

HOW CORTICON MAKES PROGRESS TOWARD ENSURING COMPLIANCE



Challenge

Maintaining compliance with numerous and constantly changing state and federal regulations, corporate policies and customer expectations is a challenge for organizations across all industries; failure to do so can result in severe consequences.

Solution

Progress Corticon, the market-leading business rules management system, provides organizations with a flexible and agile way to automate the underlying decision-making process within their business applications, ensuring those organizations can quickly and easily adapt to changes that can affect compliance.

Benefit

By consistently maintaining compliance, organizations can avoid financial penalties and reputation damage, maintain customer and investor confidence, and retain and attract new customers while optimizing the customer experience.

The rise of regulations such as HIPAA, Sarbanes-Oxley and BASEL II, coupled with long-standing mandates in areas such as insurance and banking means more companies than ever are struggling with the complexities of compliance, including:

- The ability to demonstrate compliance
- Responding quickly to new and changing regulations and policies
- Retaining a level of business agility, while maintaining compliance

To further complicate matters, companies have their own corporate policies and standards—human resources policies, service-level agreements and so on—which can vary across industries, regions and countries and evolve with shifting market dynamics.

Although compliance is most often associated with highly regulated markets such as financial services, banking, insurance and healthcare, it affects every industry. Real estate companies must follow strict rules for developing contracts, offer agreements and disclosures. Government agencies must adhere to rules for providing benefits and assistance to citizens. Schools have strict policies for sharing student information. Online retailers and service providers must follow specific payment rules.

And, most organizations are guided by corporate policies dictating employee conduct, corporate responsibility and an employee's right to privacy.

The consequences of non-compliance can be considerable, including financial penalties, loss of customer and investor confidence, reduced market share, reputation damage, disruption to operations and even prosecution. "Increased regulatory scrutiny and complexity, enforced business changes and individuals being held personally accountable are all set to continue as a result of continuing widespread compliance failures," according to a recent Reuter's report.

But ensuring compliance has become increasingly complex. Not only do most companies make thousands of recurring decisions every day (for example, what benefits does this person qualify for? What forms must be disclosed/signed to complete this transaction?), but the rules, policies and regulations guiding such decisions are constantly changing.

An Agile, Flexible Approach to Compliance

Managing the rules associated with these decisions manually is fast becoming unreliable and impossible. Some companies have tried to build automation into the decision-making process by hard-coding business rules into their operational applications. But this approach often fails to scale with the breadth and frequency of change with which companies must contend. Changes to a single rule may require IT resources and can take weeks or even months to complete, leaving an organization vulnerable.

Progress Corticon offers a far more agile and flexible way to ensure compliance. Rather than hard-coding, Progress Corticon separates business rules from application code, enabling business users to implement

"Both business users and developers can quickly and easily manage rules using Progress Corticon Studio. Rules management has become a more iterative and agile process; what once took us weeks now takes days, if not hours."

Shirley Monroe, CTO Public Welfare
Insurance and Aging for the Commonwealth of Pennsylvania

and modify rules outside of the application within minutes, often slashing development and changes cycles by as much as 90 percent.

"With our old process, creating or modifying business rules was time-consuming and cumbersome. A business analyst would have to sit down with a developer to translate the policy into code. The developer would then have to make the changes, test and then deploy the rule," said Shirley Monroe, Chief Technology Officer, Public Welfare, Insurance and Aging for the Commonwealth of Pennsylvania. "Today, both business users and developers can quickly and easily manage rules using Progress Corticon. Rules management has become a more iterative and agile process; what once took us weeks now takes days, if not hours."

Risk Mitigation

Ensuring compliance for many organizations is far from a nice-to-have; it is an absolute necessity. Failure to do so, particularly for those organizations in highly regulated industries, can result in devastating consequences. Just ask Bank of America, which paid more than \$16 billion for selling toxic loans, or Citigroup, which paid \$7 billion for misleading investors about shoddy mortgage-backed securities.

Serving more than four million customers, DBS is a leading Asian financial services group and consumer bank operating in Singapore and Hong Kong.

DBS relies on Progress Corticon to provide a reliable, accurate and flexible credit scoring process to support both its consumer and commercial loan activities. Using Corticon, the company can determine credit worthiness quickly and accurately based on eight scoring models, each with hundreds of rules and hundreds of factors affecting a score. DBS can also add and modify rules quickly to reflect new changes in regulations and business policy while maintaining business agility and high performance.

“Progress Corticon gave us the ability to change the way the credit scoring is done...we can change criteria on the fly; we don’t have to wait months to update the process,” said Sakthidaran Swamirajan, Vice President, Application Management at DBS.

