

Process Mining Virtual Internship

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AICTE: The All India Council for Technical Education (AICTE) is a statutory body, and a national-level council for technical education, under the Department of Higher Education. Established in November 1945 first as an advisory body and later on in 1987 given statutory status by an Act of Parliament, AICTE is responsible for proper planning and coordinated development of the technical education and management education system in India.

Eduskills: EduSkills is a Non-profit organization which enables Industry 4.0 ready digital workforce in India. Our vision is to fill the gap between Academia and Industry by ensuring world class curriculum access to our faculties and students.

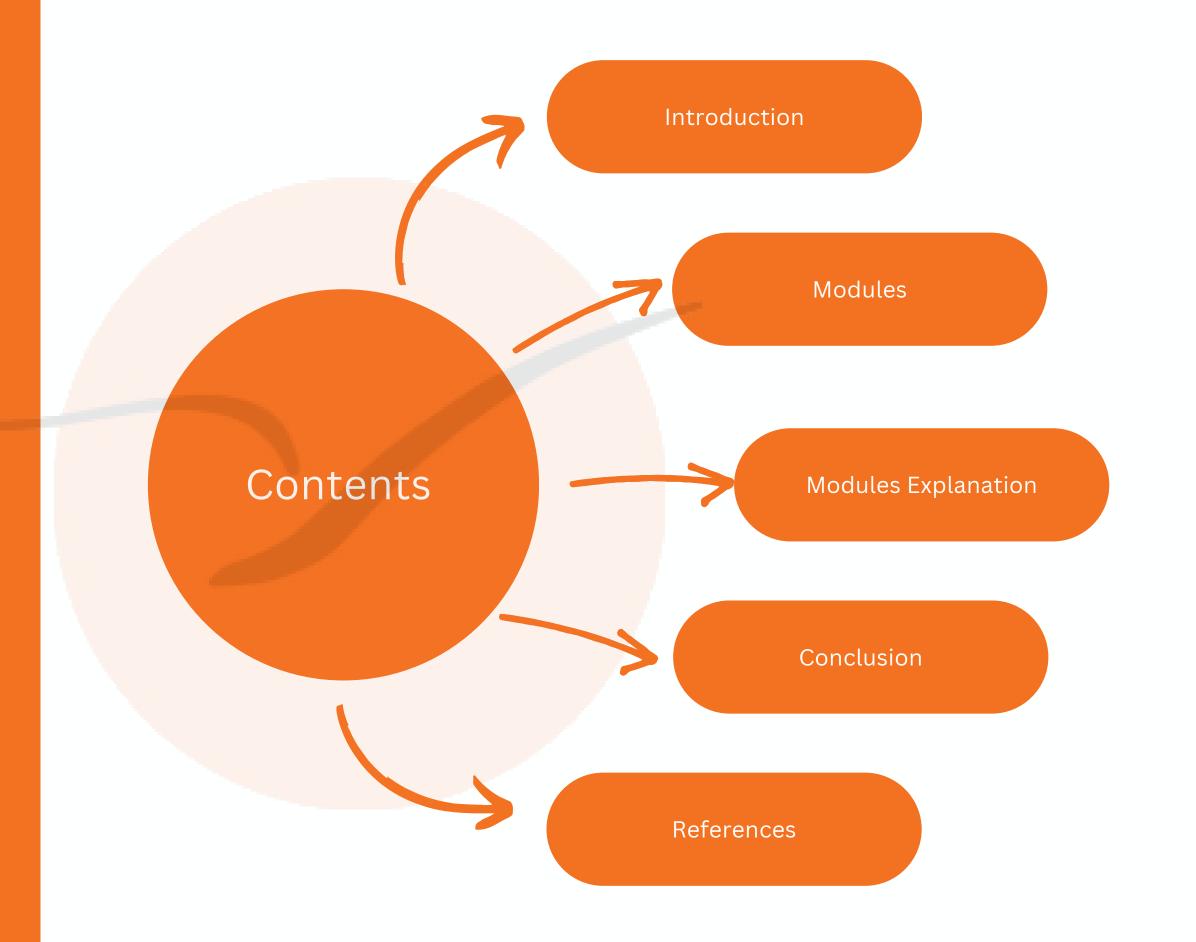
Celonis: Celonis is a German data processing company that offers software as a service (SaaS) to improve business processes. It is headquartered in Munich, Germany and New York, United States



