

M1 Smart Factory Training Glossary

Smart Factory

A highly digitized and connected production facility that relies on smart manufacturing. It uses a constant stream of data from connected operations and production systems to learn and adapt to changing demands in real-time.

Industry 4.0 (Fourth Industrial Revolution)

A transformation of manufacturing and production through digitalization and interconnectivity of machines, data, and systems.

Digital Twin

A virtual representation of a physical object or system across its lifecycle. It uses real-time data and simulation models to monitor, optimize, and control physical assets.

Cyber-Physical Systems (CPS)

Systems that integrate computation, networking, and physical processes, enabling real-time interaction between the digital and physical worlds.

Industrial Internet of Things (IIoT)

The use of interconnected sensors, instruments, and other devices networked together with computers to collect, exchange, and analyze data in industrial environments.

Quality Function Deployment (QFD)

A structured method used to transform customer needs (the voice of the customer) into engineering characteristics for a product or service.

House of Quality (HoQ)

A key component of QFD, representing customer requirements, technical specifications, and their interrelations in a matrix format to guide product development.

Customer Requirement Matrix

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A tool within QFD that systematically captures and analyzes customer requirements to inform design and development processes.

Process Performance Measurement

The continuous monitoring and evaluation of operational processes to determine their efficiency and effectiveness.

Data-Enabled Resource Optimization

The use of data-driven insights to optimize the allocation and utilization of organizational resources, including human, machine, and financial assets.

Six Sigma / DMAIC

A data-driven approach and methodology for eliminating defects in processes, standing for Define, Measure, Analyze, Improve, and Control.

SIPOC (Supplier, Input, Process, Output, Customer)

A high-level process mapping tool used to identify elements of a process improvement project.

Digital Assistant Systems

Technical systems that support human operators in performing tasks by processing information from the environment, databases, and integrated systems.

Machine Vision

The application of computer vision technologies for inspection, quality control, and guidance of equipment in manufacturing processes.

Predictive Maintenance

Maintenance strategy that uses data analytics and IoT sensors to predict equipment failures before they occur, minimizing downtime.

Artificial Intelligence (AI)

The simulation of human intelligence processes by machines, especially computer systems, enabling tasks such as learning, reasoning, and problem-solving.

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Deep Learning

A subset of machine learning where artificial neural networks learn from large amounts of data to identify patterns and make decisions.

Autoencoder

A type of artificial neural network used for unsupervised learning, primarily for dimensionality reduction, anomaly detection, and feature extraction.

Digital Transformation

The application of digital technology to fundamentally change how organizations operate and deliver value to customers.

PDCA Cycle (Plan-Do-Check-Act)

An iterative management method used for continuous improvement of processes and products.

PROMETHEE Method

A multi-criteria decision-making method used to rank different alternatives based on defined quantitative and qualitative criteria.

Enabler Technologies

Technologies that enable the realization of smart factories, including cloud computing, sensors, actuators, big data analytics, robotics, and AI.

Collaborative Robots (Cobots)

Robots designed to work alongside humans in a shared workspace, enhancing flexibility and safety in manufacturing environments.

Pick-to-Light (PTL)

An order-picking technology that uses lights to guide operators to specific locations for picking items.

AGV (Automated Guided Vehicle)

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Mobile robots used in industrial environments for automated material handling and transport.

RFID (Radio Frequency Identification)

A technology that uses electromagnetic fields to automatically identify and track tags attached to objects.

Human-AI Collaboration

The joint functioning of human workers and AI systems to improve productivity, decision-making, and safety.

M2 Customer Requirement Matrix – Quality Function Deployment (QFD) Glossary

Customer Requirement Matrix

A systematic tool used to capture and analyze customer needs, transforming them into actionable product or service specifications.

Quality Function Deployment (QFD)

A structured approach that translates customer requirements into appropriate technical requirements for each stage of product development and production.

