Process Mining – the science to extract value hidden in transaction events

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Key takeaways:

- *The questions on where to start, what to digitise, where are the biggest opportunities and how to build the pipeline to embark on the transformation agenda are becoming more pertinent as digital transformation accelerates*

- *Process mining has clearly emerged as an enabler for financial services organisations to get data driven visibility on their operations and give them the required toolset to reimagine their processes and the ensuing opportunities for transformative change.*

Digital disruption is evident in the financial services industry witnessing an acceleration in the adoption of new business models that are driven by newer technologies, including fintech partnerships. While the incumbents are taking significant leaps in reimagining business models and customer experiences, the legacy businesses still face a challenge. Moreover, the old ways of working and slower pace of change only compound the challenges faced by the legacies with respect to digital acceleration. For example, a fabulous front-end mobile app platform for digital lending without being supplemented with seamless credit decisioning, disbursement, and efficient monitoring and collection does not bring in the real benefits.

Therefore, questions such as where to start, what to digitise, where are the biggest opportunities and how to build the pipeline to embark on this transformative agenda are becoming more and more pertinent. The ability to identify the correct problem areas and associated opportunities is critical for financial services companies to drive meaningful change at a much faster pace.

Identifying the problem correctly

The common success factor across transformation interventions, whether it is digital transformation, automation, dealing with compliance or improving customer journeys has been the organisation's ability to focus on the right problems or opportunities.

Driving digital transformation to realize enterprise vision	Reaping the right benefits from Automation	Managing snowballing expectations on compliance & regulations	Understanding the real customer and employee journey

"success factor" »» **Did we look at the right business problem/opportunity**

However, understanding problems or identifying opportunities has largely been rooted in traditional approaches such as current state understanding, workshops, interviews, SoP reviews, time and motion studies, etc. These approaches are subjective; partial; time-consuming; costly and largely provide a one-time understanding; are hard and cost prohibitive to repeat; and also face change management challenges.

Organisations over the last couple of decades have adopted technology and are executing most of their day-to-day operations through information systems that capture valuable digital footprints. The time is right for these organisations to look at emerging methods for better visibility and transparency on how their processes are working in reality. Most business leaders would feel more confident deploying transformative strategies if they had a true picture of the efficacy of their business models.

Process mining and re-imagining processes

Process mining has clearly emerged as an enabler for financial services organisations to get this data driven visibility around their operations. It can also give them the required toolset to reimagine their processes and the ensuing opportunities for transformative change.
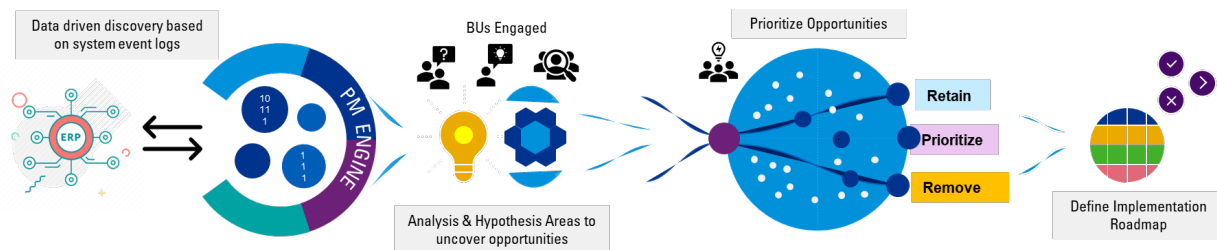
Process mining works by extracting system transaction data, transforming it into meaningful event logs and delivering key process insights across dimensions.

'Process mining aims to discover, monitor and improve real processes (i.e., not assumed processes) by extracting knowledge from event logs readily available in today's information systems'

Process mining enables businesses to discover processes, inherent variations, and gain insights on how their processes are behaving today. These analysis areas and hypotheses help them to identify and prioritise opportunities for optimisation, automation, re-engineering, digital extension, elimination or harmonisation.

Industry pulse and looking forward

While process mining adoption has accelerated in the manufacturing domain over the last decade, financial services sector has gained momentum over the last 24 months. Some of the largest financial institutions have already embarked on this journey by setting up process mining Centre of Excellence (CoEs) and adoption has been across sub-segments like investment banking, retail banking, asset and wealth management, insurance, etc. The application area or challenges that process mining is applied to is also quite varied, as reflected in the table below.

Growth drivers	Operational efficiency	Digital transformation	Risk and Compliance	Continuous monitoring
- Bottlenecks impeding growth - High drop-out rates - Low share of business.	- High turnaround time - Low STP, low throughput - Data-enabled root cause analysis.	- High frequency activities - High manual rate - Low impact and high-volume transactions - Automation opportunities.	- Flow variations - Conformance - Exceptions and anomalies - Risk score of activities.	- Data driven actions - Track and drive process performance - Change analysis and feedback loop - Process cockpit.

The adoption of process mining in financial services has accelerated over the last 2 - 3 years. During our work and interactions with clients we have seen varied use of process mining techniques in identifying transformation and value preservation interventions. For example, a large Indian retail bank applied process mining techniques to identify process bottlenecks that were impeding growth and the optimization opportunities unearthed with process mining would help them to provide better reliability and same day processing of credit requests, there by gaining a higher wallet share of the customer. Another Indian bank is looking at applying process mining to drive agile audits and provide 100% transparency in processes and compliance gaps, as against a point in time and sample driven approach. Similarly, a global investment bank has setup a process mining CoE to enable process discovery of its operations teams to identify process breaks, bottlenecks and identify opportunities to drive operational efficiency and automation.

These industry examples reflect that with process mining, financial services clients could have the right ally and a digital twin of the processes to get the right visibility, identify problem areas, translate those to opportunities and take more data driven decisions for driving change and

transformation across their operations.