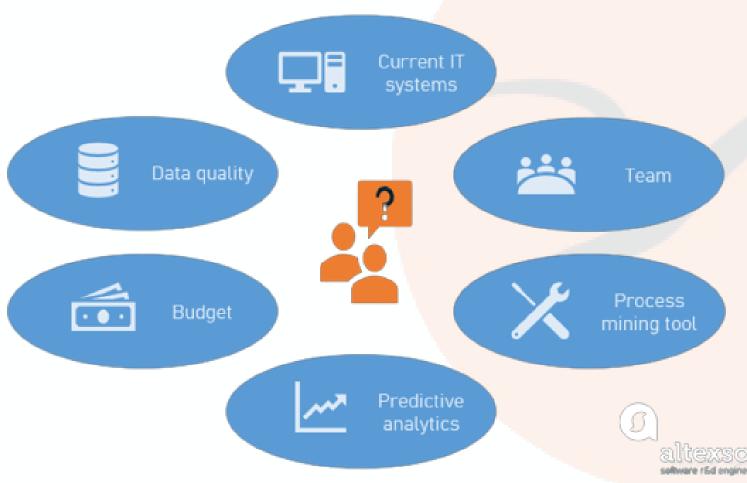




Process
Mining
virtual
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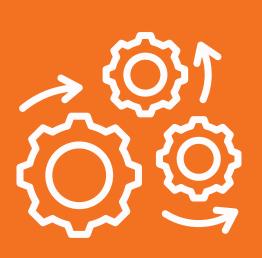


A process can be defined as a sequence of interconnected actions or steps that are undertaken with the aim of attaining a specific objective.

What is Process Mining?

Process Mining is the merging of two fields: Data Science and Business Process Management. In essence, Process Mining applies techniques from Data Science, such as Big Data and Al, to tackle challenges in Process Science like enhancing processes and automating them.

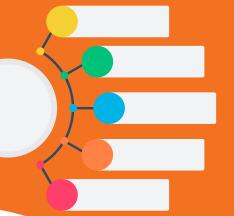
Intro



In the realm of process management, there exists a method that aids in examining business processes using event logs. This technique leads to enhanced efficiency, effectiveness, and compliance by providing valuable insights.