House of Quality (HoQ)

The core element of QFD: a matrix diagram that relates customer requirements to product capabilities, technical specifications, and competitive comparisons.

Customer Requirements

Specific needs, desires, or expectations expressed by customers regarding a product or service.

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Product Specifications

Technical descriptions and parameters of a product that are derived from customer requirements and intended to fulfill them.

Correlation Matrix

A matrix within the HoQ that shows the strength of relationships between customer requirements and product features, typically graded as strong (9), moderate (3), or possible (1).

Technical Comparison of Competition

An evaluation within QFD comparing how well the organization's and competitors' products meet customer requirements.

Mutual Influence of Product Features

The assessment of interdependencies between different product features, showing how improvements in one feature may impact others.

Competitive Analysis

A process of comparing one's products to competitors to evaluate strengths, weaknesses, and opportunities for improvement.

Kano Model

A method to categorize customer requirements into Basic, Performance, and Excitement (Enthusiasm) features based on their impact on customer satisfaction.

Primary Data

Information collected directly from the customer through surveys, workshops, expert interviews, or competitions.

Secondary Data

Existing data sources such as market research, standards, statistics, CRM systems, or internal reports used to identify customer needs.

Basic Requirements

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The minimum expectations of customers that must be fulfilled to avoid dissatisfaction.

Performance Requirements

Product features where higher performance leads directly to higher customer satisfaction.

Excitement (Enthusiasm) Requirements

Unexpected features that delight customers when present but do not cause dissatisfaction when absent.

Weighting of Requirements

The process of assigning importance levels to customer requirements to prioritize product development efforts.

Product Feature Quantification

The process of assigning measurable units or indicators to product features for technical evaluation.

Pairwise Comparison

A technique to systematically compare and evaluate interactions between pairs of product features.

Lean Methodology

An approach that focuses on minimizing waste while maximizing customer value.

Green Methodology

A sustainable approach that considers environmental impacts in product development and process design.

Individualization

The customization of products to meet specific customer preferences and needs.

Market Attractiveness

The appeal of a product or market segment based on customer needs, competitive positioning, and potential profitability.

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M3 Data-Enabled Resource Optimisation Glossary

Data-Enabled Resource Optimisation

The use of data collection, analysis, and evaluation to optimize the allocation and usage of organizational resources in order to achieve business goals efficiently.

Process Performance Measurement

Continuous, planned, and formalized monitoring of operational processes to assess efficiency and effectiveness.

Resource Optimization

The process of aligning available resources (human, machinery, financial) with organizational needs to achieve desired goals within a defined timeframe and budget while minimizing resource usage.

Data-Driven Culture

An organizational mindset that emphasizes the use of data for continuous performance improvement, decision-making, and strategic planning.

IoT Application Data

Data generated by Internet of Things devices that monitor and report on resource utilization and system performance in real-time.

Distributed User Data Metrics

Data collected from multiple users and systems distributed across an organization, used to manage resources dynamically.

Process Inputs and Outputs

The resources, activities, and results involved in completing organizational processes.

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Process Bottlenecks

Points in a process where the flow of operations is slowed down, limiting overall efficiency.

Risk Identification

The process of detecting potential obstacles or issues that could negatively affect performance or resource allocation.

Continuous Improvement

An ongoing effort to enhance products, services, or processes to increase efficiency and effectiveness.

Six Sigma

A data-driven methodology aimed at reducing defects and variation in processes to improve quality and efficiency.

DMAIC (Define, Measure, Analyze, Improve, Control)

A Six Sigma process framework used to optimize existing processes by systematically identifying and eliminating inefficiencies.

TQM (Total Quality Management)

A comprehensive management approach focused on long-term success through customer satisfaction and data-based decision making.

SIPOC (Supplier, Input, Process, Output, Customer)

A process mapping tool that identifies key elements of a business process for analysis and improvement.

Optimization Algorithms

Mathematical methods used to find the best allocation of resources under given constraints.

