

RegTechs: a game changer in credit process efficiency

Banks benefit greatly from digitalisation – whether through an increase in operational efficiency, enhanced responsiveness to customer needs, or improvements in strategic decision-making. Technology companies, such as RegTechs, are a key driving force behind many of these benefits. They harness the evolution of digital technologies for the purposes of risk management and regulatory compliance. RegTechs can enhance data availability, traceability, and/or modularity hence, improving the overall reporting standards (financial, risk, regulatory, and management). It is also possible for RegTechs to facilitate documenting compliance with existing regulatory requirements. But most importantly, RegTechs have the ability to overhaul almost all aspects of risk management at banks and other lenders. Through these benefits, it will be no surprise that RegTechs are a game changer for the credit industry moving forward.

Following the global financial crisis, a great number of new regulations have forced financial institutions to spend significant amounts of time and money on regulatory projects in order to ensure compliance.

Financial as well as human capital has been invested in setting up new compliance and data governance frameworks. Meanwhile, margins in the traditional lending business have decreased significantly.

For the foreseeable future, a turnaround of the current ECB strategy is not in sight. This is one critical driver behind the historically low margins and unprecedentedly high cost-in-come-ratios.

Such signs indicate that the traditional business model of banks has become out of balance.

At the same time, technological developments have changed people's behaviour and increased their expectations in terms of the quality, speed and customer-friendliness of the entire financial services industry. The co-evolution of customer expectations on the one hand, and technological capabilities on the other, has spawned the emergence of a multitude of FinTechs, for example:

- Consumer credit companies (e.g. Zopa in the UK and Lending Club in the US)
- Payment service providers (e.g. Paydirekt, Paypal or Cringle)
- Insurance technology providers (e.g. German start-ups Clark or Friendsurance)
- Robo-advisors (e.g. Scalable Capital).

Even BigTechs like Apple launched a payment solution ApplePay, and financial heavyweight Goldman Sachs is building its own digital consumer lending platform called Marcus.

German companies like N26 or Comdirect bank, both pure online banks, have already realised how important the digital customer experience is. In the absence of any physical product, being digital has become a must for financial services providers. More and more digital products are launched or will be published in the near future, e.g. the Deutsche Bank robo-advisor "Robin" or the Sparkassen Group payment app "Kwitt".

In back office, however, processes are still predominantly manual in these areas. Especially compliance/finance and risk management departments can benefit greatly from automation. One example is the use of robotic process automation (RPA) in order to save human time and effort for more complex tasks.

The typical loan journey in Germany

Automation is already present in customer acquisition and on-boarding. Numerous comparison websites automatically match borrowers with prospective lenders and transmit their information so that a creditworthiness assessment can be performed. Front office operations have been significantly digitalised and automated in the recent years compared to back office operations.

One clear indicator of this is that the physical interaction between the borrower and the bank has significantly decreased. For example: in many banks underwriting consumer loans is just a simple yes/no decision based on a credit score threshold. Depending on the pricing system, customers may receive a risk-adjusted/-sensitive rate. Based on this rate, they can decide, if they want to accept or reject the offer.

After accepting and completing the paperwork, the loan will be on the customer's

account within a few days – something that could take easily a few weeks just a decade ago.

The lifecycle of a bank loan, however, does not end at the time of disbursal. There is a complex set of back office processes, which are still manual and therefore subject for improvement. RegTechs in particular can support in certain areas such as loan monitoring, analysis, stress testing and reporting.

On the market, there is a variety of different RegTechs, which offer customised solutions, greater automation and highly efficient analysis. Thus, the different bank-teams along the value chain can invest more time in analysing data and respond appropriately instead of only executing repetitive tasks, which are not aligned with the needs of the situation a customer is facing.

Not only consumer loans but also business loans are affected by RegTech developments. Especially complex business loans require more resources with respect to monitoring, continuous analysis, and risk management. Thus, RegTechs can provide a significant economic benefit to a variety of sub-sectors of the lending industry.

RegTechs in Risk Management

Several companies are operating in the field of providing specialised risk management services to banks and other lenders. One for instance is the Risk Research GmbH, who provides a complete end-to-end (origination, controlling, operations and reporting) solution in terms of software and consulting. One of their core capabilities is validation of bank models according to Basel standards and other relevant standards.