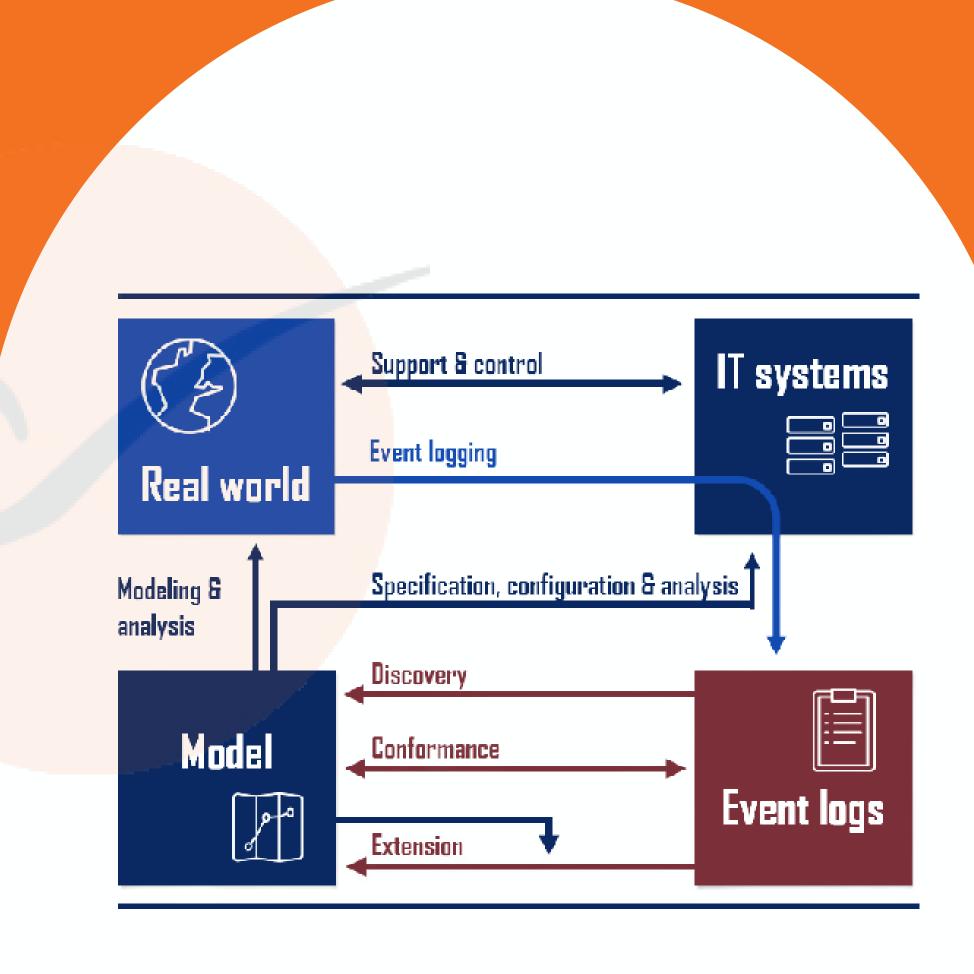
Current processes can be visually represented in real-time by extracting information from event and transaction logs using efficient and dependable Modern Process Mining technology.

