

DECISION
MANAGEMENT
SOLUTIONS

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Increase the Impact of Processes with Decision Management

Automating and improving decisions to make processes more effective, transparent and agile.

Process Management is an effective tool for increasing visibility and control while delivering consistency and governance. In an era of rapid change, multiple channels, demanding consumers and Big Data applying Decision Management delivers increased business impact.

Process Management is a proven approach for taking control of your business operations. It makes clear how value is delivered in your organization and gives business users visibility and control. It can help drive out costs and improve business alignment.

The demands of the business world keep rising, however. The social, mobile consumer is demanding cross-channel consistency, self service and deep personalization. The ongoing digitization of real-life is creating vast volumes of data, Big Data, that holds the key to better customer treatment and optimized business operations if only it can be put to work. The pace of change continues to increase so business agility, an ability to respond promptly and correctly to changing circumstances, is critical. These demands are pushing organizations to find new ways to increase the impact of their business processes.

Decision Management, a focus on operational business decisions and the use of business rules and predictive analytics to automate these decisions is an essential building block for more impactful processes. Focusing on operational decisions, not just operational processes, enables more effective and more analytic processes while increasing transparency and business agility.

In this paper we will introduce Decision Management and show how it can increase the impact of your business processes.

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Decision Management

Like Process Management, Decision Management is both an approach and a technology stack. Adopting Process Management involves changing how you think about your business not just buying and using a Business Process Management System. Decision Management involves both a change in how you think about your business and the adoption of new technology.

Decisions First

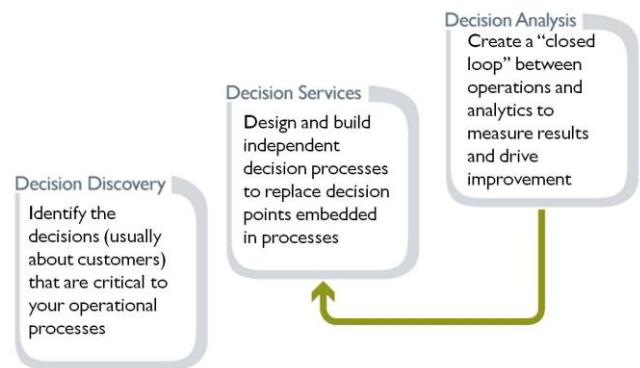
The key to adopting Decision Management is to focus on decisions early and to treat decisions as first class objects. Organizations adopting Decision Management seek out the decisions at the heart of their day-to-day operations. These decisions, often about customers, are high volume, repeatable decisions that must be made hundreds, thousands or even millions of times a year. Individually small but cumulatively impactful, these decisions are central to the effective execution of an organization's operational business processes and to its ability to respond to business events.

Three steps to Decision Management

Adopting Decision Management involves identifying, modeling, automating and managing these decisions. Companies adopting Decision Management:

- ▶ Use Decision Discovery to find and model the decisions that matter to their business and drive the results they seek.
- ▶ They replace embedded decision making within operational systems with independent Decision Services built on business rules and predictive analytics.
- ▶ They close the loop with Decision Analysis, ensuring that the way decisions are being made is monitored and the results constantly improved.