Prior to using Corticon, the DBS credit determination process was very manual and error-prone. Consequently, DBS assumed higher risk, and was

“The application [based on Progress Corticon] is helping realtors mitigate risk. ...With Corticon, new rules can be created and deployed today, but not go into effect until some future date, such as when a new statute takes effect. And you can audit the system for what rules were in effect at a prior date. This can be invaluable for a realtor to use in the event of litigation.”

William E. Brown, President
California Association of Realtors

required to hold more capital in reserve. With Progress Corticon, DBS now routinely passes both internal and external audits by the Monetary Authority of Singapore. This not only reduces its own credit risk, but reduces the amount of funds that once had to be held in reserve to cover potential bad loans. The bank’s strong capital position, as well as their A rating (beginning in 2009) was due to the change in their credit reporting application that included Corticon (launched in 2009).”

The California Association of Realtors (C.A.R.) is using a Forms Advisor solution that leverages Progress Corticon to define, automate and manage forms selection. One of the most complex parts of a realtor’s job is determining what forms to use for what transaction, for example the purchase of a residential property or the lease of an apartment. The number of possible combinations of forms is mind-boggling, and failure to complete a single mandated form can subject a realtor to liability and/or sanctions, including fines, loss of license and damaged reputation.

Requirements change all the time in response to changes in the law, best practices and modifications in the text of the forms themselves. Some forms apply statewide, while others are specific to regions, geographies or local associations. Brokers also have their own specific forms and rules, some of which override the local or statewide forms.

Using Progress Corticon, C.A.R. has automated the complex business rules for completing forms. As a result, the organization has mitigated financial and reputation risk, is enabling members to achieve 100 percent compliance despite constantly changing policies, and has allowed C.A.R. to dramatically reduce legal staff.

“The application [based on Progress Corticon] is helping realtors mitigate risk. If a realtor does not use a required disclosure form, they’ve opened themselves to liability. If they use the wrong form, they are not protected,” said C.A.R. President, William E. Brown. “With Corticon, new rules can be created and deployed today, but not go into effect until some future date, such as when a new statute takes effect. And, you can audit the system for what rules were in effect at a prior date. This can be invaluable for a realtor to use in the event of litigation.”

Tokio Marine and Fire Insurance Co. (HK) Ltd. is a member of one of the largest international Insurance groups in the world. The company is using Corticon to automate the highly complex business rules within its 401K business support system, to ensure compliance with regulations while maximizing operations and productivity.

Supporting more than 600,000 users, the Progress Corticon-based system manages 400,000 steps across 120 unique screens and 94 jobs. By replacing its previous manual-based, error-prone process with Progress Corticon, Tokio Marine and Fire Insurance Co. can now automate a single process that includes hundreds of thousands of steps, while ensuring the outcome of that process meets rigorous compliance standards.

Customer Satisfaction, Retention and Attraction

Maintaining a solid reputation and ensuring an excellent customer experience are vital to long-term success. The ability to comply with regulations and policies can build customer and investor confidence and improve customer satisfaction, while saving a company money.

Take Holland’s largest independent holiday retailer, for example. To remain competitive, D-reizen strives to provide customers with the latest and most exciting holiday deals. Finding and showcasing the travel specials

“The Progress business rules management software makes everything significantly faster. A rule change that used to take five days to code and implement can now be completed in a few hours.”

Lucas Nijenhuis, Functional Architect
D-reizen

was not particularly difficult. However, when it came to ensuring payments were processed in ways that satisfied both the tour operators and regulators, the company struggled with its existing system architecture.

In Holland, it is customary for a tour operator to require a down payment for a holiday and then collect the full payment within six weeks of the trip. For each type of holiday (cruises, cycle, sport, camping and so on), slightly different policies have to be applied for the down payment—policies that are enforced by the Dutch Association of Travel Agents and Tour Operators (ANVR). D-reizen was lacking the IT flexibility to keep up with constant changes in payment rules. Because it was using a manual-based system, adding or modifying rules to reflect payment changes became a resource-intensive process that impacted D-reizen’s agility to promote new travel deals.

With Progress Corticon, D-reizen now has the ability to separate the process of making or changing payment rules from the underlying code, which has accelerated its ability to keep up with new and changing policies. Consequently, the company is able to keep its website fresh and competitive with the latest great travel deals. “The Progress business rules management software makes everything significantly faster. A rule change that used to take five days to code and implement can now be completed in a few hours,” said Lucas Nijenhuis, Functional Architect at D-reizen.

