ProMiSE Event Log

Perspective (Type)	Level 1 (L1)	Level 2 (L2)	Level 3 (L3)	Level 4 (L4)		Count
Analysis Focus (What)	**Describes the input and output of a task, if present. A task can have multiple input and outputs, based on its granularity.**					**2356**
	Provided Material				**L1: Describes the segments during which analysts focused on documents provided for their analysis.**	**418**
		Guiding Question			Document describing the analysis question participants aimed to answer.	125
		Artifacts			Document containing information about the event log, its structure, and business rules, i.e. details and regulations the process should adhere to.	285
		Instruction			Document informing about the study and its requirements.	8
	Other Artifacts				**L1: Describes the segments during which analysts focused on other resources (available online or own documents).**	**34**
		Tool Documentation/Cheatsheet			Documentation of a tool, available commands and their syntax. Might be provided as part of a tool, via websites, or as part of custom tool documentations or notes from prior analyses.	34
	Analysis Focus				**L1: Describes the segments during which analysts focused on specific data aspects (raw or processed) of the process under consideration.**	**1903**
		Process Deviations			Textual or graphical representation of deviations of traces from a mined or prescriptive model.	13
		Decision Points			Activities or paths in a process where the workflow can follow multiple alternatives. Represents a choice made during the execution of a process, based on data or rules.	10
		Flow			Sequence(s) of activities in a process.	339
		Event log			Raw data of the event log, provided as csv or xes.	105
		User-derived Metrics			Custom metrics defined by analysts to capture specific aspects of process behavior (KPI, averages, counts, ...).	88
		Temporal / Performance Information			Temporal information or performance statistics related to analysis targets. Can refer to single timestamps as well as to aggregated temporal information. Can be associated to events, activities, cases, and variants.	139
		Event Log Attributes			Data attributes in the event log. Refers to single attributes or the analysis of their distribution.	218
		Descriptive Statistics (Out of the box)			Statistics that describe and summarize analysis that are provided by the process mining tool without the need for further fine-tuning/modification.	247
			Number of events		Number of events in the event log or parts of it (e.g., in a subset of traces)	32
			Number of cases		Number of cases in the event log or parts of it (e.g., in a subset of traces)	190
			Other		Custom statistics	25
		Cases			Focus on a single case or group of specific cases.	75
		Variants			Distinct sequences of activities followed by cases, used to understand different paths through the process.	223
			Happy Path		The most common or ideal variant representing the expected or most efficient flow through the process.	10
		Activities			Discrete steps recorded in the event log. Can refer to the focus on a single activity or a group of activities.	447
			End Activities		Activities(s) marking the completion of cases, useful for identifying process outcomes and exits.	67
Tool Function (How)	**Describes how the task performed, i.e., the observable tool features used.**					**2596**
	Case Inspection				**L1: Functions to explore individual process instances (cases)**	**148**
		Case Explorer			A visual or tabular interface to browse and compare individual cases and their attributes.	35
		Case Table			A structured table showing case-level data such as case ID, duration, and number of activities.	43
		Aggregated Table (e.g., OLAP)			An interactive table that enables manipulation of case data using multidimensional views and user-defined metrics.	70
	Conformance Checking				**L1: Functions to compare event logs against reference models to detect deviations and assess compliance.**	**51**
		Edit BPMN Process Model			Allows manual editing or creation of BPMN models to be used as references for conformance checking.	19
		Root Cause Analysis			Explains detected deviations with behavior patterns or rules that caused them.	8
		Conformance Overview			Summary view showing where and how process execution aligns or misaligns with a reference model.	24
	CSV Reader				**L1: Functions to open csv files.**	**26**
	Data Transformation				**L1: Functions to manipulate, enrich, or reshape data.**	**96**
		Custom Formula			Interface in which analysts can generate own expressions to calculate or derive new attributes from existing ones.	57
		Create Plot			Interface in which analysts can generate visual representations.	7
		Copy Attributes			Interface allowing to duplicate existing attributes to separate use or modification.	4
		Create New Object			Interface allowing to generate new analysis units (e.g., adding of dashboard components or generation of new data objects).	28
	Filter				**L1: Functions to restrict or refine the data scope of analysis by removing or selecting specific elements of the event log.**	**375**
		Applied Filter			Application of new filter.	231
			Activity Filter		Include or exclude cases based on specific activities.	99
			Attribute Filter		Include or exclude cases based on attribute values.	35
			Variant Filter		Include or exclude cases based on their exact activity sequences (variants).	16
			Performance Filter		Include or exclude cases based on their temporal aspects.	5
			Endpoints Filter		Include or exclude cases based on their end activities.	35
			Follower Filter		Include or exclude cases based on where activities follow each other in a defined order.	29
			Case Filter		Directly include or exclude specific Case Ids (instances).	12
		Interrupted Filter			Use of a filtering function without actual application of any filter.	28
		Removed Filter			Use of the filtering function to remove one or multiple active filters.	116
	Import/Export				**L1: Functions to handle data exchange with a process mining tool.**	**45**
		Event Log			Manages importing and exporting logs used for analysis.	41
			Import		Loads event logs into the tool from files or databases.	36
			Export		Saves the current log (e.g., a filtered version) for use elsewhere.	5
		Process Model Export			Saves discovered or edited process models (e.g., BPMN).	4
	Notes				**L1: Functions that support documentations (e.g., note-taking) during the analysis process.**	**93**
	PDF Reader				**L1: Functions that supports viewing reference documents, reports, or manuals in pdf format.**	**417**