Figure 1: Decision Management Steps

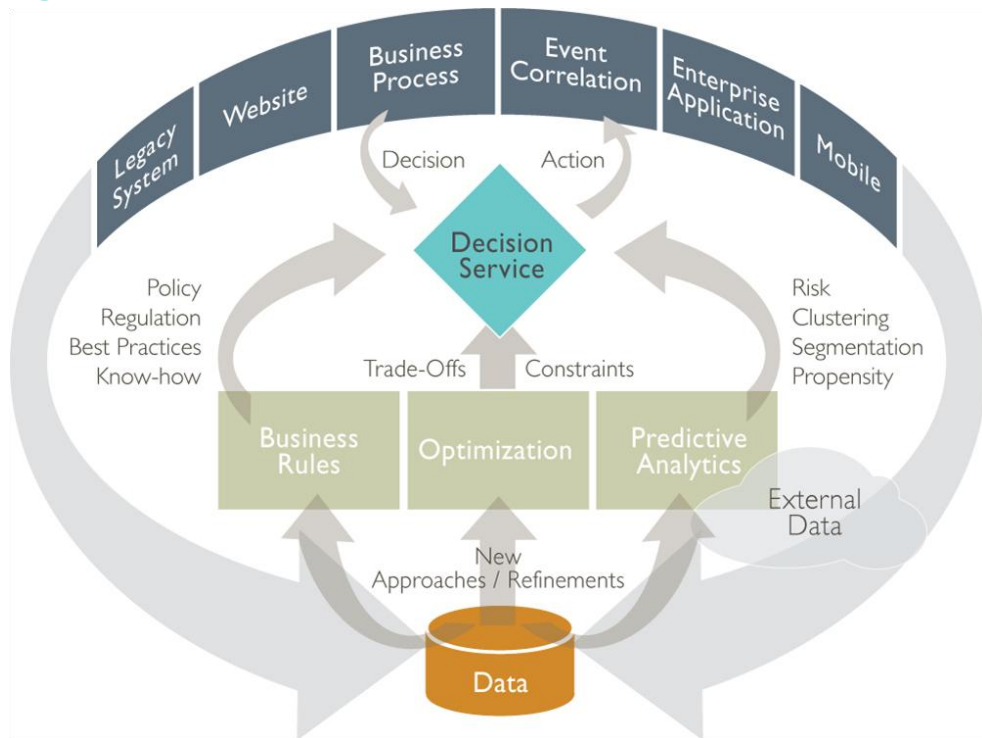


Each step enhances part of the existing development lifecycle. Decision Discovery adds a focus on decisions to the requirements process, Decision Services focus existing development approaches on decision-making components and Decision Analysis enhances the performance management and maintenance approach an organization takes.

A Decision Management Architecture

Decision Management also takes advantage of technology, specifically Business Rules Management Systems to manage decision logic and Predictive Analytic tools to develop and deploy advanced analytic models. The aim is to create independent Decision Services to replace the decision points currently embedded in business processes and operational systems. The building blocks of Decision Services are the business rules that drive and support your decision making approach and the analytics that ensure that decision-making is accurate.

Figure 2: Decision Services At The Center



Source: *Decision Management Solutions*

To see how Decision Management and Process Management work together, consider this Latin American Insurance company. In a highly competitive market this company used Decision Management to develop smarter and more agile processes. Using a Business Rules Management System to develop Decision Services for quoting, underwriting, pricing and more, this company integrated decision-making into its processes and legacy applications. Supporting corporate customers, consumers and agents, the new processes handle 5M policies and over 8,000 agents.

How did they do? A 90% improvement in straight through processing, greater transparency, improved compliance **and** a 70% improvement in speed to market—4 weeks v more than 3 months—tell the story. More effective, more transparent and more agile.

More Effective Processes

Applying Decision Management as well as Process Management creates fundamentally more **effective** business processes. Managing and automating decisions increases the rate of straight through processing and ensures more processes are right the first time. Decision Management also makes it practical to apply advanced analytics and Big Data to improving process outcomes.

Straight Through Processes

Making processes more effective requires that they handle more transactions without manual intervention—that more instances run straight through. This means that business processes cannot rely heavily on manual reviews nor put items on worklists or in queues very often as these put a hold on execution. For many processes it is the need to make decisions that cause transactions to be reviewed or placed on someone's queue—decisions about validating the completeness of a transaction, determining eligibility, assessing risk or calculating a discount for example. Decision Management delivers Straight Through Processing by replacing manual decisions with automated ones. Whether the decision service in question handles 100% of transactions or not, every decision made means another transaction running straight through the process.

Straight through processing is often valued because it reduces costs but it also enables critical customer-centric capabilities. A process that executes straight through is more likely to be consistent than one that stops for manual intervention. This means less channel inconsistency, something customers hate, and more confidence on the part of customers that the company has the process under control. Straight through processing also supports self-service much more effectively. Instead of a customer being able to start a process for themselves and then wait for a human response, they can get an immediate response as the process executes to completion in real-time.

