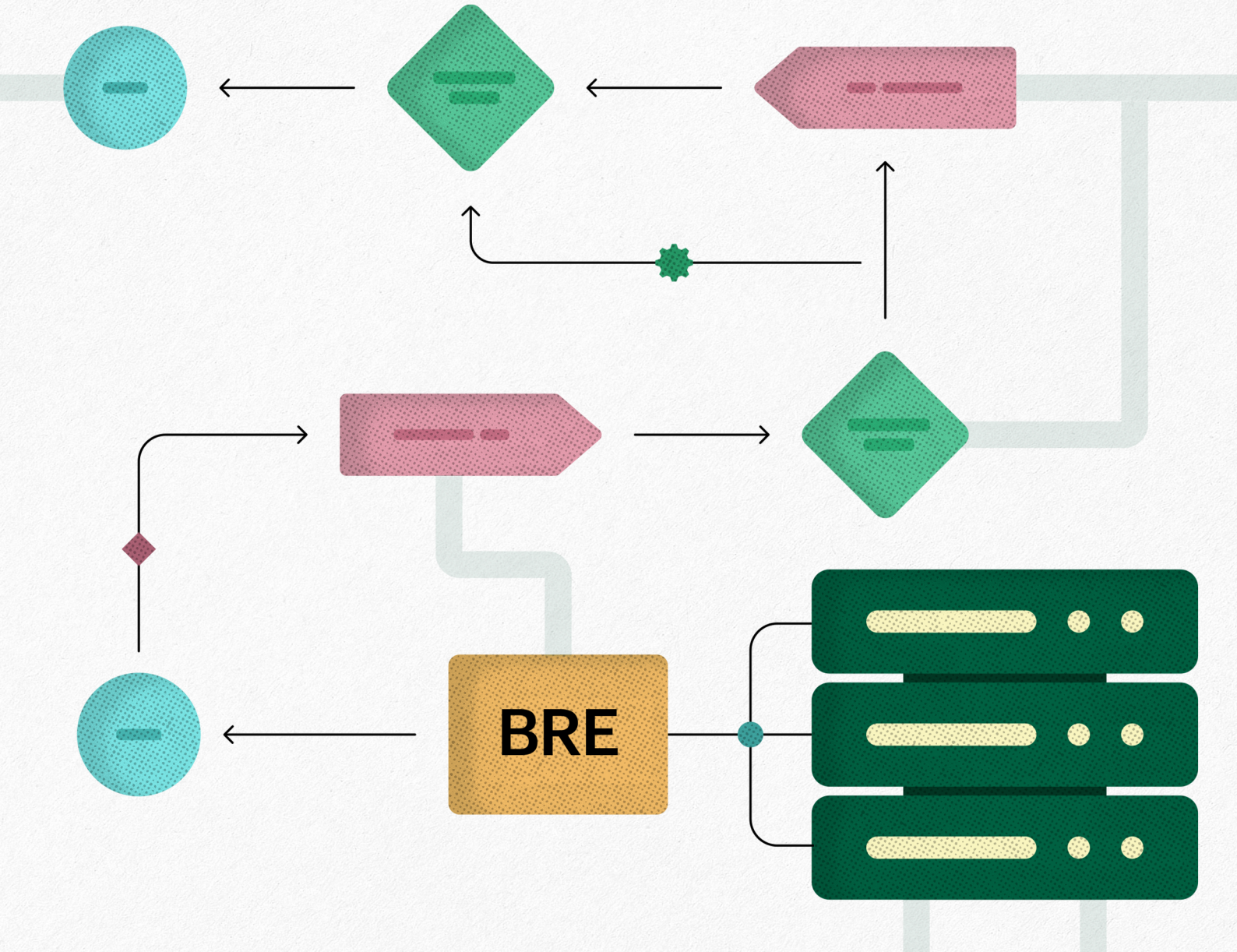
Adapt to evolving market conditions and regulations with a business rule engine (BRE)



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Introduction

In today's world where real data fuels every decision from crafting personalized offers, purchasing products, and offering customer service to deciding the terms and conditions of a contract, decision-making has become powerful but, at the same time, precarious.

Earlier, making operational decisions was much easier and had a straight-forward approach. The steady rise in customer expectations, the evolving regulations, and the explosion of data from digital channels along with the AI boom, has made every decision carry greater weight.

Businesses cannot afford to rely on legacy systems or static logic that was designed years ago and managed by a handful of senior employees. Information that is scattered across spreadsheets or systems and stays in silos poses the risk of incorrect decision-making. More adaptable and scalable systems that continuously perceive, evaluate, and act allow businesses to adapt to the ever-changing market needs.

