



**Financial Services Organizations  
Need to Rethink Their Approach  
to Business Process Management**

## Background

Waves of new regulations and compliance risks require an acceleration in the adoption of new technologies and smarter use of existing technologies to avoid significant financial penalties.

Financial service providers of all shapes and sizes and in all geographies are under immense competitive pressures from fintechs and big tech companies (1). However, unlike many other industries, this highly regulated sector must also contend with seemingly never-ending waves of regulation. Not only do these waves of regulation appear to show no sign of slowing down, the penalties for failing to adhere to them are growing and being applied more regularly. As an example, fines for noncompliance and service level agreement breaches associated with Anti-Money Laundering and Know Your Customer hit an all-time high of \$10 billion in 2020, an increase of

almost 100 percent over 2019 (2).

While for many years banks have focused on the financial and capital requirements of regulations such as BASEL II, many of the fines handed down have actually been for process failures. Recently an organization was handed a significant fine from a regulator, even though they were actually doing nothing wrong. The fine was levied as they were not able to provide documentation to prove that they were doing things right!

Going forward it will no longer be sufficient to rely on just meeting financial requirements, or just assuming that you are meeting regulations. In order to protect your organization, you will need to ensure that you have the right processes in place, that they are properly documented, and that those processes are suitably communicated and understood throughout the organization.

### The cost of compliance

In 2020 the SEC alone issued:

**715**

Enforcement  
Actions

**\$4.68B**

Total Fines

**\$2M**

Average Fine  
Amounts

Source: Securities and Exchange Commission, 2020. <https://www.sec.gov/news/press-release/2020-274>

## Managing People, Process, and Systems

Historically, much of the risk management associated with regulations has sat with a chief risk officer but responsibility will increasingly fall on chief process officers and chief information officers.

**Today, people, process, and systems are where the real risks lie and having a coordinated, managed practice that constantly evaluates and monitors all three is going to be critical.**

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Use of professional quality Business Process Management Software (BPMS) will go a long way to support and address many needs, but the increased complexity of new regulations will require interactions between diverse stakeholders and between disparate systems of record. A new approach will be required to run alongside or as part of your Business Process Management (BPM) solution.

That technology is commonly known as process mining, although the label hides the fact that the technology helps with automated process discovery, monitors system processes, and provides support for both compliance

and conformance challenges. In fact, we foresee a world where regulators and auditors will increasingly either use process mining technology to audit organizations for regulatory compliance or will require that organizations provide evidence that they are using such technology and making changes based upon what they find (4). This will be especially true where organizations embed artificial intelligence (AI) and machine learning (ML) based logic within or across systems, and thus may not actually know whether their systems are applying rules and avoiding unforeseen bias and profiling of customers.

**Financial institutions that leverage process mining can reduce compliance risks at lower costs**

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Human error, hand offs, and reworks across disparate systems require compliance officers to track, manage, and analyze detailed data about transactions, customers, and operational activities. However, compliance officers lack insight into the details of process execution steps, where potential process bottlenecks exist, how to identify their root causes, and why decisions are being made.

While traditional process mapping and modeling techniques work well at the inception or improvement stage, when new processes are being built, these strategies are not as well suited to managing and monitoring processes once implemented.

This is especially so for processes that are built into and executed by systems. In other words, compliance teams have no visibility into what is happening. Mitigating regulatory compliance risks requires an understanding of the complete process execution and interactions between multiple internal and external stakeholders, such as regulatory bodies.

Noncompliance with regulatory oversight may result in significant fines imposed by regulators. In 2020 the SEC alone issued 715 enforcement actions, totaling fines of \$4.68 billion, with the average fine nearly \$2 million. The costs of financial crime compliance alone reached over \$213 billion in 2021 (5). Additionally, over 50 percent of banks report that they spend 6-10 percent of revenue on compliance (6).

With spiraling costs and ballooning fines, smart financial institutions are increasingly recognizing that process mining, especially when connected to the broader business process management philosophy is no longer a luxury, but a critical technology to mitigate the risks of noncompliance.

#### Typical uses for Process Mining include:

- **Discovery and mapping** that visually models event logs to identify variations from the ideal process flows and find the root causes
- **Conformance assessment** which enables a determination of process deviations from prescribed mandates
- **Monitoring and improvement** that empowers organizations to proactively anticipate and mitigate potential compliance exposures

The value of mining is that it enables organizations to gain insight into interactions between people, systems, and processes, based on the “as-executed” visualization of the processes.

**While compliance and conformance have been two common use cases for process mining, much of that focus has been regarding standardization of operations and reducing variations in execution, with the goal of operational improvement of automated processes.**

Less emphasis has so far been placed on using process mining to validate the executed processes with the designed process or on discovering the rules and decisions being used in those systems.