Unum is a Fortune 500 company and a market leader in disability, group life, long-term care and voluntary benefits. The company serves more than 170,000 businesses and its employees worldwide, helping to protect 20 million working people and their families in the event of illness or injury. To add value to existing customers while attracting new ones, it is essential that Unum is able to quickly introduce new products and services, and then ensure it offers and administers those products and services in compliance with federal regulations, corporate policies and entitlement rules.

In the past, the business rules that defined these products and services had been hard to find and hard to change, delaying the introduction of new products. “Our business rules were locked up in code” said Julie Gross, Assistant VP of Business Systems Implementation at Unum. This led to lack of agility. Changes we needed urgently were taking 12-plus weeks to implement.” Today, business decisions from a number of domains have been automated using Corticon. Customer acquisition, self-service, contact management, benefit administration and product specification have already been implemented, with benefits (claims) underway.

The ease of use and transparency of Corticon mean that Unum’s business analysts are fully empowered to manage business rules that comprise business decisions, leading to much faster turnaround on

changes. Prior to Corticon, a customer could wait eight weeks after a price quote was accepted and before the policy was issued; now it takes as little as a week. Changes are made with accuracy and confidence, including all the necessary IT governance and controls, thanks to the model-driven approach and rule verification built into Corticon.

Serving the Needs of the Public

Average citizens don’t care about compliance. What they do care about is getting timely access to the benefits and services they need and deserve. Local governments and agencies, on the other hand, do have to care about both: serving the needs of the public while protecting their programs from risk and fraud.

The mission of the Commonwealth of Pennsylvania Department of Public Welfare (DPW) is to improve the quality of life for Pennsylvania’s individuals and families by promoting opportunities for independence through services and support while demonstrating accountability for taxpayer resources. DPW is using Progress Corticon to automate the rules and logic behind the process for determining entitlement for benefits, such as Temporary Assistance to Needy Families (TANF) and Supplemental Nutrition Assistance Program (SNAP).

To ensure compliance with program entitlement rules, Corticon must automate the exchange of information between the department and more than 100 entities within the state and federal government for data matching, such as the Social Security Administration (SSA) and the Internal Revenue Service (IRS). Prior to Corticon, the system would often raise alerts about

“Using Corticon to manage our business rules lets us adapt and evolve rather than having to reinvent everything for each new product or service. We have realized a strong ROI with respect to Corticon.”

Rick Klausner, Vice President
IT Enterprise Architecture, Unum

potential conflicts. Caseworkers would then have to manually review each of those actions to ensure entitlement decisions were in compliance with state and federal regulations. With a huge backlog of pending alerts, caseworkers were tied up trying to resolve compliance issues, and access to programs and assistance for PA's citizens could be delayed.

Progress Corticon has given the Commonwealth of PA the ability to automatically manage the entitlement process, ensuring underlying decision-making processes meet compliance requirements. "Now our caseworkers focus only on those hits that truly require human analysis," said James Weaver, Deputy Chief Information Officer for DPW. "This has cleared out a huge backlog of pending alerts, significantly improved productivity and enables us to provide eligible citizens with the benefits they deserve, when they need them."

This level of automation has also decreased the number of overpayments associated with non-compliance. "We are under time constraints for when benefits need to be issued. So with our old system

"With our old system we ran the risk of sending out incorrect benefit amounts. When the Auditor General would come in to do compliance checks, he was constantly finding overpayments; money in all likelihood we never got back. By automating this process with Progress Corticon we have improved program integrity and achieved cost avoidance."

James Weaver, Deputy CIO
for The Commonwealth of PA Department of Public Welfare

we ran the risk of sending out incorrect benefit amounts. When the Auditor General would come in to do compliance checks, he was constantly finding overpayments; money in all likelihood we never got back," said Weaver. "By automating this process with Progress Corticon, we have improved program integrity and achieved cost avoidance."

One U.S. State in particular is home to most of its human services and healthcare programs, including Medicaid and the Department for Public Health. In addition, they built their own Health Insurance Exchange (HIX) to help uninsured people find healthcare coverage.

Corticon is a key component of the system, automating the complex business rules involved with determining what health insurance a citizen qualifies for based on a number of rules— rules that often change in response to market fluctuation plus local and federal regulations. Progress Corticon enables the department to ensure decisions made within its HIX are in compliance with those policies and regulations. With traditional methods that embed the decision-making rules into the application code, it could take the department weeks or even months to revise, test and redeploy rules. Progress Corticon enables the department to create and modify rules far more quickly—within hours in many cases—ensuring citizens receive the most accurate information possible.

