Factors [12]	Elements [27]	Definition/ Example [27]	Maturity Stages					
			1 Initial [27]	2 Rudimentary [27]	3 Standalone [27]	4 Systematic [27]	5 Optimizing [27]	6 Outstanding
Organization *Organization enables significant process mining*	**Purpose**	Describes the scope of process mining **use cases** in the organization, as well as the **long-term strategies** and **vision.** A use case contains a process mining **technique**, a **process** and an expected **benefit**	No specific **use case** has been defined yet	A **first use case for process mining** exists in the organization	A **vision** is written down, supported by **performance indicators and a monitoring**	The application of process mining is **continuously expanded** based on a **roadmap** with regard to **new techniques or processes**	A long-term pursued vision is **continuously developed** and **systematically reviewed**	A long-term pursued vision is continuously refined, meticulously executed, and thoroughly evaluated to enable **advanced applications** on processes.
	Center of excellence for process mining	Bundles the effort for process mining in the organization, thus **accelerating the adoption** - Leadership and managerial support - Technical support and trainings - Methodological support, best practices	**No unit** of the organization **bundles support** for process mining	One unit deals with process mining with focus on **one specific use case** Time horizons are **short-term**	An **interdisciplinary team** addresses **multiple use cases** Time horizons are **medium-term**	A (centralized or hybrid) **Center of excellence** guides role assignment, tasks, and duties for process mining Time horizons are **long-term**	Process mining is established and **anchored it in the organizational structure** Time horizons are **visionary** and **future-oriented**	Process mining is established and anchored it in the organizational structure. In addition, there is an **expert group dealing with advanced applications in PM**. Time horizons are **visionary** and **future-oriented**
	Process centricity	The organizations aspiration is to **think and work cross-functionally**	**No process awareness** (functional divisions act and optimize for themselves)	Initial **process awareness** through **cross-functional** process oriented thinking	**Cross-functional** process management (e.g. fixed responsibilities, standardization measures and KPIs)	**Target-driven** end-to-end processes (e.g. proactive action and strategic alignment of processes)	**Continuous optimization** of end-to-end processes	**Automated** optimization of end-to-end processes
	Evidence centricity	Data is generally used to **base decisions** in the organization	**Data** is **not** used for **decision support**	**Data is passively collected** but not used for decision support	**Data is actively collected**, but not actively used to support decisions (i.e. there is no need to view the data)	**Data is actively used** for decision support	**Data-based standard solutions** are established in relevant business areas and account for the main source of information	**Process Mining Analysis solutions** are established in the relevant business areas and complement data-based standard solutions.
	Change centricity	**Culture and organization** is open for change	Corporate culture is **rigid**	Changes only happen **top-down**	A culture of change is established among employees, especially in the form of an **active error culture**	**Mistakes** are seen as a **chance** for improvement	**Change** is considered **natural** at all levels	Change is seen at all levels as an opportunity to **gain an advantage** over competitors.
	Methods of process mining **project phases**	Maturity of **methods in the organization to structure tasks** of process mining project phases - Workshops or structuring templates - Data map - Process models like CRISP-DM or PM^2	**No** supporting methods in use	Supporting methods are **undocumented**	Supporting methods are **documented**	Supporting methods are **linked to project phases** and become mandatory	Methods are **bundled and further developed** in one place	Methods are bundled and further developed in one place. New **Methods from science** are quickly implemented in practice in a meaningful way.
Data foundation *Environment enables sufficient process mining*	**Process-oriented** **IT-systems**	Describes the **maturityof used IT-systems** regarding **completeness** and **reliability** for event logs	Data is mainly recorded **by hand**	The majority of **data** is recorded **automatically** as a by-product of IT-systems, but there is **no claim to completeness** or reliability	Data is **automatically recorded** by IT-systems and the **data** in the system **is reliable**, but there is **no claim to completeness**	Data is **automatically recorded** by IT-systems and is **complete and reliable**	In addition, **data protection, security**, and **semantically clear structures** are guaranteed	The IT-system automatically **provides an event log** for each process.
	Data accessibility	**Access** to data can be given **quickly** to relevant entities - Reduction of datasilos - Uniform and optimal format - Reduction of access time	Data is **not optimally accessible**	First business units develop a **strategy to increase accessibility** Data is only **extracted on demand and in a costly manner**	The strategies are **extended and aligned** Data is only extracted on demand, but in a **fixed procedure**	Hurdles are systematically removed, and **access times are accelerated** through targeted measures Extraction is standardized and **enables immediate data transformation**	Data is **directly accessible** at any time according to the analysis questions **without additional IT effort**	In addition, **further data** is available for direct retrieval at any time, which can be used additionally.