Deep Learning

A form of machine learning that uses large datasets and neural networks to identify patterns and improve prediction capabilities.

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Autoencoder

A type of neural network designed to reduce data dimensions and extract features, often used in anomaly detection and unsupervised learning.

Anomaly Detection

The identification of unusual patterns or behaviors in data that may indicate issues requiring attention.

Feature Extraction

The process of transforming raw data into informative inputs for machine learning models by identifying relevant characteristics.

Supervised Learning

A machine learning approach where models are trained on labeled data to make predictions or classifications.

M4 Digital Assistant Systems Glossary

Digital Assistant System

A technical system that processes information from its environment, databases, and integrated systems to support human operators in performing tasks more efficiently and accurately.

Cyber-Physical Systems (CPS)

Systems that combine physical and digital components, interconnected via networks, to enable real-time data exchange and smart decision-making in manufacturing environments.

Industry 4.0

The fourth industrial revolution focused on automation, real-time data exchange, and advanced manufacturing technologies, integrating digital and physical systems.

Human-AI Collaboration

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The cooperative interaction between humans and AI-powered systems to optimize task execution, decision-making, and productivity.

Process Optimization

The improvement of production processes by analyzing data and recommending adjustments to enhance efficiency, reduce errors, and minimize resource waste.

Operator Support

Assistance provided to human workers by digital assistant systems, including guidance on assembly, machine operation, or complex task execution.

Quality Control

The process of ensuring products meet required specifications, supported by digital assistant systems through machine vision and automated inspection.

Machine Vision

The use of cameras and AI algorithms to automatically inspect products, detect defects, and verify dimensions and quality standards.

Inventory Management

The tracking and control of stock levels, with digital assistants providing real-time updates and optimization of inventory based on demand and supply data.

Pick-to-Light (PTL)

An order picking technology using lights to guide operators to the correct storage locations, improving picking accuracy and efficiency.

Augmented Reality (AR) Glasses

Wearable devices that overlay digital information (such as instructions, visual aids, and alerts) onto the user's view, enhancing task guidance and reducing errors.

Cobot (Collaborative Robot)

A robot designed to work safely alongside humans, assisting in manufacturing tasks that require precision, strength, or repetitive actions.

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Manipulator

A mechanical arm or device used to handle, lift, or position heavy or delicate components in the production process.

RFID (Radio Frequency Identification)

Technology that uses electromagnetic fields to automatically identify and track tags attached to objects, enabling real-time tracking in production and logistics.

AGV (Automated Guided Vehicle)

A mobile robot used to transport materials within a facility without human intervention, guided by sensors, tracks, or navigation systems.

LCD with Instructions

Digital displays used to present step-by-step instructions, diagrams, or alerts to operators during task execution.

Workspace Layout Optimization

The design and arrangement of workspaces to improve safety, ergonomics, and productivity while minimizing unnecessary movements and time waste.

Cycle Time Reduction

The shortening of time needed to complete a manufacturing cycle, achieved through automation, better process sequencing, or digital assistance.

Worker Effort Reduction

Decreasing the physical and cognitive load on workers by providing clear instructions, reducing errors, and automating difficult tasks.

PROMETHEE Method

A multi-criteria decision-making approach used to evaluate and rank different technology implementation options based on defined criteria.

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M5 Digital Twin of the Facility Glossary

Digital Twin (DT)

A virtual replica of a physical system that uses real-time data and simulations to monitor, optimize, and control its physical counterpart.

Digital Twin of Facility

The specific application of digital twin technology to model, monitor, and manage an entire manufacturing facility and its internal processes.

Digitization

The process of converting analog information into digital format to make it accessible to information systems.

Digitalization

The use of digital technologies to improve business processes, models, and organizational performance.

Digital Transformation

A comprehensive change where organizations integrate digital technologies into all aspects of business, creating new processes and models for improved competitiveness and efficiency.