Using Progress Corticon, both business and IT users can build, test and deploy complex rules. And with Corticon, the department can also maintain a record of what rules were in affect at any given time.

New Market Opportunities

The push for increased compliance is providing entrepreneurs with new market opportunities—opportunities that are driving exciting technology innovations.

The NETELLER Group operates an online money transfer service that uses and extends the existing international banking structure to provide a secure means of transferring funds worldwide. One of NETELLER's core competencies is the ability to provide positive proof of identity of online individuals in an effort to eliminate identity theft and fraud. The company's identification system takes personal information—such as an applicant's name, address, social security number and country of residence—and verifies this data with external data providers, like credit reporting bureaus, to ensure the account holder is indeed who he or she claims to be.

Using Progress Corticon, NETELLER has streamlined and increased the accuracy of the verification process—ensuring decisions are made in compliance with state and federal regulations and corporate policies. Today, the average identity verification transaction takes between four and ten seconds. “Our new [Progress Corticon] system gives us a huge amount of flexibility, and greater confidence in the accuracy of our results,” said Andy Scott, Chief Security Officer. “Now we

“Corticon offers the flexibility and agility around rules creation and management that we needed...There are no other solutions on the market that can do for us do what Progress Corticon does.”

Carlos Bassi, CEO and Founder
Vitalbox

“Our new [Progress Corticon] system gives us a huge amount of flexibility and greater confidence in the accuracy of our results. Now we are able to verify more applicants and approve more customers at a higher level, which translates directly to more business with more people.”

Andy Scott, Chief Security Officer
NETELLER Groupare

are able to verify more applicants and approve more customers at a higher level, which translates directly to more business with more people.”

Vitalbox is a social business enterprise focused on public health in Brazil. The company has developed an innovative Personal Health Platform designed to create a personalized assessment of health risks. Using Corticon to automate the business rules management process, the platform provides individuals with a health map based on a number of rules that calculates the chance of that person developing chronic conditions.

“We add new rules to our system every day based on new studies, protocols and regulations,” said Carlos Bassi, CEO and Founder of Vitalbox. “Once we expand outside of Latin America, we will need to create and customize rules across a multitude of factors, including country, regulations, ethnicity, gender and risk level.”

A critical component to the Vitalbox platform is the ability to provide notifications to its users based on the information in their member profiles. A notification can be a simple reminder that some health data is missing or overdue, an alert because a combination of data creates a special situation that requires attention, or a recommendation based on a list of factors. “These rules change frequently, based on health ministry guidelines, country, health operator and so on. It is crucial to

have flexibility to create and maintain these rules,” said Bassi. Progress Corticon gives us that agility to immediately react to change, and it ensures our users are getting the important and timely information they need to guide their health decisions.”

Users can opt to share their information with their personal physician. In the near future, Vitalbox plans to offer physicians the ability to modify and create their own rules, based on their individual patient’s needs. For example, if a doctor has determined the patient has high blood pressure, he may create a rule that the patient is to take and record her own blood pressure every two weeks. If the patient fails to comply with the doctor’s order, the rule can be configured to send the patient a reminder. And if the recorded numbers fall within dangerous levels, the doctor can configure the rule to send an alert telling that patient that she should set up an appointment for a checkup immediately. “There are no other solutions on the market that can do for us do what Progress Corticon does,” said Bassi.

Conclusion

Whether you are an organization looking to reduce your risk, improve the customer experience, attract and retain customers or deliver new and innovative solutions, compliance is a necessity— compliance with rules and regulations, with corporate policies and even with customer expectations. More than 500 customers around the world rely on Corticon for automating and executing business rules. Industry leaders such as eBay, Vitalbox, NETELLER, DBS Bank and the Commonwealth of PA have realized significant bottom- and top-line results using Progress Corticon to create manage and deploy business rules.

To learn more about how Corticon can help your organization ensure compliance, visit progress.com/corticon or call **1-800-477-6473**.

About Progress

Progress (NASDAQ: PRGS) is a global software company that simplifies the development, deployment and management of business applications on-premise or in the cloud, on any platform or device, to any data source, with enhanced performance, minimal IT complexity and low total cost of ownership. Progress can be reached at www.progress.com or 1-781-280-4000.

Progress and Progress Corticon are trademarks or registered trademarks of Progress Software Corporation and/or one of its subsidiaries or affiliates in the U.S. and/or other countries. Any other trademarks contained herein are the property of their respective owners.

© 2016 Progress Software Corporation and/or its subsidiaries or affiliates. All rights reserved.
Rev 16/3