Automate decision-making with a business rule engine (BRE)

The current business landscape is highly digitized. In such an ecosystem, organizations need quick, adaptable, and accurate decision-making skills if they are looking to optimize their operations, enhance customer experience, or bring innovative changes. This is where business rules come into play.

What is a business rule engine?

BREs are indispensable tools that allow you to define, execute, and manage business rules separately without touching the core application. This gives businesses better agility and reduces IT workload.

How do BREs influence decision-making?

A business rule engine automates decision-making by applying predefined logic to business operations. The primary purpose of a BRE is to offer more control over the process, because adjusting a logic for a customer requirement becomes easy and consistent. It reduces reliance on manual interventions.

Consider a customer who has subscribed to “X” edition, which doesn’t facilitate on-site implementation. They request implementation and exclusive support for three months. An exception can be made in view of the customer’s lifetime value (CLV).

A CLV greater than 10 qualifies them for a discounted price on the higher subscription, allows them to pay less for on-site implementation, and gives them free premium support for three months. A simple change in the criteria that defines “if CLV is greater than 10” and “subscription is X” allow “A,B,C” would make these operational changes easier with BRE.

A modification to the eligibility criteria makes the process simpler. There is no need to wait for senior approvals or have back-and-forth conversations with the customer. It reduces negotiation time, ensures quick delivery, and provides consistent messaging that directly impacts the brand’s value and customer experience.

BREs are particularly useful in complex operations where multiple rules govern a process within a department. Categorizing customers on specific criteria; understanding the requirement and assigning it to the right team; ensuring the employees follow operational standards, adhere to ethical guidelines, and update customers in real time can all be automated by defining the right logic.

BREs play a critical role in modern enterprise operations bringing agility, accuracy, improved efficiency, and ease in policy implementation.

How do BREs interact with different automation platforms?

BREs are the core component within a BOAT (business orchestration and automation technology) platform. Automation tools such as workflows, robotic process automation, process management, AI, and orchestration function on logic and decision-making which is defined by the BREs.

BREs are the decision-makers and BOAT tools are the orchestrators.

The BREs set and evaluate the conditions for an action which in turn decide the course of action. The automation tool uses the decision and guides the overall workflow. The automated actions and subsequent tasks or human interventions are triggered across the necessary systems.

For example, if the total amount is "X," give a 10% discount. BRE will ensure whenever this condition is satisfied, the defined action takes place without any exception. BREs promote systematic decision-making across platforms improving the quality of the output.

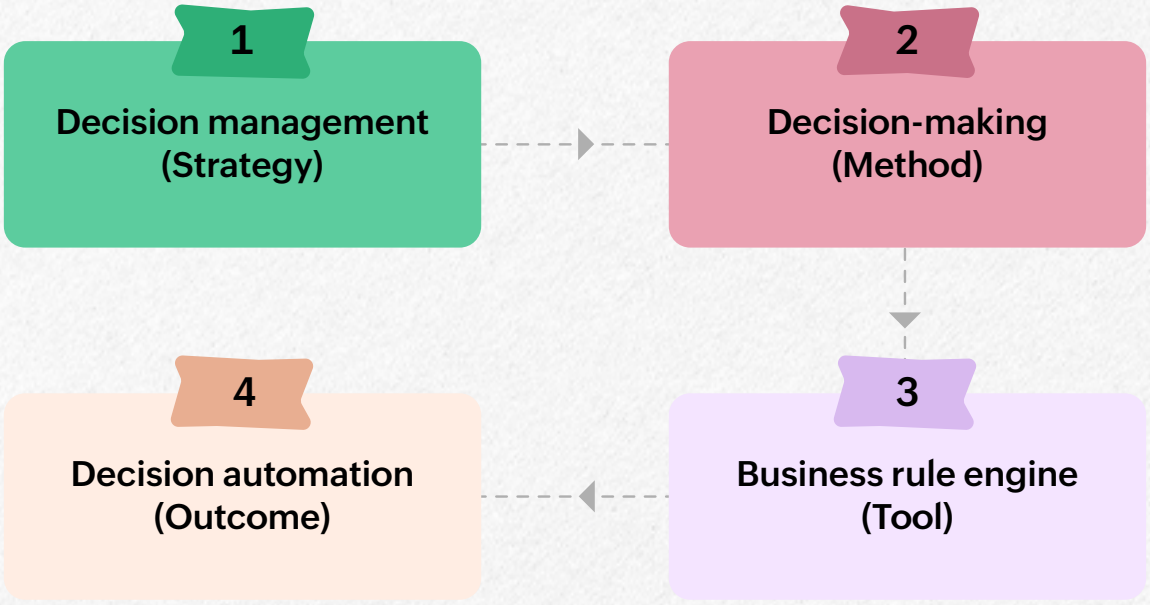
In other words, a BRE provides the "what" and "how" of decisions, while the BOAT platform provides the comprehensive framework for orchestrating and executing those decisions across an ecosystem.