Product Lifecycle Management (PLM)

An approach to managing a product's entire lifecycle, from design and manufacturing to maintenance and disposal, supported by digital twin data.

Real-Time Monitoring

Continuous observation of facility processes and equipment through sensors and data analysis, allowing instant response to deviations.

Simulation

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The use of digital models to replicate and test real-world processes, systems, or events to optimize performance and identify potential issues.

3D Visualization

Graphical representations of the physical facility, equipment, and processes in three dimensions, enhancing planning and monitoring.

Integrated Planning

Coordinated development and synchronization of products, processes, and production resources through digital twin simulations.

Continuous Improvement

Ongoing refinement of production processes and systems to optimize quality, efficiency, and cost-effectiveness, supported by digital twin insights.

PDCA Cycle (Plan-Do-Check-Act)

An iterative approach for continuous process improvement commonly used in digital twin deployment.

Cybersecurity

Protection of digital systems and data from unauthorized access, critical for ensuring the safety of interconnected digital twin systems.

4A Traps

Potential pitfalls in digital twin adoption across departments: Adopting: Fully implementing prescribed global practices. Adapting: Modifying practices to fit local needs. Acting: Superficially implementing changes. Avoiding: Ignoring recommended improvements.

Data Management

Organizing, storing, and maintaining digital information to ensure accuracy, accessibility, and security within the digital twin environment.

Parallel Development

Simultaneous development of products and production processes, facilitated by digital twin simulations for early validation.

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Automation

The use of control systems, robots, and data-driven processes to operate equipment and complete tasks without human intervention.

Virtual Commissioning

The use of digital twin simulations to test and validate production systems before physical implementation, reducing costly errors and delays.

Factory Simulation Tools (e.g., Tecnomatix, Plant Simulation, Process Simulate, Line Designer)

Software platforms used to create digital models for planning, optimizing, and validating factory layouts, processes, and material flows.

Occupancy-Oriented Digital Twin

A digital twin model focusing on facility management, monitoring occupancy levels, space utilization, and environmental conditions for operational efficiency.

M6 Key Performance Indicators (KPI) Glossary

Key Performance Indicator (KPI)

A quantifiable measure that evaluates how effectively an individual, department, or organization achieves its objectives and strategic goals.

Performance Measurement

The ongoing process of evaluating the efficiency and effectiveness of a process, project, or organization by tracking selected KPIs.

Process Performance

An assessment of how well a process operates by comparing its outputs against defined targets or benchmarks.

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Target Setting

The act of defining specific, measurable goals that an organization strives to achieve within a certain time frame.

Leading Indicator

A predictive metric that signals future performance outcomes and allows proactive adjustments before final results occur.

Lagging Indicator

A metric that reflects performance results after the fact, used to assess whether strategic goals have been met.

SMART Criteria

A framework to guide KPI definition: Specific, Measurable, Achievable, Relevant, and Time-bound.

Quantitative Indicator

A performance measure that can be expressed numerically, such as sales volume or production output.

Qualitative Indicator

A performance measure expressed descriptively or through opinions, such as customer satisfaction or employee engagement.

Input Indicator

Measures the resources (time, money, personnel, materials) consumed to produce a desired outcome.

Process Indicator

Monitors the efficiency and productivity of a process by evaluating its internal operations.

Output Indicator

Assesses the immediate results or deliverables produced by a process or activity.

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Practical Indicator

KPIs that fit within existing organizational processes and are easily implemented and monitored.

Directional Indicator

Indicates the trend or direction of performance (improving, declining, or stable).

Actionable Indicator

A KPI within an organization's control, where management can directly influence outcomes through interventions.

Financial Indicator

Measures related to financial performance, such as revenue growth, profit margin, or return on investment.

Benchmarking

The process of comparing organizational performance metrics with those of industry standards, competitors, or best-in-class organizations.

Business Process (BP)

A structured set of activities designed to produce a specific outcome or service within an organization.