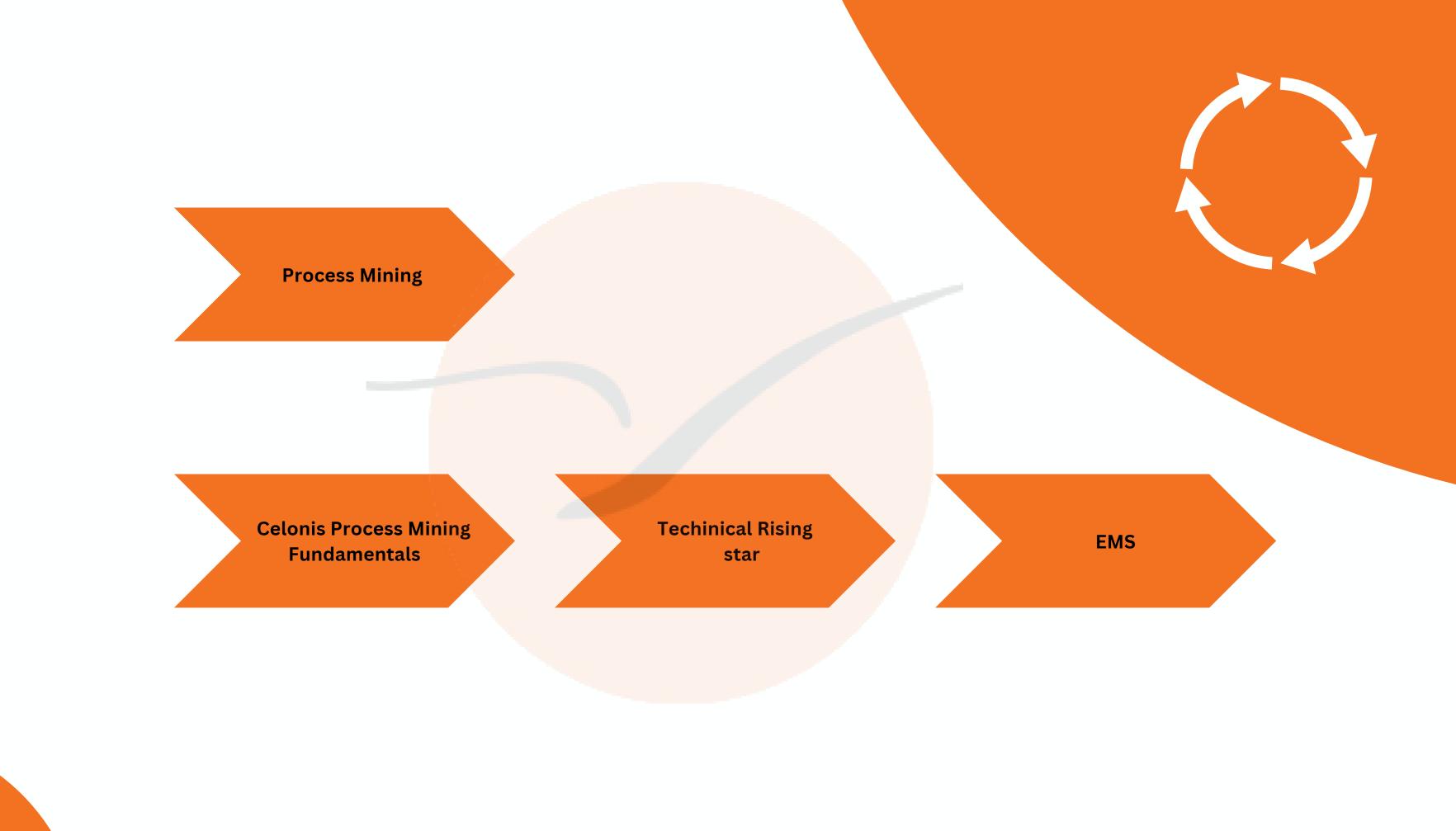


Examples

Real Time examples of Process Mining Includes

- Procurement
- Order management
- Compliance
- Intelligent automation
- Digital transformation
- KPI reporting
- Accounts payable
- Accounts receivable
- Auditing
- IT development
- Service management
- Logistics and many more.



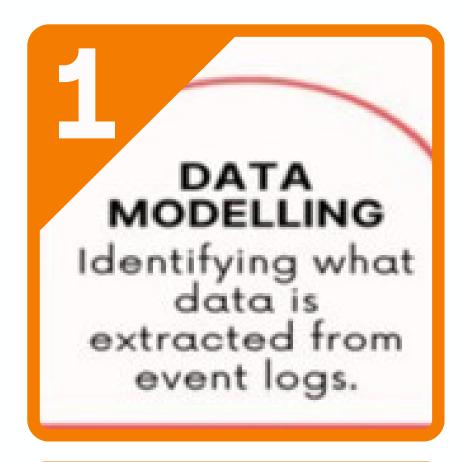


Celonis Process Mining Fundamentals

- Process Mining is the merging of two fields: Data Science and Business Process Management. In essence, Process Mining applies techniques from Data Science, such as Big Data and AI, to tackle challenges in Process Science like enhancing processes and automating them.
- The training course covers the fundamentals of Process Mining, including both theoretical concepts and practical applications.
- Process mining takes this data, transforms it into a log of events, and subsequently generates visual representations of the accompanied by valuable analytical insights.
- Each action taken during the procedure is recorded in an event log, along with the corresponding time and case ID. This log captures all the steps performed, their timestamps, and the specific instances of the process.
- Algorithms utilize the event log to generate a process model that accurately reflects the timing and variations of each step within the process.