The comparison between process design and process execution is a critical part of ensuring and proving compliance. Often fines are handed down because of the gap between what is happening compared with what was thought to have happened. At the same time, the systems deployed are increasingly using AI and ML, which inevitably means that what is happening may be further divorced from the intention.

Processes such as credit decisions are codifying bias, and with information buried in the system, it is challenging for financial institutions to be certain that they are not applying decisions with implicit bias and in breach of regulations. Only by applying a metaphorical X-ray diagnostics solution to such systems can those decisions be surfaced, analyzed, and corrected where needed. Process mining provides such an ability.





## Recommendations

# Process Mining for Compliance



### Focus on Profit

When building a business case for the acquisition of process mining, consider not just how it might reduce the risk of regulatory fines, but instead consider how the compliance costs can be reduced and present that to management as an increase in profit. For example, a 25 percent reduction in compliance costs could equate to a 50 percent increase in profits.



### Provide Proof

Conformance and compliance understood in a process mining context only means efficiency and standardization in comparison to what has been put forth, whether or not it is correct. However, conformance and compliance from a regulatory perspective means doing the right things right, every time and being able to prove it.



### Normalize Process Awareness

Connect process mining to process models to create living process dashboards that easily visualize risks in context, ensuring that compliance moves out of the compliance domain and becomes part of every manager's responsibility. Such linkage also makes it faster and easier to enact continuous process improvement on regulated processes.

### **Adopting a multi-model approach to business process management enables financial services organizations to better compete with fintechs, while complying with regulatory constraints.**

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Large financial services organizations have many disparate systems, siloed structures, engrained cultures, and outdated capital investment policies. Change at such organizations has often been likened to trying to turn an oil tanker. This inability to be more flexible, if not agile represents a significant risk.

Conversely, fintechs are fundamentally reshaping and disrupting the traditional banking sector, accounting for 38 percent of US unsecured personal loans, up from 5 percent in 2013. Their appeal is frictionless customer experience, and significantly lower transaction costs, compared to mainstream financial services competitors.

While Millennials constitute the largest percentage of fintech users, it is gaining wider adoption, with 26 percent of Baby Boomers now using fintech, in part amplified by the pandemic.

For traditional financial services, the threat posed by fintechs is only going to grow with fintech investments accelerating and projected to grow at 23.4 percent CAGR to \$22.6 billion by 2025 (7).

## **Capitalize on Trust**

Much of the fintech advantage is said to come about as a result of the application of AI and ML, enabling systems to make more of the decisions and to both speed processing and reduce transaction cost. However, consumers are inherently apprehensive about trusting AI systems with such tasks as opening a bank account, or approving loan eligibility, despite the promise of fintech to expand financial inclusion to an underserved demographic, which account for 22 percent of the US population.

There is reason for such skepticism. A study of fintech firms reveals a persistent pattern of AI algorithmic bias in lending outcomes (8). As an example, some groups of borrowers have been shown to incur mortgage interest rates 7.9 and 3.6 basis points higher than other comparable borrowers.

### **While US legislation such as the Equal Credit Opportunity Act of 1974, Truth in Lending Act of 1968, and the Fair Housing Act of 1968 prohibit discriminatory lending practices for protected classes, big data, combined with more advanced machine learning algorithms is proven to produce harmful, albeit unintended results.**

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This uncertainty and bias represent a business opportunity for established financial services firms willing to rethink the way they design, improve, and operate their business processes.

To date, although younger generations have a greater trust in technology, incumbent financial institutions still enjoy higher levels of trust among consumers overall.

Over time that trust leverage is likely to erode, leaving only a small window of time for incumbents to evolve and leverage that position.

To do so will require a change in the way that financial institutions develop, manage, communicate, and execute their business processes.

## Streamline the Journey

It is no longer enough to simply rely on traditional process modeling and process models, as we have seen. Rivaling the customer focus of fintechs requires a shift in thinking. Journeys are becoming the new preference when it comes to understanding how customers, employees, regulators, and other stakeholders interact with organizations.

The “outside-in” approach enables organizations to quickly identify areas of friction, areas of opportunity, and causes of frustration and delight. Banks that look at the process of lending through the eyes of a journey quickly identify that what had been thought of as a single process is really a whole series of processes or sub-processes chained together to deliver an outcome. Rarely are these process chains pre-planned or designed to work together, and in many cases the parts work against each other, much to the frustration of customers.

**When journey maps or models are connected with process maps or models, it becomes easier to remove friction, simplify processes, and ensure greater consistency and clarification of outcomes for the customer or employee.**

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When such models are connected to operational systems via process mining technology, a complete monitoring and improvement system takes shape. By taking this multi-model approach, it becomes easier to identify risks and opportunities, assess opportunities for new automation systems, and remove waste from the processes.