A correlation: Decision-making strategy and business logic

Decision management is the core strategy that revolves around providing a plan that helps a business achieve the desired outcome. It ensures the decisions are effective and lead to better outcomes.

Decision-making is the second and the most important phase. This is where the strategy is put in action. Its main focus is on creating a systematic method that will help a business make decisions automatically and consistently. BRE is the tool used to create decision rules that will govern the process. The businesses set up and implement the rules to replicate the business process in real time.

Finally, **decision automation** is the outcome of the above synchronization. This ensures the strategy, method, and the tool work harmoniously to give the desired outcome. It can be simplifying repetitive activities, streamlining an activity from start to end, or allowing autonomous actions within a process.

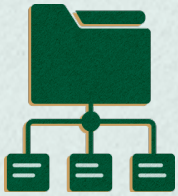


Key features of a business rule engine

A BRE operates by executing predefined logic to an input data. It evaluates the condition and, when it satisfies, it performs a series of automated actions. Here are the key components that a BRE has.

Rule authoring and editing

Rules are defined on user-friendly interfaces that are flowchart-based, template-based, or scripting-based. It may involve low coding depending on what a business wants to achieve. In Zoho Desk, workflows, blueprints, guided conversation, ticket assignment, SLAs, and similar functions provide simple, intuitive, flowchart- and drag-and-drop-based visual interfaces that make rule creation dynamic.



Rule storage and management

The rules must be stored in a centralized repository for easy access, collaboration, and version control. Workflows, macros, and time-based rules in Zoho Desk store alerts, tasks, updates, and custom scripts for easy access. Even the notifications and predefined templates are managed centrally.

Rule execution

The BRE processes the input value and evaluates the conditions defined in the rule. If the conditions satisfy the rule, it is executed. For example, if the issue is “L2,” assign it to the development team. This restores the sanctity of a process and gives it speed and accuracy.

Integration with systems

A BRE integrates seamlessly with existing business applications via APIs, allowing for smooth data exchange and real-time decision-making. It can integrate with CRM, ERP, and custom software facilitating seamless data transfers.

Testing and validating

The rules must be tested and validated in a controlled environment like Sandbox to reduce the risk of error and maintain optimal performance in the live environment.

Measuring performance

Periodically monitoring the performance of the rules helps refine strategies and make course corrections wherever necessary. Reports that highlight the outcome, bottlenecks, and breakage in flow provide insightful data to make proactive adjustments.

Rule-based decision-making in daily business operations

Business rules are important in end-to-end process automations because they govern specific outputs based on specific inputs. The business logic is usually the "if" and "then" rule like "if X," "then Y." BREs are an essential part of end-to-end automation because they govern various other forms of automation. Here are some common business decisions that are driven by such rules.

Calculating total price

Unit prices of products, service costs, and subscription charges vary according to factors like currency exchange rate, regional taxes, discounts, and more. Rules are defined to calculate the final output by considering the above factors which are applied based on the user's input. For example, the housekeeping charges will be automatically calculated based on the regional tax and the type of real estate that is inputted by the user. Formula-based auto-calculations significantly improve accuracy within a process.

Changing fields and sections dynamically while entering data

Data entry forms consist of a lot of information such as personal details, qualifications, professional experience, travel details, beneficiary details, and similar factors according to the business type. Consumers can be strategically guided to enter the right details in such forms with rule-based layouts. For example, the section containing beneficiary details is shown only if the user selects the "Family health insurance" plan.

Ensuring correctness and proper formatting of data when captured

Incorrect or partially filled forms are common causes of confusion and delays in solving a problem. If the email address, contact number, product code, or other data are incorrect or not provided at the beginning, it causes unnecessary delays in further processing.

An issue's resolution time has a considerable impact because there needs to be a back-and-forth conversation to get the correct starting details. Validating the data accuracy at the time of submission prevents such problems. For example, if the consumer enters an incorrect code, the system will trigger an alert prompting them to enter the right value in the right sequence. Likewise, rules can ensure certain fields are mandatory so users don't forget to enter the data before submitting the form.