Celonis Process MiningFundamentals

Main Stages in Process Mining:



1.Data Modeling



2.Data Extraction

VISUALIZATION

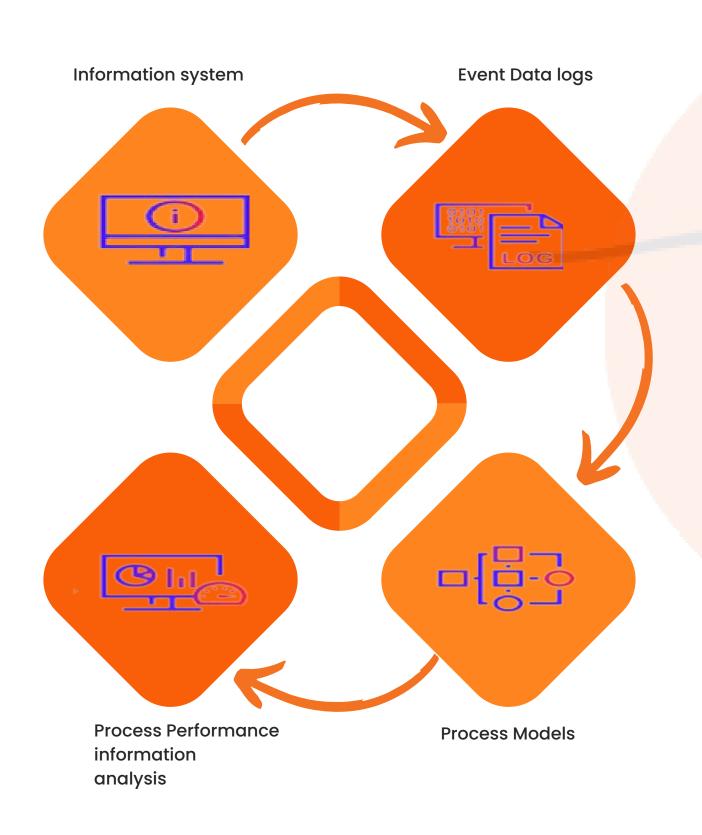
Application of data
visualizations to process data

3. Visualization



4.Data analysis

Celonis Process Mining Fundamentals



Process Mining can be utilized in various ways.

Automated business process discovery/mapping

utilizing automated methods, the process of discovering and mapping business activities involves tracking event logs to identify the tasks carried out by employees. Subsequently, a well-defined process is established based on these activities.

Performance analysis/process optimization

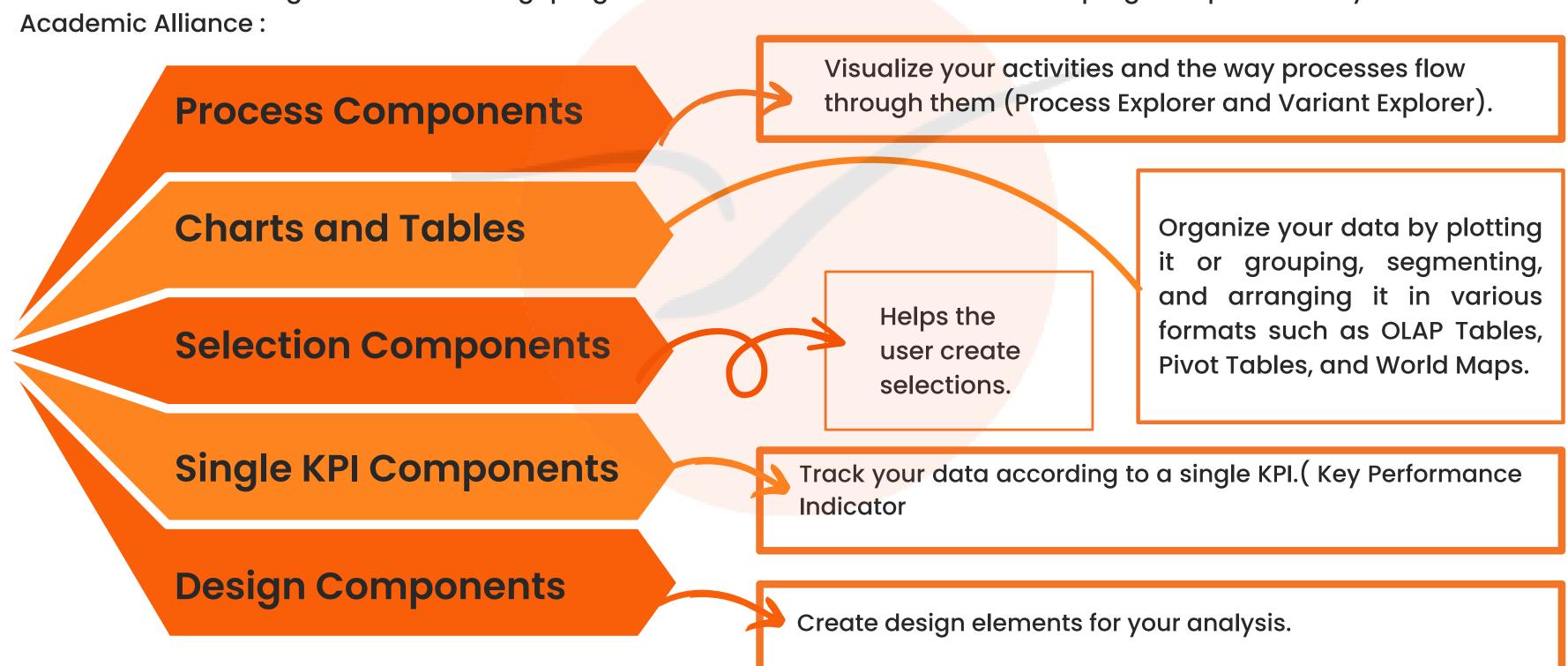
Analyzing information from the event log allows enterprises to enhance performance by identifying opportunities and adjusting or improving process models based on real process data. This can lead to performance optimization and increased efficiency within the organization.

