Glossary

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| **Administrator** | A user responsible for system management tasks, such as user creation and permissions, and overall system configuration |
| **Bill of Materials (BOM)** | A hierarchical structure representing the components (raw materials and intermediate products) required to produce a final product |
| **Bill of Operations (BOO)** | A tree-like structure representing the sequence of operations a product must undergo during manufacturing |
| **DBMS (Database Management System).** | Software that enables the creation, management, and manipulation of databases, ensuring data integrity and security |
| **Factory Facilities** | The physical layout and arrangement of machines, workstations, and other equipment used in production, which can vary based on industry, safety concerns, efficiency, and other factors |
| **Flow-Shop** | A specific case of JobShop where production is limited to a small number of product families, focusing on efficiency |
| **JobShop** | A type of factory organization where products vary widely, produced in short runs with high flexibility |
| **MVP (Minimum Viable Product)** | A product with just enough features to be functional and meet initial requirements, developed iteratively |
| **Operations** | The tasks performed during manufacturing, such as cutting, drilling, or assembling, which are carried out at workstations |
| **Plant Floor Manager** | A user responsible for managing the factory layout, defining production lines, and configuring the machines used in production |
| **Production Manager** | A user responsible for managing product data, raw materials, and production orders in a factory |
| **Product Engineering** | The process involving the conception, design, and planning of products and their components, analyzing the load and determining technical and economic feasibility |
| **Production Control** | Supervision of production activities to ensure efficiency and quality, including machine operation and preventive maintenance |
| **Production Orders** | Instructions generated from customer orders, containing the materials needed (from BOM) and the sequence of operations (from BOO) to be performed at specific stations |
| **Production Planning** | The module responsible for generating the production plan, which considers customer orders, product BOM (Bill of Materials), and operational sequences (BOO - Bill of Operations) |
| **Project-Based Manufacturing** | A type of manufacturing tailored to custom or unique products, typically requiring specific project management for each production run |
| **SCRUM** | Agile method that organizes work into short sprints, fostering collaboration and continuous delivery |
| **Short-Run Production** | A manufacturing approach involving small batch sizes or project-based production, focusing on flexibility and adaptation to different product types |
| **Simulation Tools** | Software tools used for analyzing production scenarios, optimizing machine utilization, identifying bottlenecks, and ensuring efficient use of resources |
| **Sprint** | A set period during which specific tasks (user stories) are completed in an agile development process |
| **TDD (Test-Driven Development)** | A software development process where tests are written before code is implemented, ensuring that the code meets specified requirements |
| **US (User Story)** | A description of features or functionality from the perspective of a user, used to define the requirements for each sprint in the project |
| **Workstation** | The locations within a factory where specific manufacturing operations are performed. Workstations can consist of machines, robots, or human operators |