Remember, those fintechs did not drive transaction cost down by simply applying traditional incremental improvement techniques. They looked at the whole journey, all the processes and asked the questions: “Do we actually need this at all?” or “How can we do without it?”

Such thinking can only be done in existing organizations when you have full visibility into the entire end-to-end process. You can’t change what you can’t see.

## Recommendations

# Journey Maps and Models



## Consolidate Solutions

Audit use of existing process modeling and management tools and identify where consolidation can take place to move toward a single source of process truth. Consider whether existing tooling provides the complete and connected views for journeys, processes, and mining, and how such information is easily shared and communicated across the organization.

## Define Accountability

It is likely not necessary to create yet another center of excellence, but it is important to create a federated group of specialists who will ensure that the needs of all stakeholders are properly represented in a single holistic manner. Employees, customers, compliance teams and regulators all need confidence that what is being seen is what is being done, and that it is being done consistently.



## Measure your Measurements

Evaluate current KPIs and assess whether they are sufficiently outcome and customer centric. Where they are not, consider removing them and replacing them with new and more relevant KPIs. These KPIs should be visible and shared via process and journey models, and ideally would be populated automatically via process mining. The overriding factor should be that they need to be outcome and not activity focused.

By leveraging connected views for a 360-degree visualization and combining that with the ability to analyze vast numbers of historical transactions, it becomes apparent that agile incumbents can undertake sophisticated scenario analysis to predict the likely impacts of change, the pressure points, and the risks and opportunities associated with them.

**Using the complete capabilities of an enhanced BPM toolkit enables financial institutions to benefit from full 21st century continuous improvement.**

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The use of AI and ML by fintechs has been established, along with the associated impact to potential trust. However, it is important to also examine the broader issues of automation and AI. Often when people talk about trust in the context of AI and ML they focus purely on the new systems. This can be a mistake, as what is really coming under the microscope are the algorithms being applied and used in, or by, those systems. In other words, it is the decision of algorithms and systems in which regulators and customers are really interested. They want to ensure they are engineered, implemented, and executed in a trustworthy, transparent fashion.

## The Algorithms Are Coming

The momentum for the regulation of AI is gaining ground. There are initiatives under way by standards organizations, public sector entities, the G20, and by Big Tech, all recognizing the need to create a harmonized and predictable AI regulatory framework (9, 10, 11). While many of the ideas around trustworthy AI are still at the discussion stage, it will come as no surprise to readers that Europe is further along the regulation routes than other countries, and has already published a draft of the EU Artificial Intelligence Act (AIA) which provides a prescriptive, risk-based approach to regulating AI (12).

While the proposed regulation is still in the discussion stage, once ratified it may well serve as a template for a global AI regulatory framework. The proposed AIA regulation imposes rigorous compliance obligations on both vendors and users of AI applications based on a classification of prohibited, high risk, and minimal risk AI, reinforced by administrative penalties in the event of noncompliance (13).

Of particular significance to operational excellence (OPEX) compliance vendors and IT groups, the AIA (or any similar regulations that might follow) proposes conformity, accountability, explainability, transparency, certification, and auditability that includes traceability of event logs, and human-in-the-loop (HITL) processes to adjudicate and remediate any adverse AI algorithmic outcomes. These processes will need to be either built into internally developed systems or be requirements when purchasing any new systems. However, nothing in the proposals suggests it is only new systems. Many existing and legacy systems feature decisioning that is likely to fall under any potential regulation.



**The focus on auditability of compliance processes and the rules and decisions they apply is great news for the process improvement community as it has become harder to gain end-to-end visibility to conformance with prescribed regulatory mandates.**

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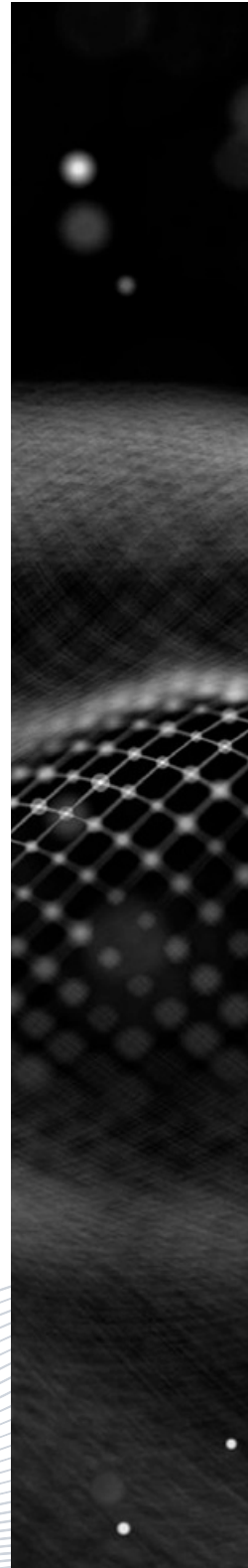
The need for granular process visibility and continuous compliance process monitoring are expected to become a high priority (14). Because of this need, OPEX teams will have justification for the acquisition of the type of process diagnostic, or “X-ray” type technology capable of revealing and analyzing rules and decisions. To do so will discover the processes that improve them. By combining traditional OPEX type practices with the automated process and rules discovery solutions, organizations will be able to get a full 360° view upon which to base their improvement suggestions.