	Process Discovery				**L1: Algorithms to automatically create process models from event log data.**	**41**
		Inductive Miner			Application of the inductive miner algorithm.	5
		Multi-Perspective Process Explorer			Application of the multi-perspective process explorer (ProM: Supports discovery from multiple views (control-flow, performance, data) in an integrated interface).	3

		Interactive Data-Aware Heuristic Miner			Application of the interactive data -ware heuristic miner.	16
		Decision Tree Miner			Application of the decision tree miner algorithm which discovers decision rules in the process using classification trees.	2
		Discover DFG			Application of an algorithm creating a Directly-Follows Graph (DFG) to visualize the immediate succession of activities. Automated in many process mining tools.	12
		Heuristic Miner			Application of the heuristic miner algorithm.	3
	Statistics				**L1: Functions for summarized views and statistics on the process.**	**237**
		Other Statistics			Additional or customized statistical views beyond standard measures.	149
			Attribute Statistics		Provides value distributions and frequencies for log attributes.	48
			Number/KPI		Displays key figures or performance indicators.	8
			Performance Statistics		Aggregates temporal data.	5
			Activity Statistics		Shows metrics such as frequency, average duration, or waiting time per activity.	51
			Case Statistics		Describes per-case metrics such as total duration or number of events.	37
		General Statistics			Overview statistics summarizing the entire event log.	88
			Event Log Summary		Displays a summary of the event log, including number of events, cases, activities, and attributes.	32
			Process Overview		Provides a high-level view of the process, combining control-flow and performance insights.	56
	Tool Documentation				**L1: Functions that explain features or theoretical background (in-tool or external references, e.g., websites) of process mining tools.**	**44**
	Variant Inspection				**L1: Functions to explore, compare, and analyze different variants in the process.**	**298**
		Variant Explorer			Visualizes variants and their structure (e.g., in a graph-like representation). Depending on the tool, the interface might include information about frequency, characteristics, or performance aspects of different variants. Typically interactive.	283
		Variant List			Summary of variants depicting the frequency and order of activities of each variant. Typically non-interactive.	15
	Visualization				**L1: Graphical representations of process data or models to support interpretation and insight generation.**	**527**
		Other Visualization			Visualization types beyond "standard" process models.	37
			Social Network (HoW)		Interface that visualizes handover-of-work networks meant for showing collaboration between resources.	3
			Box Plot		Interface with Box Plot visualization.	1
			Bar Chart		Interface with Bar Chart visualization.	6
			Scatter Plot		Interface with Scatterplot visualization.	1
			Dotted Chart		Interface with Dotted Chart visualization.	26
		Process Model			Graphical depiction of the structure of a process.	490
			IvM Model		Interface for visualizing model discovered using the Inductive Miner algorithm.	3
			DFG		Interface for visualizing a directly-follows Graph (DFG).	461
				Animation	Simulates process executions.	2
				Non-interactive DFG	A static view of the DFG.	32
				Interactive DFG	A dynamic version of the DFG with support of (at least) filtering and zooming.	427
			Dependency Graph		Visualization of a process model that highlights dependencies between activities.	4
			Petri Net		Visualization of a formal process model using places and transitions.	22
	Window Switch				**L1: User actions involving changes in tool interfaces or application contexts.**	**198**
		Technique Selection			Switching between different analysis methods or algorithms.	36
		Connection Error			Occurs when the tool fails to connect to external services or data sources.	16
		Desktop View (Not Categorized)			Other user interface windows not linked to a specific feature category and not considered relevant for advancing the analysis.	146
Visualizations		**Describes what specific type of visualization is used.**				**772**
	Other Chart Visualizations				**L1: "Standard" visualizations that are used to visualize different aspects of event log data.**	**65**
		Heatmap			"Standard" Heatmap Visualization.	1
		Box Plot			"Standard" Box Plot Visualization.	1
		Bar Chart			"Standard" Bar Chart Visualization.	19
			Histogram		"Standard" Histogram Visualization.	4
		Line Graph			"Standard" Line Graph Visualization.	15
		Scatterplot			"Standard" Scatterplot Visualization.	29
			Dotted Chart		Visualizes the raw data from the event log, displaying each event as one dot in a chart. Options allow to flexibly set the x- and y-axis and to specify the meaning of colors.	27
	Process Model				**L1: Visualizations that depict a process model.**	**606**
		Dependency Graph			Graph-like presentation of a processes highlighting dependencies.	4
		Petri net			Mathematical modeling language that is mainly used to describe distributed systems. It can be applied to processes to model them as a set of states and transitions.	30
		DFG			Displays a process model in a graph-like structure. Based on the implementation, the level of detail (how many relations and activities are displayed) can be selected. Additionally, annotations can be added to the nodes and edges of the graph.	531
		BPMN			Graphical language providing symbols that allow to record, model, document, design, execute, measure, monitor, and control business processes.	17
		Causal Net			Graph where nodes represent activities and arcs represent causal dependencies. Compared to Petri nets, in Causal nets, no states are displayed and the routing logic is only represented by the direct bindings of nodes.	9
		IvM Model			Visualization follows the principles of process trees.	13
		Social Network			Highlights interactions and relationships between individuals or roles involved in a process.	2
	Other Process Representation				**L1: Visualizations that depict process mining specific aspects of event logs.**	**101**
		Sequence Chart			Provides a visualization of the sequence (flow) of activities of process instances, process variants, or the event log.	101
			Variant Sequence		Interactive visual overview of all variants in the log.	32
			Trace Sequence		Display events and attributes of one case (trace) in the log. Allows to assess the sequence of activities for the case, as well as attributes (e.g., timestamps) related to them.	69