	Scope of the data	Data is **annotated**, **transformed** and **enriched** with further information according to its process-specific context - Meta data - Additional attributes like resource, order size, type of product etc. - Completeness of contextualization	**No** additional **description** of the data	**Limited** data scope, with manual extensions and testing	**Functional** data scope, with first automated contextualization for specific application scenarios	**Advanced** data scope, through corporate standards for contextualization	Data is **automatically extended** by its context	Data is **intelligently and dynamically augmented in real-time**, leveraging advanced contextual analysis and predictive algorithms to ensure comprehensive and accurate information.
People´s knowledge *People understand process mining*	**Handling** **process mining tools**	The ability to use **suitable tools independently**at the **right time** - Knowledge of functional scope - Knowledge about tool limitations	**No knowledge** exists in handling process mining tools	Relevant business units have **unpracticed knowledge** about process mining tools	**Operational, autonomous knowledge** of process mining tools available in relevant business areas	Relevant business areas have routinized knowledge in the use of tools and can **solve complex tasks autonomously**	A **knowledge management**, carried out by a **separate unit**, is implemented to facilitate **knowledge externalization** and **networking** across business areas	A **seamlessly integrated knowledge ecosystem**, driven by a centralized and agile knowledge management function, empowers effortless knowledge externalization, fosters cross-functional networking, and facilitates real-time knowledge sharing and collaboration across all business domains.
	Technical basics	**General knowledge** of IT topics - Integration and dashboarding - Database queries - Operational support	**No knowledge** exists on technical basics	Relevant business units have **theoretical knowledge** of technical basics	**Operational, autonomous knowledge** of technical basics available in relevant business areas	Relevant business areas have routinized knowledge of technical basics and are able to **solve complex tasks autonomously**	A **knowledge management**, carried out by a **separate unit**, is implemented to facilitate **knowledge externalization** and **networking** across business areas	A **seamlessly integrated knowledge ecosystem**, driven by a centralized and agile knowledge management function, empowers effortless knowledge externalization, fosters cross-functional networking, and facilitates real-time knowledge sharing and collaboration across all business domains.
	Data preparation	Data can be processed to **increase its information content** - Preprocessing pipeline - Filters for data - Detect human errors and incompleteness	**No knowledge exists** on data preprocessing	Relevant business units have **theoretical knowledge** of data preprocessing	**Operational, autonomous knowledge** of data pre-processing available in relevant business areas	Relevant business areas have routinized knowledge of data preprocessing and can **solve complex tasks autonomously**	A **knowledge management**, carried out by a **separate unit**, is implemented to facilitate **knowledge externalization** and **networking** across business areas	A **seamlessly integrated knowledge ecosystem**, driven by a centralized and agile knowledge management function, empowers effortless knowledge externalization, fosters cross-functional networking, and facilitates real-time knowledge sharing and collaboration across all business domains.
	Classic data mining	Knowledge about the general **handling of large data sets** - Clustering - Dimension reduction - Feature selection - Machine learning	**No knowledge** exists of classic data mining	Relevant business units have **theoretical knowledge** about classical data mining	**Operational, autonomous knowledge** of classic data mining available in relevant business areas	Relevant business areas have routinized knowledge of classical data mining and can **solve complex tasks autonomously**	A **knowledge management**, carried out by a **separate unit**, is implemented to facilitate **knowledge externalization** and **networking** across business areas	A **seamlessly integrated knowledge ecosystem**, driven by a centralized and agile knowledge management function, empowers effortless knowledge externalization, fosters cross-functional networking, and facilitates real-time knowledge sharing and collaboration across all business domains.
	Process mining basics	Basic knowledge in process mining: **process mining techniques**, process **representations** (Petri nets, DFG, BPMN, etc.), **algorithms** - Advantages and disadvantages are known - Tailoring to use case	**No knowledge** exists of process mining basics	Relevant business units have **theoretical knowledge** about process mining basics	**Operational, autonomous knowledge** of process mining basics available in relevant business areas	Relevant business areas have routinized knowledge of process mining basics and can **solve complex tasks autonomously**	A **knowledge management**, carried out by a **separate unit**, is implemented to facilitate **knowledge externalization** and **networking** across business areas	A **seamlessly integrated knowledge ecosystem**, driven by a centralized and agile knowledge management function, empowers effortless knowledge externalization, fosters cross-functional networking, and facilitates real-time knowledge sharing and collaboration across all business domains.
	Advanced application	Process mining for **use cases beyond the main techniques** (discovery, conformance, enhancement) - Control flow, organization, case, time perspective - Process flows - Predictive process mining	**No knowledge** exists on advanced applications	Relevant business units have **theoretical knowledge** on advanced applications	**Operational, autonomous knowledge** of advanced applications in relevant business areas available	Relevant business areas have routinized knowledge of advanced applications and can **solve complex tasks autonomously**	A **knowledge management**, carried out by a **separate unit**, is implemented to facilitate **knowledge externalization** and **networking** across business areas	A **seamlessly integrated knowledge ecosystem**, driven by a centralized and agile knowledge management function, empowers effortless knowledge externalization, fosters cross-functional networking, and facilitates real-time knowledge sharing and collaboration across all business domains.