Continuous Improvement Process (CIP)

An ongoing effort to enhance processes, products, or services through incremental changes guided by KPI measurements.

Executive Summary Report

A condensed, high-level report presenting key findings and performance insights for top management based on KPI data.

Operational Report

A detailed report focusing on real-time performance monitoring and day-to-day process management.

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M7 Predictive Maintenance Glossary

Predictive Maintenance (PM)

An advanced maintenance strategy that uses data, sensors, and analytics to predict equipment failures before they occur, allowing timely interventions and minimizing unplanned downtime.

Preventive Maintenance

A traditional maintenance approach that schedules maintenance tasks at regular intervals, regardless of the current condition of the equipment.

Reactive Maintenance

A maintenance strategy where repairs are made only after equipment has failed or malfunctioned.

Downtime

The period during which equipment or a system is not operational due to maintenance, failure, or other interruptions.

Mean Time Between Failures (MTBF)

A reliability metric that measures the average operational time between two consecutive equipment failures.

Mean Time to Repair (MTTR)

A metric that measures the average time required to repair and restore a system or device after a failure.

Sensor Technology

Devices that collect real-time data from equipment (e.g., temperature, pressure, vibration, sound) to monitor conditions and detect anomalies.

Data Sources

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Various systems and devices that provide operational data for predictive maintenance analysis, including IoT sensors, ERP systems, and historical maintenance records.

IoT (Internet of Things)

A network of interconnected devices and sensors that collect and exchange real-time data for monitoring and optimizing equipment performance.

Sigma Air Manager

A specific predictive maintenance system used in industrial compressed air systems to analyze operational data and predict failures in advance.

Enterprise Resource Planning (ERP)

An integrated software system that manages core business processes, often used to store and integrate data relevant for predictive maintenance.

Profibus DP (Decentralized Peripherals)

A digital communication protocol used to connect sensors, actuators, and controllers, enabling fast and safe data exchange within industrial systems.

Machine-to-Machine (M2M) Communication

Automated data exchange between machines without human intervention, supporting real-time monitoring and maintenance actions.

Predictive Model

An algorithm or analytical model that uses historical and real-time data to forecast potential equipment failures and recommend proactive maintenance.

Condition Monitoring

The continuous assessment of equipment conditions to identify early signs of deterioration and potential failures.

Failure Threat

An identified risk or condition that indicates a high probability of upcoming equipment failure if not addressed.

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Resource Allocation

The strategic distribution of maintenance personnel, tools, and materials based on predictive maintenance insights to maximize efficiency and minimize costs.

Safety Improvement

One of the key benefits of predictive maintenance: by identifying failures in advance, it minimizes hazardous situations for workers.

Cost Reduction

Lowering maintenance and repair expenses by replacing or repairing components only when needed, as indicated by predictive maintenance data.

Change Management Program

An organizational initiative to help personnel adapt to predictive maintenance systems, ensuring successful implementation and adoption.

M8 Process Identification and Mapping Glossary

Business Process Management (BPM)

A systematic approach to documenting, analyzing, redesigning, implementing, and monitoring business processes to enhance organizational performance.

Process Identification

The first step in BPM, involving the discovery and classification of an organization's processes, defining their hierarchy, value chains, and relationships.

Process Mapping

The creation of a visual diagram that documents how a business process works, including inputs, outputs, activities, and responsibilities.

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Process Architecture

The structure that defines how an organization's processes are organized, grouped, and sequenced, typically into management, core, and support processes.

Value Chain

A series of connected business activities that add value to products or services and contribute to delivering value to customers.

Core Processes

Primary business processes directly related to producing goods or services that generate value for customers.

Management Processes

Processes that provide governance, strategic direction, and oversight of core and support processes.

Support Processes

Processes that provide necessary resources, services, or infrastructure to enable core processes but do not directly add value to the product or service.

Process Portfolio

A collection of all identified processes within an organization, often analyzed based on importance, health, and feasibility for improvement.