Operational support

Enhancing operations by offering data-driven assistance, such as alerts, forecasts, or suggestions, without altering the existing structure. This support directly impacts and improves the process.

Execution Management consulting for Students

The Execution Management Consulting program for students is a certification program provided by the Celonis



Execution Management consulting for Students

Introduction to EMS platform service: Traders use an Execution management system, which is an application that shows market data and allows for quick and effortless access to trading destinations. Its main purpose is to facilitate order transactions.

The application includes algorithms from brokers as well as independent ones like TWAP and VWAP. It also provides global market data and technology that can assist in forecasting specific market conditions.

EMS possesses the capability to handle orders across various trading venues, which is a significant aspect of its functionality.

- 1.Stock exchanges
- 2.Stock brokerage firms
- 3. Crossing networks and electronic communication networks.

EMS assists companies in optimizing their operational capabilities across the entire organization.

PQL: Processed Query Language

Process mining relies heavily on PQL as a crucial element.

The SQL differs from it in various ways. It has been created to meet specific needs and when presented with a question, it processes the information and provides a meaningful response.

Easy to use and translates the complete process questions into data queries.

Formulates any question, regardless of the process

supports
process mining
functionalities

Combine
process Mining
and business
intelligence
capabilities

Support of a graphical user interface(GUI).