Scope of the process mining activity *Holistic application of process mining*	**Discovery**	Process discovery describes how to **create process models** from event logs - Create actual process models - Incorporate knowledge from domain experts - Enrich process model with additional data	Process mining is **not used** for process discovery	Process discovery is used for **simple proof of concepts or not by the organization itself**	Process discovery is used in **selected use cases** by the organization itself	Process discovery is used for **all relevant business processes**	The use of process discovery is **continuously optimized and expanded**	An **AI-driven process discovery** continually evolves and expands, optimizing operational efficiency.
	Analysis	Analysis describes the **data-based analysis** of processes with regard to dimensions such as **time, quality, complexity or costs** - Quantitative analysis (flow analysis, cycle time ...) - Conformance checking	Process mining is **not used** for process analysis	Process analysis is used for simple proof of concepts or **not by the organization itself**	Process analysis is used in **selected use cases** by the organization itself	Process analysis is used for **all relevant business processes**	The use of process analysis is **continuously optimized and expanded**	An **AI-driven process analysis** continually evolves and expands, optimizing operational efficiency.
	Monitoring and controlling	Ongoing **monitoring** and control of processes by means of **keyprocess indicators**	Process mining is **not used** for process monitoring and controlling	Process monitoring and controlling are used for simple proof of conceptsor **not by the organization itself**	Process monitoring and controlling are used in **selected use cases** by the organization itself	Process monitoring and controlling are used for **all relevant business processes**	The use of process monitoring and controlling is **continuously optimized and expanded**	An **AI-driven process monitoring and controlling** continually evolves and expands, optimizing operational efficiency.
	Operating advanced use cases	Process mining is used specifically for **advanced application** scenarios such as **prediction** or **automated execution of actions**	Process mining is **not used** for advanced applications	Advanced applications are applied to simple proof of concepts or **not by the organization itself**	Advanced applications are applied to **selected use cases** by the organization itself	Advanced applications are applied to **all relevant business processes**	The use of advanced applications is **continuously optimized and expanded**	Advanced applications are constantly being developed, enhanced and **automated using AI** to optimize operational efficiency.
Governance *Guidelines for process mining application*	**Method / tool governance**	The maturity of guidelines that define **who can and must use which tools/methods** - Which tool for which use case - Which method in which phase of the BPM lifecycle	**No or undocumented** method/ tool guidelines	**Documented** method/tool guidelines, but **not consistently enforced**	**Documented** method/tool guidelines are visible at a central location for all stakeholders and are consistently **enforced**	Future and historical changes to method/tool guidelines are **visible for all stakeholders at a central location**	Governance matters are **bundled and further developed** at one entity within the organization	**A centralized governance center** leads comprehensive development, refinement and documentation in a location that is readily accessible to all stakeholders at all times.
	Roles and responsibilities	The maturity of policies that define **accountability and role assignment** for process mining in the organization - For employees, but also for other actors (crowdworkers, robots, smart devices, software)	**No or undocumented** roles and responsibilities	**Documented** responsibility guidelines, but **not consistently enforced**	**Documented** responsibility guidelines are visible at a central location for all stakeholders and are consistently **enforced**	Future and historical changes to responsibility guidelines are **visible for all stakeholders at a central location**	Governance matters are **bundled and further developed** at one entity within the organization	**A centralized governance center** leads comprehensive development, refinement and documentation in a location that is readily accessible to all stakeholders at all times.
	Process governance	The maturity of standards and guidelines for **process decisions** - Who gets to modify processes and when? - Who defines and measures process performance? - Who documents and actualizes processes?	**No or undocumented** process guidelines	**Documented** process guidelines, but **not consistently enforced**	**Documented** process guidelines are visible at a central location for all stakeholders and are consistently **enforced**	Future and historical changes to process guidelines are **visible for all stakeholders at a central location**	Governance matters are **bundled and further developed** at one entity within the organization	**A centralized governance center** leads comprehensive development, refinement and documentation in a location that is readily accessible to all stakeholders at all times.
	Data governance	The maturity of **guidelines** for management and **control over** the use of **(process) data** - Who is allowed to view process data and when? - Who may grant access to data and when?	**No or undocumented** data guidelines	**Documented** data guidelines, but **not consistently enforced**	**Documented** data guidelines are visible at a central location for all stakeholders and are consistently **enforced**	Future and historical changes to data guidelines are **visible for all stakeholders at a central location**	Governance matters are **bundled and further developed** at one entity within the organization	**A centralized governance center** leads comprehensive development, refinement and documentation in a location that is readily accessible to all stakeholders at all times.