Simplified back office loan value chain*

Origination	Risk Controlling	Servicing & Operations	Reporting
<ul style="list-style-type: none"> Record and verify customer details and determine credit score Perform requisite fraud checks Make loan decision according to criteria defined by risk management Make alternative offerings if original customer request cannot be accommodated Disburse funds to customer 	<ul style="list-style-type: none"> Stress testing Portfolio analysis Early warning indicators (KPI and KRI) Continuous improvement of credit model Resale of loans on secondary market to optimise portfolio Fully transparent reporting to potential investors and regulators about loan performance and compliance 	<ul style="list-style-type: none"> Review and adjustment of contracts and ratings depending on customers' individual circumstances Extensive self-servicing capabilities (e.g. make unscheduled early repayments) Data-driven profiling of delinquent borrowers Smart collection of non-performing loans Loan restructuring Collateralisation 	<ul style="list-style-type: none"> Highly flexible, real-time reporting Ad-hoc definition of variables Integrated / harmonised management and regulatory reporting
Risk Management	<ul style="list-style-type: none"> Provide accurate measures of risk to be used in underwriting / origination Change underwriting decision rules based on risk appetite / current capacity Determine adequate interest rates for different risk levels Analysis of financial statements (B/S, P&L, cash flows) Develop, test and continuously review / update the bank's credit model 		

* Please note, the shown RegTechs are just examples of companies that offer such services and are not linked to TME AG in any matter

Source: TME AG, 2018

Another provider with a far more innovative approach, is the British RegTech Logical Glue. Logical Glue uses neural network-based models to construct autonomously learning algorithms to solve problems ranging from the assessment of creditworthiness to the likelihood of recovering a sum owed by a delinquent borrower. The RegTech prides itself on being able to predictively out-match any conventional model as long as input data exceeds a certain volume and complexity.

RegTechs in Risk Controlling

Having an effective risk controlling function is extremely important and can affect the whole lending value chain.

Being able to predict delinquencies, risk concentrations and losses, as well as, to measure expected portfolio profitability at an early stage is essential for lenders. It enables them to identify issues and react promptly to events.

Thus, risk controlling is another step of the loan value chain that exhibits high potential for RegTechs to add value. Based on the available parameters, a RegTech can provide

different and complex stress tests, as well as, customised analysis.

This enables the production of early warning indicators such as KPIs or KRIs, which automatically trigger loss prevention actions prior to delinquency.

Stress testing and loan analytics are two additional fields in which RegTechs can improve back office processes.

One RegTech, which is specialised in stress testing as a service, is the Dutch company Open Source Investor Services B.V. (OSIS). The OSIS LoanPilot software solution offers the forecasting of multi-year rating migrations, defaults and expected losses considering different macro factors on both the portfolio and loan levels.

Temenos Group AG offers with their Analytics solution another module-based software for Loan Analytics. The software provides the chance to be more analytically driven with different ready-to-use models, KPIs, dashboards, applications and reports, combined with real-time data and predictive analytics.

Using such software allows financial institutions to get a better understanding of their customers' behaviour, forecasting trends, react faster, better, and overall proactively mitigate the risk of delinquency.

RegTechs in Servicing and Operations

Integrating RegTech solutions can make loans much more profitable, for example by reducing processing time.

Actico offers that sort of solution, among others. The German company is specialised in origination and associated services along the credit lifecycle. Actico offers a broad range of services including capturing and analysing financial statements, as well as, a flexible framework for the implementation of internal ratings and customised scoring models.

Based on an in-depth risk assessment, the Actico platform allows the implementation of complex loan strategies and workflows for loan origination and monitoring. A built-in simulation environment allows platform users to analyse changes of the underlying risk models as well as to ensure their continuous improvement.

Such solutions can provide valuable support in loan monitoring but also in the prevention of fraud. This is particularly critical for business loans since they have bigger volumes than consumer loans and therefore expose the originating institution to greater risk.

There are regulation-versed technology-conservative companies like Optio Solutions from the US, which is focused on recoveries/collections, combining the benefits of automation and statistical analysis with fully transparent, digital operations and intensively emphasised compliance.

Information about collaterals especially for large loans, e.g. mortgages or syndicated credit lines provided to businesses, must be reviewed regularly. Often this process is very complex and time consuming. Thus, costs can be reduced significantly if certain tasks are outsourced to a specialised and efficient vendor.