Process Health

An evaluation of how effectively and efficiently a process is currently performing, often used to prioritize improvements.

Process Feasibility

The degree to which a process can be improved or redesigned based on available resources and organizational capabilities.

As-Is Process

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A representation of the current state of a process as it operates today, including existing tasks, flows, and roles.

To-Be Process

A redesigned version of a process that incorporates improvements to enhance performance, efficiency, or quality.

BPMN (Business Process Model and Notation)

An international standard (developed by OMG) for visually modeling business processes using standardized symbols and swimlane diagrams.

EPC Diagram (Event-Driven Process Chain)

A process mapping tool often used in ARIS software, focusing on events, functions, and resources involved in business processes.

Swimlane Diagram

A type of process diagram that visually divides tasks and responsibilities among different organizational units or roles.

ARIS (Architecture of Integrated Information Systems)

A specialized BPM software tool used for designing and analyzing business processes, including EPC diagrams.

Microsoft Visio

A general-purpose diagramming tool often used for creating business process maps and flowcharts.

Lead-to-Quote Process

A value chain representing the process flow from initial customer inquiry to providing a formal sales quotation.

Order-to-Cash Process

A core value chain process covering the sequence from receiving customer orders to delivering products and receiving payment.

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M9 Continual Improvement & Benchmarking Glossary

Continuous Improvement Process (CIP)

An ongoing, systematic effort to identify, analyze, and improve processes, products, or services through incremental changes to achieve higher performance and efficiency.

PDCA Cycle (Plan-Do-Check-Act)

An iterative improvement framework consisting of four stages: planning improvements, implementing actions, checking results, and acting to standardize or adjust based on findings.

Kaizen

A Japanese philosophy that emphasizes continuous, small, incremental improvements involving all employees to enhance productivity and eliminate waste.

Lean Methodology

A systematic approach to reducing waste and maximizing value in processes by improving efficiency, quality, and resource utilization.

Agile Methodology

A flexible, iterative approach to project and process management that promotes adaptability, customer collaboration, and rapid response to changes.

Benchmarking

A structured comparison of an organization's processes and performance metrics against industry leaders or best practices to identify improvement opportunities.

Best Practices

Proven, effective methods or techniques that consistently produce superior results and serve as benchmarks for performance improvement.

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Industrial Tourism

A benchmarking practice where organizations visit industry leaders to observe and learn from their processes, even without specific improvement goals.

World-Class Processes

Exceptional business processes that achieve superior performance standards, often serving as universal benchmarks across industries.

Process Mapping

The visual representation of workflows and tasks within a process, used to analyze and identify improvement areas.

Stakeholder Involvement

The engagement of individuals or groups affected by a process to participate in identifying improvement opportunities and implementing changes.

Process Waste

Any activity or resource use within a process that does not add value to the final product or service and should be minimized or eliminated.

Performance Indicators (KPIs)

Quantifiable metrics used to assess the effectiveness and efficiency of processes and guide improvement efforts.

Process Evaluation

The assessment of process performance based on criteria such as effectiveness, efficiency, cost, and customer satisfaction.

Incremental Improvement

Small, continuous changes implemented regularly to refine processes and gradually achieve higher performance levels.

Innovation Improvement

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Larger, more transformative changes that often require higher investment but lead to breakthroughs and significant advancements.

TRIZ (Theory of Inventive Problem Solving)

A problem-solving methodology that applies systematic innovation principles to overcome technical and process-related contradictions.

Change Management

A structured approach for guiding individuals and organizations through transitions resulting from process improvements or new initiatives.

Kanban Board

A visual project management tool that tracks tasks, progress, and workflow stages, often used to support continuous improvement efforts.

ISO 9001

An international standard that provides a framework for quality management systems, emphasizing process control, continual improvement, and customer satisfaction.