Right First Time Processes

More effective processes also mean less re-work. It's not enough that a process completes, it must complete correctly. Decision Management delivers more "Right First Time" executions by correctly implementing potentially complex policies and regulations. Using a Business Rules Management System to manage hundreds even thousands of rules means that your policies will be enforced and your outcomes will be in line with the relevant regulations without expensive and time consuming rework.

This too reduces costs while improving customer outcomes. Having to revisit a customer's application, having to reach out long after the customer thought they

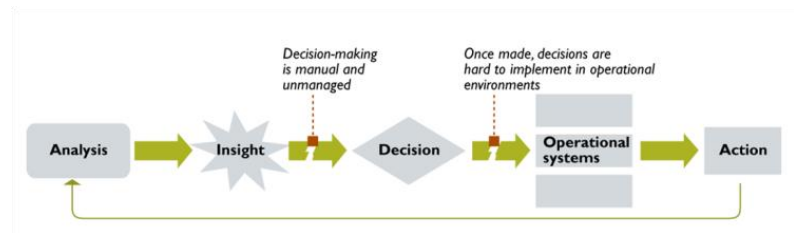
were done, is terrible customer service. Getting it right the first time, gathering all the data that is going to be required, validating that data and checking that the customer is eligible all help ensure a better customer experience.

Analytic Processes

While many processes rely on explicit decision-making logic, some involve more complex assessments—of credit or supply chain risk, of fraud risk or of customer opportunity. Traditionally these assessments require a human user to review potentially large amounts of data to make a determination. In an era of Big Data, where the volume of data available is exploding and where that data has greater variety and arrives more rapidly, such an approach simply drowns decision-makers in data and leaves an insight to action gap. When the decisions involved are part of high-volume business processes, when those decisions must be made at the front-line of an organization in real-time, a fundamentally different approach to analytics is required.

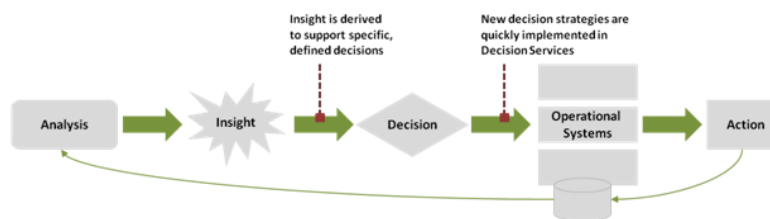
Decision Management applies advanced analytic techniques—data mining and predictive analytics particularly—to turn large volumes of data

Figure 1: The Insight To Action Gap



into usable insight. These techniques analyze historical data to find hidden patterns that predict the degree of risk, the likelihood of fraud, likely demand or the best way to maximize customer opportunity automatically. Decision Management then closes the insight to action gap by embedding these analytics into automated decisions.

Figure 2: Automated, Analytic Decision-making



Using these analytic assessments in automated decisions improves their accuracy. It allows pricing to vary depending on risk,

auto-adjudication to consider the chance of fraud, re-stocking to consider demand and cross-sell to target customers more effectively. By ensuring that the decisions within a process are made in the light of these patterns, Decision Management makes the process truly analytic, putting your data to work improving results.

More Transparent and Agile Processes

The benefits of Process Management—consistency, improved customer experience, reduced costs and business agility for instance—can be undermined by complexity. If a business process is complex then it is harder to manage and change in response to new challenges or opportunities. Applying Decision Management as well as Process Management creates more **transparent** and **agile** business processes.

Simpler Processes

Complex processes are hard to manage. One of the most common ways to add complexity to a business process is by embedding decision-making in that process. As Figure 3 shows, even a little decision-making logic can make for a complex process as multiple gateways and paths are used to describe the logic. In contrast, identifying and managing the decision separately as in Figure 4 dramatically simplifies the process.