By leveraging a comprehensive process management solution, organizations will find it easier to identify and manage risks associated with potential regulatory issues, both now and in the future. At the same time, by taking an inclusive approach, organizations will undoubtedly identify areas for potential process improvement, processes that should be eliminated, and those that would benefit from fresh automation perspectives.

Perhaps most importantly, the systems they create using a modern full process management platform also provide insurance for the future, and enable them to deliver a new continuous process improvement system fit for the 21st Century.

**Organizations that have started to make moves in this direction find it easier to meet or exceed regulatory compliance challenges and are able to do so at lower costs than they currently experience.**

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## Recommendations

### Invest in the Big Picture



#### Regard the Risk

When considering new systems or updating existing systems, look at factoring in some of the likely changes needed. Where people find it hard to get buy-in, or interest in a business case, putting 2-4 percent of worldwide annual revenue at risk through fines is likely to focus the attention of C-suite and senior executives.

#### Future Proof

Deepen and broaden your research into AI regulatory frameworks and ensure that any practices you put in place and systems you implement would meet the basic tenets of even draft legislation, as retrospective analysis may prove challenging. This evaluation of systems should also include a plan to audit rules and decisions that have been historically embedded in legacy systems.



#### Review Retrospectively

Consider leveraging process mining technology for use cases beyond the norm. For example, in the legacy systems referenced above, process mining may be the only practical way to uncover the rules and decisions that have long been embedded in those systems.

## Conclusion

Failure to rethink approaches to process management and operational regulatory compliance, poses a significant threat to financial institutions. The financial services sector has been at the forefront of IT spending for many years, yet as we see it today, the lack of a cohesive and coordinated approach to these investments in the past is now risking more than it may have rewarded. Customer dissatisfaction, eye watering audit and compliance costs, and yet another round of regulations are all crashing like ever bigger waves on a shore.

**Intelligent BPM (iBPM) offers a solution that can increase customer satisfaction, remove waste, reduce compliance costs and de-risk regulatory compliance issues.**

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However, to get these benefits organizations need to rethink the way they approach process management, rethink the types of solutions they use, and to apply automation in smarter ways than many have done to date.

A recent survey by APQC highlighted that “Establishing a Data Driven Culture” and “Aggregating Analysis into a Decision-Making Dashboard” were two of the top challenges for BPM professionals in 2022 (15). Further “Data Visualization” and “Enhanced Visibility into Business Operations” were cited by around half of respondents as being key areas for improvement. These findings are in line with what we have seen in our own work and in the conversations, we have had with people.

There is a common saying that you can't change what you can't see, but perhaps more importantly, customers and regulators are demanding that organizations look harder, see more, and then do more as a result of what they find.

To support these goals, modern business process management solutions include the ability to:

- Fully integrate process mining and monitoring
- Combine process and journey modeling
- Leverage insights to deliver actionable process intelligence
- Provide easily consumable management dashboards
- Deliver contextual process information to everyone in the organization

Such tooling is now more affordable than ever, and more easily used and consumed by broader groups within an organization.

We are already hearing of situations where audit firms are using process mining as one of their audit tools, and we predict it won't be many years before regulators, if not doing the same, will ask you for the results of such mining efforts to be shared with them as evidence of compliance. Will you be ready?



## About the iGrafx Platform

Whether being first to market with a disruptive business model, an innovative product, or a revolutionary process that becomes an industry standard, leading companies are always seeking an edge that will help them to maintain a competitive advantage.

For 30 years, iGrafx has succeeded at improving complex compliance, regulation, and customer journey initiatives to deliver true digital transformation. With the iGrafx process intelligence platform, companies can deliver the processes of the future, today.

Process360 Live is ideal for organizations who need support in a number of areas:

- Process Knowledge Capture and Retention
- Operational Excellence
- Quality Management
- Governance, Risk and Compliance
- Continuity and Resiliency
- IT Services Management
- Performance Management
- Digital Transformation
- Workflow Automation
- Customer Experience
- Journey Mapping
- Process Mining

Find out more at:

[www.igrafx.com/products](http://www.igrafx.com/products) ↘

## The iGrafx Approach

### Discover

Discover how your business processes run today



### Design

Design the ideal future versions of your processes

### Optimize

Optimize processes for maximum performance

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