

# PROCESS MINING IN THE BACK OFFICE

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## GREATER TRANSPARENCY FOR MANUAL WORKFLOWS AND A STEP TOWARDS AUTOMATION

Back office systems in asset management and trading are complex and require significant manual intervention to complete a range of operations - processing trades on various systems, settling orders, administering portfolios, and executing fund accounting. Robotic Process Automation (RPA) can handle recurring incidents but often fails to interact adequately within the IT landscape. By using root cause analysis, process mining can close the gap between systems' interfaces and provide the basis for standardized datasets, ready for re-use.

### PROCESS MINING SHOWS WHAT'S REALLY GOING ON (IN THE BACK OFFICE WORKFLOWS)

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Process mining technology detects the digital footprint and visualizes workflow traces. As long as a unique identifier is assigned and traceable (e.g. trade ID, funds number), process mining can cross the interface/system 'borders' between IT systems and make process sequences visible for all variants, showing their frequency in real time. In this way, target processes can be recorded and operative measures can be controlled. In addition, central monitoring of the (pre-defined) KPIs becomes possible.

The extraction of the necessary data often seems daunting, as it requires expert knowledge of business units and application owners. The technical preconditions are:

- The existence of user-IDs (distinguished between manual and technical users)
- A time stamp linked to each lifecycle event or technical activity
- A clear understanding of every single manual step in the system's workflow.

Analyzing weak spots in end-to-end processes is rather difficult and the specialist teams are typically only able to assess parts of these processes. In addition, there are stringent data protection regulations and the works council rules that need to be adhered to.

### TRANSPARENCY IN THE DOCUMENTING OF EACH MANUAL TRANSACTION IS FUNDAMENTAL FOR AUTOMATION

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Process mining can provide transparency about the many manual adjustments that are needed daily. Here are some examples:

- In fund administration, it is necessary to calculate fund prices first in one system and then type it into another system. This happens hundreds of times a day.

- In reconciliation processes, there are recurring errors which need to be corrected manually every time (even though the reasons for these errors are well known). Since these errors are not recorded anywhere, they must be corrected manually every time they show up.
- The net asset value (NAV) approval for investment funds is done manually. This includes calculating prices in several systems and reconciling data between the systems.
- Orders in the trading systems must often be adjusted and confirmed manually, for several reasons. Transparency about this could make communication with the front office easier and more effective in terms of avoiding unnecessary non-STP transactions.

Significant potential for automation remains untapped if systems or the interfaces between them are not able to process data automatically due to a lack of standardization. Documenting and recording each single deviation from the defined STP-path are necessary to identify, quantify, and evaluate measurements required for automation and thus for achieving a significant increase in process efficiency.

## FRONT-TO-BACK PROCESS ANALYSIS REVEALS POTENTIAL FOR VALUE CHAIN ENHANCEMENTS BEYOND COST SAVINGS

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Process mining uses artificial intelligence-based tools to convert data-driven insights into actions and optimize workflows in line with corporate objectives. This simplifies and harmonizes processes in a sustainable way. The resulting increase in effectiveness and efficiency not only boosts the employee motivation, it also forms the basis for using future-proof technologies:

- Low costs and low complexity in the end-to-end processes create the basis for a future-compatible architecture.
- The high degree of standardization enables easy coordination with software and service providers.
- The ability to remove and add components flexibly plays an important part, especially in view of the trend towards outsourcing IT services.

The highly complex nature of IT architectures requires banks and asset managers to deal with numerous work processes. To optimize these processes, first they need to be thoroughly examined across systems and divisions.

Capco believes that a complete understanding of process chains and systems, coupled with intelligent data preparation through process mining, will generate substantial added value for banks and asset managers.

Contact us to find out more about opportunities offered by process mining.

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