M10 Digital Human Resource Management Glossary

Human Resource Management (HRM)

The planning, organizing, directing, and controlling of employee-related activities to ensure that an organization has the required human resources to achieve its objectives.

Digital Human Resource Management (Digital HRM)

The integration of digital technologies into HRM processes, transforming how HR functions operate by automating tasks, enabling data-driven decisions, and supporting strategic objectives.

Digitization

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The technical process of converting analog HR information into digital formats for automated processing and storage.

Digitalization

The socio-technical process of applying digital technologies to improve organizational processes, structures, and capabilities.

Digital Transformation

A comprehensive change where organizations leverage digital technologies to redesign business models and HR strategies for improved competitiveness and innovation.

Digital Disruption

The shift caused by digital technologies that significantly alter traditional HR practices and require organizations to adapt.

Operational Application of Digital Technologies

The use of digital tools to automate routine HR functions such as recruitment, payroll, and compensation without directly influencing HR strategy.

Strategic Alignment of Digital Technologies

The process of aligning digital tools with predefined HR strategies to support their execution and enhance operational efficiency.

Strategic Integration of Digital Technologies

The integration of digital technologies into the formulation of HR strategies, directly shaping HR value propositions and long-term organizational goals.

Digital Workplace Application

The embedding of web and ICT technologies into daily work environments to enhance transparency, collaboration, and productivity.

Talent Selection

The recruitment process that leverages digital tools, social media platforms, and AI-powered systems to attract, evaluate, and hire qualified candidates.

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E-Learning

The delivery of training and development programs through electronic media, enabling flexible and personalized learning opportunities.

Adaptive Learning

A form of digital learning that uses artificial intelligence to customize learning paths based on individual learner needs and performance.

Evaluative Functions

HR functions related to monitoring employee performance, turnover, absenteeism, and other metrics, increasingly driven by data analytics.

Talent Inventory

A database containing comprehensive information on employees' skills, qualifications, performance, and career progression.

Hire-to-Retire (H2R) Process

An end-to-end HR process encompassing all activities from hiring an employee to their eventual retirement or separation from the organization.

Business Process Management (BPM)

The use of software tools to model, analyze, and optimize HR processes for improved transparency and efficiency.

ERP (Enterprise Resource Planning)

An integrated software platform that supports multiple business functions, including HRM, by centralizing data and streamlining processes.

BPMN (Business Process Model and Notation)

An international standard for visually representing business processes, often used to model digital HRM workflows.

Generational Workforce Issues

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Challenges arising from differences in expectations, digital fluency, and work styles among employees from different age groups adapting to digital HRM

M11 EU - UN - ILO Policies Glossary

European Green Deal

The EU's comprehensive policy strategy to make Europe the first climate-neutral continent by 2050, focusing on emissions reduction, energy efficiency, sustainable industry, and economic transformation.

Climate Neutrality

The balance between emitting carbon and absorbing carbon from the atmosphere, aiming for net-zero greenhouse gas emissions.

Sustainable Development Goals (SDGs)

A global framework of 17 goals adopted by the United Nations to address poverty, protect the planet, and ensure prosperity for all by 2030.

Five Pillars of SDGs

The main elements underlying the SDGs: People, Planet, Prosperity, Peace, and Partnership.

Decent Work

A multidimensional concept developed by the International Labour Organization (ILO) referring to employment conditions characterized by freedom, equity, security, and human dignity.

ILO Decent Work Agenda

The ILO's policy framework comprising four strategic pillars: employment opportunities, rights at work, social protection, and social dialogue.

Employment Conditions

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Terms that define workers' rights, wages, working hours, job security, and work-life balance.

Social Dialogue

Negotiation, consultation, and information exchange between employers, workers, and governments on work-related issues.

Social Security

Public and private programs that provide income protection, healthcare, pensions, and other benefits to ensure well-being throughout life stages.

Green Transition

The shift toward a sustainable economy based on low-carbon technologies, renewable energy, and circular economic principles.