Determining how to best route a service request

Often, there are dedicated teams to handle specialized requests. This allows businesses to categorize and address requests faster. Service providers try to triage these requests at the time of submission to improve the resolution speed, as the requests are assigned to the relevant department or team upon submission. For example, a request for AC repair is assigned to the AC service department. This can be defined through workflows.

Capturing data in the correct type of request forms

Requirements such as car service, insurance claims, and mortgage services are distinct. They require consumers to provide different types of information like a vehicle identification number, beneficiary and nominee details, principal amount, interest rate on the debt, and other unique information. Creating specialized forms that only show specific fields and sections and highlight the necessary fields is essential for capturing the right details. With layouts businesses can create customized data entry forms with service-specific fields and sections.

Checking and auto-filling correct data based on the input value

Fields like Country-State, Category-subcategory, Course-subject are interdependent. For example, when someone enters “Arizona” for the state, the country is autopopulated as “United States.” Setting field dependencies automates filling out the appropriate values in the related field, improving accuracy.

Enforcing corporate policies and data privacy

Details such as salary, user ID, and passport number are private and should be accessed or viewed only by authorized people. Distinguishing such fields as critical and allowing them to be accessed by specific profiles like HR, HOD, or administrator allows an organization to adhere to the company’s privacy policies and restrict unauthorized access to sensitive information.

Ensuring adherence to process guidelines and SOPs

Easing employee onboarding and adherence to protocols can be managed in a better way by including the instructions that need to be followed within the process. For example, if the invoice has to be submitted in order to process the return and refund of a product, then a message showing “Collect invoice from the customer” or “Attach your invoice here” when the person is submitting their request is a proactive way to guide people through the process and reduce errors.

Service blueprints facilitate the mandate of important fields so people don’t skip details that are necessary to process a request through to the subsequent stages. Managers can also add instructions, give alerts, and define guidelines within the blueprint making it easier for the employees to follow the right steps.

Want to learn more about streamlining customer service operations?

Download this ebook

Guiding customers to quick and correct decision-making

Chat interfaces are convenient for users to place orders, make payments, and even troubleshoot common problems. By displaying contextual options based on the user input makes the conversation dynamic, improves relevance, and keeps it engaging. For example, showing a menu such as payment, renewals, booking, and the like at the beginning of the session will guide the user to the right path.

During the conversation, prompting the user with appropriate follow-up questions makes the chat interactive, too. For example, when the user clicks on Booking, ask them "Do you need help with previous booking or would you like to make a new booking?"

Giving adequate time to different types of service requests

Critical requests require quick turnarounds to ensure business continuity. Identifying and classifying issues and mapping them to the appropriate service-level agreement defines clear handling time of a specific issue. For example, payment failure, credit card blocking, or towing an impounded car are critical services that require immediate attention, while return or pickup services are non-critical services that can be handled within 48 hours. Setting SLAs for each type of issue will ensure strict adherence.

Providing personalized support service to suit a requirement

Customized service plans allow service-based businesses to modify their support plans according to the consumer's requirement. It is also useful in the long run as the business can easily accommodate evolving consumer requirements within the existing plan, without making contract-level changes. For example, if the credit cycle is not sufficient to accommodate all the service requests, a priority-based, time-bound plan can be added to the SLA, which will take care of the remaining critical issues that otherwise do not fall under the support plan.

Improving speed, accuracy, and efficacy through AI-assisted orchestration

AI provides broad cognitive capabilities that augment and accelerate human decision making and process routing. Intelligent document processing (IDP) is an application that processes unstructured or semi-structured content, such as emails, comments, and thread conversations into meaningful content. AI tools can predict outcomes, extract important details from content, generate content, translate content into different languages, draft email replies, gauge customer sentiment, auto-tag emails, and provide answers to questions, automating several common activities performed by humans. These capabilities accelerate autonomous decision-making which is useful for an enterprise as business processes can continue in a standard protocol with controlled human involvement.

Conclusion

Business rules drive complex decision-making across diverse sectors such as real estate, insurance, hospitality, retail, healthcare, and beyond. This flexibility stems from carefully designed criteria and conditions that precisely capture business needs. As markets shift and customer expectations evolve, processes must quickly adapt to the changing conditions. It is therefore crucial to monitor every outcome to embrace emerging opportunities and achieve optimal results.

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