RegTechs in Regulatory and Management Reporting

Besides optimising above back office processes, there are additional areas where RegTechs can contribute a benefit. E.g. in reporting (financial, regulatory, risk and management). With the go-live of the AnaCredit regulation in September 2018 de-

tailed information on loans above 25k EUR must be reported to the regulator.

Gathering this information and assuring data integrity is very time consuming and complex, especially given the fact that financial institutions must comply with the requirements of BCBS239. RegTechs can offer efficient solutions for streamlining the relevant processes while at the same time ensuring the required level of data quality, traceability and modularity.

Another time-consuming back office process is to report on the different portfolios, products, regions, customer types and or any other clusters. These reports must be generated on a regular basis or ad-hoc in order to provide senior management as well as other relevant stakeholders (e.g. loan investors or regulators) with an overview of the current and expected situation.

All RegTechs offer reporting, as a standard service. This eliminates the use of separate spreadsheets, provides flexibility, and produces ad-hoc reporting capability as well as all relevant documentation with minimal effort. A fully fletched risk data warehouse is not available at most banks yet. Such deficiency combined with banks inefficient IT-infrastructure is one of RegTech's biggest opportunities.

Conclusion

These few examples show the extremes in which a multitude of national and international companies is operating. Thus, RegTechs, even if still at an early stage, have the potential to be a real game changer for the financial services industry.

A greater degree of automation is important for speeding up the credit process and for increasing the quality of underwriting. This enables credit providers to offer better pricing, better terms and better conditions to their customers. As shown earlier, especially in the back office, processes can be improved and streamlined by applying RegTech solutions.

The RegTech market is already highly competitive. There are various RegTechs which provide specialised services tailored to individual bank's requirements. Therefore, before co-operating with a RegTech, alternative providers have to be analysed thoroughly in order to find the best fit.

With the help of RegTechs, financial institutions have more capacity to focus on strategic challenges, outperform customer expectations and improve the transparency of their compliance with all regulatory requirements.

TME AG

Risk & Regulatory

- Risk & Regulatory Analytic
- RegTech Solutions
- External and Regulatory Reporting

Transformation Management

- Innovation Management
- Project- und Programme-Management
- HR Transformation

Digital Banking

- Customer Experience Design
- Prototyping & App Development
- Digital Audit & Strategy

You can find more topics on our website
kontakt@tme.ag | www.tme.ag

TME Institut für Vertrieb und Transformationsmanagement e.V.

Hamburger Allee 26-28
60486 Frankfurt am Main
kontakt@tme-institut.de



APP „TME Institut“

All TME publications are also available for download in the TME Institut App. Get the App in the App Store from Apple and Google.

Authors & Contact Persons

STEFAN STEINHOFF is Partner at TME AG and as a Managing Director responsible for Risk & Regulatory.

steinhoff@tme.ag

NICOLAI PREUSS is Senior Consultant at TME AG and an expert in outsourcing, sourcing strategy and digitalisation in Risk & Regulatory.

preuss@tme.ag

MONIKA ANDRONOVA is Senior Consultant at TME AG and an expert in new technologies, RegTechs and digitalisation in Risk & Regulatory.

andronova@tme.ag

TME Institut | Dezember 2017

Die in den letzten Jahren immer weiter ansteigenden aufsichtsrechtlichen Anforderungen erhöhen den Steuerungs- und Verwaltungsaufwand für Auslagerungen sowie für Auslagerungsrisiken. Die seit Jahren schwache Ertragslage, bedingt durch das niedrige Zinsniveau, sowie der Druck auf der Kostenseite der Banken, unterstützen andererseits steigende Dienstleistungspreise, machen das Auslagern von Prozessen immer ineffizienter. Robotic Process Automation (RPA) bietet das Potenzial, Abhilfe in diesem herausfordernden Umfeld zu schaffen.

Das Auslagern von Teilen des Bankbetriebs, wie z. B. der IT oder administrativen Tätigkeiten, wird durch die zunehmende Regulierung und die Komplexität der Prozesse immer un-

Die Kosten für die regulatorisch angemessene Steuerung, der durch die Auslagerung von Prozessen entstandenen Risiken, drohen oftmals die ursprünglich, durch die Auslagerung geplante Kosteneinsparungen zu reduzieren.