Resilient Infrastructure

Durable and adaptive systems for transportation, energy, and communication that can withstand climate change impacts and evolving social needs.

Inclusive Economic Growth

An economic growth model that ensures equal opportunities for all individuals and communities to benefit from economic activities.

Lifelong Learning

The continuous development of knowledge, skills, and competencies throughout an individual's life to adapt to changing work environments.

Renewable Energy Share

The proportion of total energy consumption sourced from renewable resources such as wind, solar, hydro, and biomass.

EU Investment Programs (e.g., InvestEU)

Financial mechanisms designed to mobilize public and private capital to support EU policy goals, particularly the Green Deal and SDGs.

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International Mobilization of Capital

Global coordination to secure financial resources for implementing sustainable development and climate action measures.

Democratic Decision-Making Processes

Inclusive governance systems where citizens, stakeholders, and organizations actively participate in shaping policies and decisions.

Joint International Efforts

Collaborative actions among countries, organizations, and institutions to tackle global challenges such as climate change and poverty.

Monitoring and Evaluation

The systematic tracking and assessment of progress towards achieving defined goals and policy outcomes.

Best-Practice Projects

Exemplary initiatives that demonstrate effective and replicable approaches to achieving sustainability, social justice, and economic growth.

M12 Brainstorming Glossary

Brainstorming

A creative group or individual problem-solving technique used to generate a wide range of ideas or solutions to a clearly defined problem in a free-thinking and non-judgmental environment.

Divergent Thinking

A thought process used to generate creative ideas by exploring many possible solutions and encouraging spontaneous, non-linear thinking.

"How Might We" Questions

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A common brainstorming technique where problems are framed as open-ended questions to spark creative thinking and idea generation.

Quantity Over Quality Principle

The idea that generating a large number of ideas increases the likelihood of producing innovative and high-quality solutions.

Deferred Judgment

A rule that postpones evaluation and criticism of ideas during brainstorming to encourage uninhibited creativity and participation.

Wild Ideas Encouragement

The practice of welcoming unusual, unconventional, and seemingly unrealistic ideas to stimulate innovative thinking.

Idea Combination and Improvement

The process of merging, adapting, or building upon multiple ideas to create stronger and more viable solutions.

Groupthink Avoidance

The intentional effort to prevent conformity or premature consensus in group brainstorming sessions to maintain idea diversity.

Ideation Session

A structured brainstorming meeting where participants focus on generating as many ideas as possible within a set timeframe.

Facilitator

An individual who leads the brainstorming session, explains the rules, manages participation, and ensures a constructive, non-critical atmosphere.

Brainstorming Ground Rules

Guidelines established at the start of a session to foster open participation, such as no criticism, welcoming wild ideas, and building on others' ideas.

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Evaluation Phase

The stage following idea generation where ideas are reviewed, analyzed, clustered, and selected for further development based on feasibility and impact.

Cost/Benefit Analysis

A decision-making tool used during evaluation to weigh the potential benefits of an idea against the costs or resources required to implement it.

Creative Problem Solving

A problem-solving approach that combines analytical thinking with brainstorming to discover innovative solutions.

Electronic Brainstorming

A digital form of brainstorming where participants contribute ideas electronically, often anonymously, to reduce inhibition and encourage broader participation.

Group Support Systems (GSS)

Technology-assisted systems that support brainstorming and collaborative problem solving by organizing and managing idea generation processes.

Personality Differences in Brainstorming

The recognition that individual traits (introversion, extroversion, creativity) influence how participants engage in and contribute to brainstorming sessions.

Brainstorming Session Preparation

The process of defining the problem, selecting participants, preparing materials, and setting expectations to ensure productive idea generation.

Consolidation of Ideas

The process of combining, refining, and prioritizing generated ideas into actionable options for further analysis or implementation.

Responsible Person Assignment

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The designation of individuals or teams to take ownership of implementing or further developing selected brainstorming ideas.

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