Simplicity

Flexibility

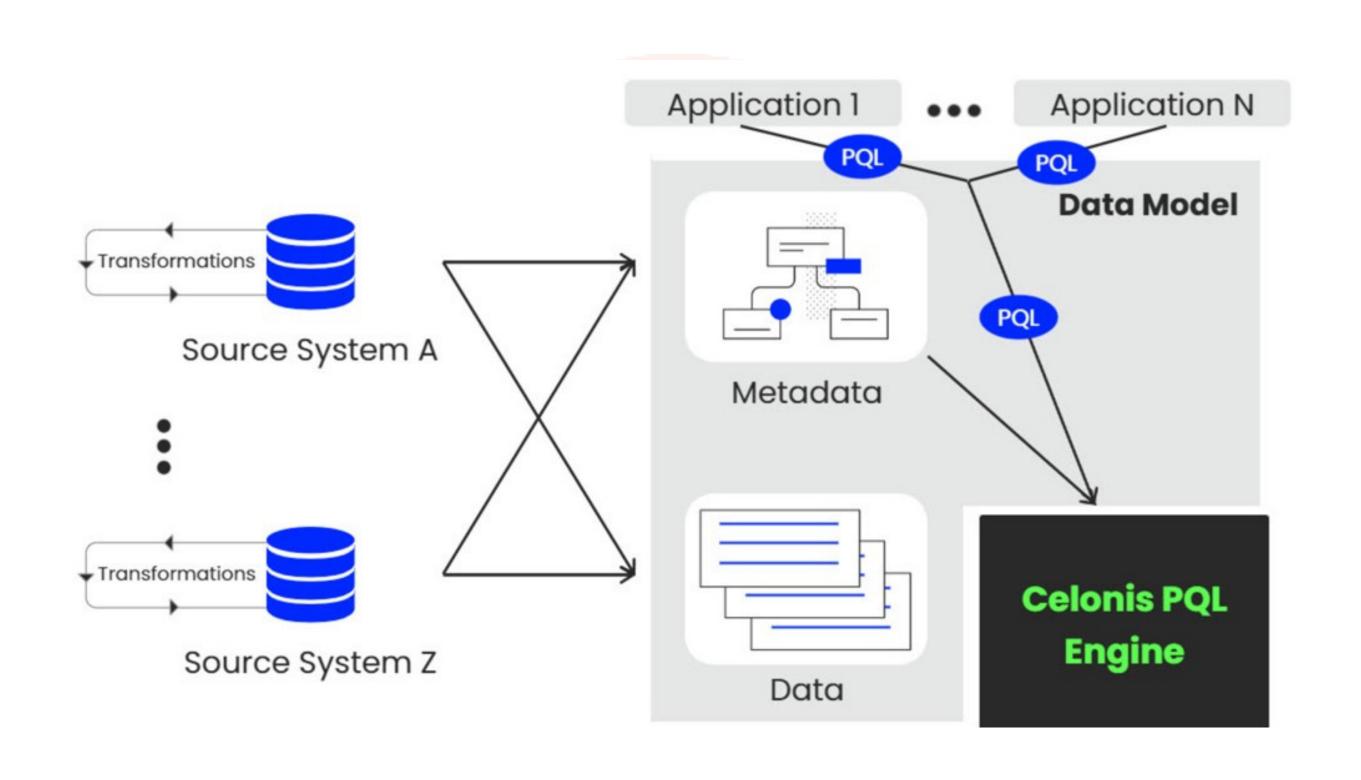
Event log centered

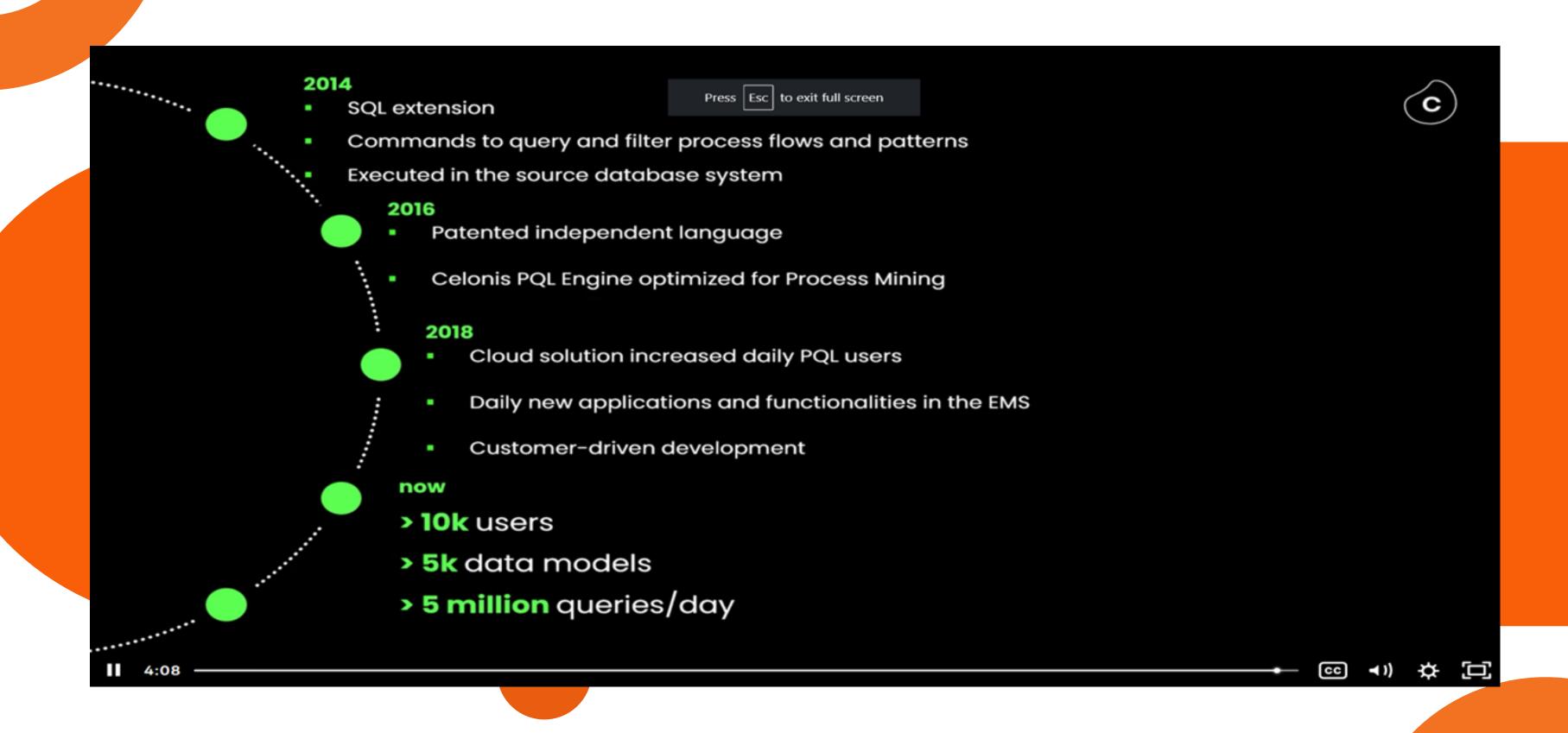
Business Focus

Frontend interaction

PQL are executed in visual and code editors.

Architecture of software PQL Engine

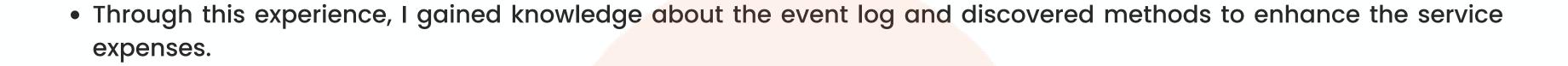




Upon finishing this Training Track, you will have the capability to:

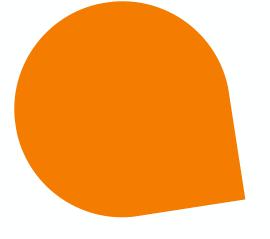
- Analyze process visualizations and utilize analyses to pinpoint inefficiencies in the process.
- Formulate your process by categorizing activities and cases.
- Store an analysis selection for future use and share it with your team; export visualizations and data related to the process.
- Execute fundamental tasks required for constructing Celonis analyses.
- Gain familiarity with Analysis Settings and Permissions.
- Publish analyses following version control best practices.
- Apply your understanding of the theoretical principles behind Process Mining in practical situations

Learning Outcomes



- Mining and process of data
- About PQL queries
- We can also learn how the process mining will be carried out from it.

Conclusion



References

- [1] Ref website: https://academy.celonis.com/learning-paths/execution-management.
- [2] Execution management link: <u>Through this experience, I gained knowledge about the event log and discovered methods to enhance the service expenses.</u>
- [3] Login page: https://academy-login.celonis.com/s/login/.

Thank You..!