Für die Institute in Deutschland stellt die fünfte MaRisk-Novelle, mit ihren verschärften Anforderungen, insbesondere im Auslagerungsmanagement (siehe TMC Whitepaper zur MaRisk-Novelle), die Banken vor neue Herausforderungen. So wird die Auslagerung von Kernbankbereichen, wie Compliance und Revision, durch die Novelle deutlich aufwendiger. Zukünftig wird auch der Aufbau eines zentralen Auslagerungsmanagements gefordert, um die bestehenden Lücken in der gesamthafter Steuerung und zentralen Überwachung sämtlicher Auslagerungsmaßnahmen zu schließen.

Wie auch in anderen Bereichen der Branche besteht die "Technologien" das Potenzial, die Regulierung nicht zu werden, ausgelagerte Prozesse wieder einzunehmen und gleichzeitig die Effizienz zu erhöhen.

RPA ist ein Beispiel für eine solche technologische Lösung. Durch automatische, intelligente und skalierbare Prozessabläufe ist RPA vielfach in Lohn- und Leiharbeitsverhältnissen zu übernehmen. Dabei greifen RPA-Anwendungen typischerweise auf Daten aus verschiedenen Systemen zu und führen diese in einer bestimmten Reihenfolge aus. RPA-Anwendungen können dazu genutzt werden, um die Effizienz der Datenverarbeitung zu erhöhen und die Kosten zu senken. RPA-Anwendungen können auch dazu genutzt werden, um die Effizienz der Datenverarbeitung zu erhöhen und die Kosten zu senken.

Im Folgenden werden die Möglichkeiten des Einsatzes von RPA im Kontext des Auslagerungsmanagements betrachtet und Handlungsalternativen aufgezeigt, die eine effektivere und effizientere Steuerung der inhärenten Risiken von Auslagerungssachverhalten ermöglichen.

Vorteile des Einsatzes von RPA-Lösungen



Quelle: TMF AG Research, 2012

Insourcen bestehender Auslagerungs-
sverhältnisse

häufig wird die Möglichkeit, bestehende Dienstleistungen wieder in den Geschäftsbetrieb zu reintegrieren, aufgrund von Kosten und mangelnder Ressourcen nicht in Betracht gezogen. Das Insourcen und das damit verbundene Aufbauen der nötigen Kapazitäten im eigenen Haus wird oft als nicht tragbar angesehen. Gleichzeitig stehen aktuell die steigenden regulatorischen Anforderungen zur Auslagerungssteuerung und die damit verbundenen finanziellen Mehraufwände im Fokus. Durch die technologische Entwicklung in den vergangenen Jahren haben sich verschiedene Heuristiken im Bereich der Outsourcingmattierung ergeben. Der Einsatz von RPA bietet hier Möglichkeiten, in einer großen Bandbreite Prozesse zu automatisieren und somit Tätigkeiten, die zuvor von Dienstleistern durchgeführt wurden, zu reintegrieren. In vielen RPA-

Die klassische Make-or-Buy-Entscheidung ist überholt.

Die klassische Make-or-Buy-Entscheidung beschreibt den Entscheidungsprozess, eine Leistung oder einen Prozess selbst zu erbringen

oder an einen Dienstleister auszulagern. Ein wesentliches Entscheidungskriterium stellen die Kosten dar, die aus der Erbringung einer Dienstleistung resultieren, häufig jedoch auch die Mehraufwände für die Auslagerungsneuerung mit in die Kalkulation einzubeziehen. Vor diesem Hintergrund bietet die Möglichkeit der Miete-Errichtung der Dienstleistung für den Auftraggeber eine Prozesskostenorientierung eine völlig neue Perspektive. Der Einsatz von BPA reduziert bzw. eliminiert die Kosten, die für die angemessene Steuerung der ausgelagerten Dienstleistung entstehen und macht das „Miete-“ in der Miete-or-Buy-Entscheidung wieder attraktiv für Banken.

Wie bei allen technologischen Vorstößen gehen die Meinungen auch bei RPA zunächst auseinander. Die Angst vor intelligenten Robotern oder Anwendungen, die Arbeitsplätze gefährden, ist jedoch unbegründet. Da

eigentliche Mehrwert von RPA basiert darauf, dass sich wiederholende und einfache Aufgaben vollständig durch die Technologie abbilden lassen und den Mitarbeitern die Möglichkeit gegeben wird, sich auf die wesentlichen Tätigkeiten zu fokussieren. RPA ist nicht in der Lage, komplexe Tätigkeiten mit

Zum Whitepaper auf der TME Whitepaper