

Table 1: The Dimension Culture of the Artificial Intelligence Maturity Model

Indicator	Level 1	Level 2	Level 3	Level 4	Level 5
Experiments	None	Initial attempts at a culture of experimentation	Further experiments	Strengthening of experiment-friendly attitude	Fast and iterative experiments are standard
Employee Attitude	Skepticism	Curiosity	Openness	Acceptance	Enthusiasm
AI Competencies	Ignorance	Awareness of the technology	Basic knowledge acquired	In-depth understanding	Experts and lifelong learning
Knowledge Management	Isolated knowledge without exchange	Ad-hoc exchange	Structured exchange and introduction of a central platform	Central platform is frequently used	Fully integrated and centralized platform used by everyone
Training	No knowledge transfer	Initial training	Investment in further training	Significant investments in skill development	Lifelong training
Employee Empowerment	Missing	Basic principles	Established empowerment culture	Strong employee empowerment and responsibility	Complete employee empowerment
Risk Appetite	No willingness	Limited	Moderate	High risk appetite and innovation enthusiasm	Complete risk willingness and proactive innovation

Table 2: The Dimension Strategy of the Artificial Intelligence Maturity Model

Indicator	Level 1	Level 2	Level 3	Level 4	Level 5
Vision	None	Initial attempts	Formulated but inconsistent implementation	Company-wide	Vision as an innovation driver
Corporate Goals	No clear goals	Experimental goals	Goals in specific areas	AI is a central component of corporate goals	Corporate goals driven by AI
Investment Management	No AI-specific investments	Initial investments without systematic planning	Investments with partial strategic focus	Strategic, long-term, and own budgets	Proactive and AI-driven
Competitors	No consideration	Initial observations	Reactive analyses	Strategic monitoring	Proactive competitive strategy
Use Cases	No clear use cases	Initial defined use cases	Development of specific use cases	Integration into key processes	Innovation and scaling
Feedback Process	No formal process	Initial steps to capture feedback	Structured in certain areas	Systematic across the company	Proactive and adaptive feedback process

Table 3: The Dimension Organization of the Artificial Intelligence Maturity Model

Indicator	Level 1	Level 2	Level 3	Level 4	Level 5
Role Distribution	No clear role distribution	Initial assigned roles	Clear distribution in specific areas	Structured role model	Optimized, adaptive role distribution
Change Management	No structured management	Initial approaches	Structured in certain areas	Comprehensive change management	Adaptive and innovation-driven
Top Management	No interest	Initial engagement	Engaged	Exemplary engagement	Driver of AI innovation
Qualification	Lack of qualification	Initial training	Structured qualification program	Continuous further training	Excellent qualification and company-wide expertise

Table 4: The Dimension Information of the Artificial Intelligence Maturity Model

Indicator	Level 1	Level 2	Level 3	Level 4	Level 5
Data Administration	No formal data administration	Initial approaches to data management	Introduction of central data management	Efficient and scalable	Optimized and value-creating
Data Policies	No formal policies	Initial approaches	Establishment of formal policies	Comprehensive and enforced policies	Proactive and optimized data policies
Data Sources	Unstructured and isolated	Identification and integration of data sources	Standardized data sources	Fully integrated and high-quality data sources	Optimized data sources
Data Quality	Uncontrolled and inconsistent	Initial improvements	Standardized and regular data quality control	Advanced data quality and proactive control	Excellent and optimized
Data Processing	Manual and isolated	Initial automation	Standardized and automated	Advanced and real-time data processing	Fully optimized and intelligent
Data Architecture	Fragmented and undocumented	Initial approaches to standardization	Establishment of a company-wide data architecture	Optimized and scalable	Intelligent and self-optimizing
Data Exchange	No exchange	Internal exchange	External exchange with selected partners	Industry-wide exchange	Initiation of industry-wide exchange

Table 5: The Dimension Technology of the Artificial Intelligence Maturity Model

Indicator	Level 1	Level 2	Level 3	Level 4	Level 5
AI	No use	Experimental use	Standardized use	Scalable implementation	Complete integration and use
Infrastructure	Inadequate and outdated	Foundations of a solid infrastructure	Established and integrated	Optimized and scalable	Intelligent and autonomous management
Scalability	No scalability	Basic approaches	Planned and actionable scalability	Dynamic and adaptive	Intelligent and self-optimizing
Testing	Unplanned and sporadic	Basic testing procedures	Structured and consistent testing processes	Comprehensive testing strategy and integration	Intelligent and adaptive
Research	Little research	Unorganized in isolated projects	Systematic innovation focus and interdisciplinary	Leadership and proactive research	Maximizing compatibility

Table 6: The Dimension Governance of the Artificial Intelligence Maturity Model

Indicator	Level 1	Level 2	Level 3	Level 4	Level 5
Ethics	Ignored	Initial approaches	Structured ethical approaches	Ethical practices as standard	Pioneer in ethics
Bias	Undetected	Initial steps to identification	Systematic bias analysis	Proactive identification and mitigation of bias	Advanced bias analysis
Explainability	Lack of awareness	Initial steps towards explainability	Implementation of explainability techniques	Developed standards	Maximum explainability and transparency
Policies	Missing	Basic policies being developed	Established policies	Integration of policies into corporate strategy	Comprehensive and clear policies established throughout the company
Risk Management	Missing	Basic processes	Formalized	Integrated	Comprehensive and effective risk management
Quality Assurance	Not present	Initial measures	Established practices	Proactive and continuous	Leadership role and setting industry-wide standards
Transparency	Lack of transparency	Initial recognition of importance	Established practices for transparency	Proactive transparency and engagement	Pioneer and setting standards for the entire industry