Figure 3: Complexity

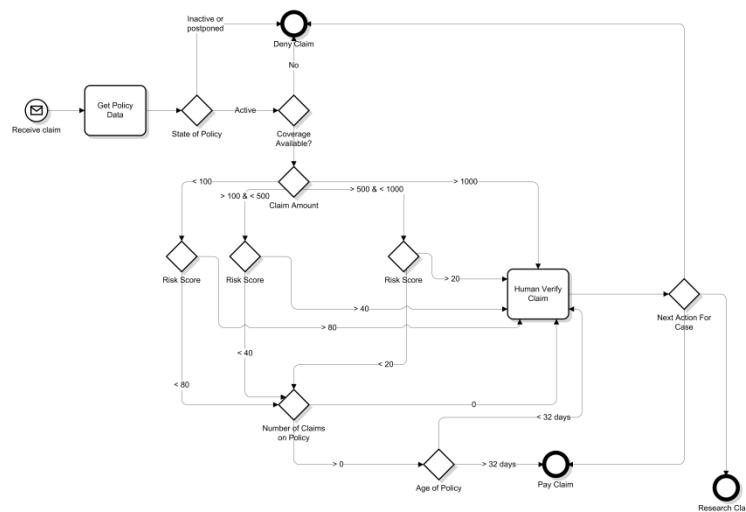
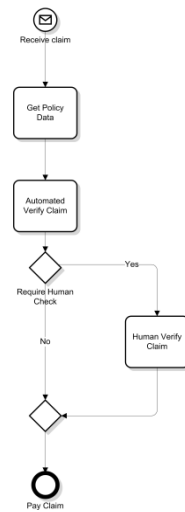


Figure 4: Simplicity



When Decision Management and Process Management are used in parallel, decisions and processes are both treated as first class concepts. The right approach is used to model and manage each and simpler, more manageable processes are the result.

Transparent Processes

Managing decisions independently of business processes makes those processes simpler. This would add little value if the resulting decision was a black box. Decision Management ensures that the decision, and therefore the business process, is transparent. By putting business rules and a Business Rules Management System at the heart of your decisions, Decision Management delivers both **design** transparency and **execution** transparency for the decisions within your process.

- ▶ A Business Rules Management System uses graphical metaphors and business-friendly syntax to specify the business rules required in your decisions. This gives you design transparency by making it clear to both business and IT practitioners how the decisions are designed, how they are expected to be made. The design of the decision, the business rules that will be applied, and the way those rules will execute, is clear to everyone involved improving the accuracy and reliability of the business rules involved.
- ▶ A Business Rules Management System also records exactly how it makes each decision it makes, which business rules fire for which transactions. This gives you execution transparency as you can review exactly why each execution of the process did what it did. The rules that fired, the decisions that were made, are clearly recorded. This supports audit and compliance needs while also supporting continuous improvement by allowing you to easily review what works and what does not.

Replacing a nest of gateways and embedded decision logic separately managed decisions based on business rules delivers a truly transparent process.

More Agile Processes

Simpler processes are easier to understand and easier to change safely. Simplifying a process by externalizing decision-making from it therefore makes it more agile. Decision making logic is easier to manage using a Business Rules Management System too; allowing business users to collaborate effectively with IT to make the changes that are needed when they are needed. This further improves the agility of the business process.

Managing decisions and processes in parallel maximizes the agility of your business overall. Encapsulating changes to organizational behavior in either a process or a decision allows them to be changed independently. When a change to the process is required the decision-making is left unchanged and can be called by the new process. Similarly when decision-making must be changed, a much more common occurrence, the process remains stable.

For instance a new regulation might change which transactions must be audited or a change to the product catalog might change who is eligible for a specific product. These changes can be made to the decisions involved while leaving the processes that use those decisions unchanged.

Managing decisions makes it possible to change the result of a process by changing how decisions are being made without redesigning the process itself. This increases the effective agility of the business as a whole.

Conclusion

Process Management has proven itself to be an effective technique for delivering better managed and more efficient businesses. Decision Management adds to this success by improving the effectiveness, transparency and agility of business processes. The use of Decision Management as well as Process Management results in simpler, more agile and fundamentally smarter processes.

Organizations already invested in Process Management as an approach and Business Process Management Systems technology should identify the decisions that matter to those processes and apply Decision Management to those decisions. Adopting a Business Rules Management System and more advanced analytics will allow them to systematically automate and improve these decisions.

For those organizations just beginning with Process Management, adopting Decision Management in parallel offers them an opportunity to keep complexity out of their solutions and move immediately to a more effective, transparent and agile business.

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If you have any questions about Decision Management Solutions or would like to discuss engaging us we would love to hear from you. Email works best but feel free to use any of the methods below.

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