## Requirements:

| Sl. No. | Requirement | Description |
|---|---|---|
| **R1** | Integration of IoT into Production Process | Production needs to be Smart by getting Informations from sources such as RFIDs to deploy human workforce as soon as possible in the company premises. |
| **R2** | Goal-Oriented Adaption of Production Process | Technical Advancements, existing demand and various business world factors can result in different alternative paths for the fulfilment of the main-goal e.g. Manual Work can be preferred if the demand is Low although Automated workflow exists. |
| **R3** | Optimizable Production Process | Optimization of each different path in execution is important e.g. A company may be in favor of a process with a more efficiency and less energy consumption. If such an alternative exists, that must be executed. |
| **R4** | Context-Driven Execution of Production Process | All the major alternatives for the accomplishment of the main intention need to be augmented by a supporting context. Context will be the driver of the process in simple terms. |
| **R5** | Near-Real-time Processing | Production process should deal with the real-time contexts in such a way that any turbulence in contexts can change the selection and deployment strategy. |
| **R6** | Prioritization of Performance Goals | These goals can be mapped to the Sub-intentions from the initial Metamodel such as, high-throughput, shorter-response time, high-automation, high-utilization, less-maintenance etc. |
| **R7** | Support for Periodic Context Acquisition | Periodic operations are executed in certain time intervals and return the result as soon as they're called e.g. The Sensor database can be periodically checked while the production is going on to ensure that the next-machine in the chain is working perfectly and any anomaly in the system is resolved causing minimum delay and business loss. |
| **R8** | Support for Event-Driven Context Acquisition | Event-driven operations are triggered when the specific event occurs. They consume less energy compared to periodic acquisitions. For example, in the very beginning of each task, available machine operators present in the premises need to be pulled up. |
| **R9** | Support for Multiple Instances of the same process | More than one process can be executed in parallel to increase productivity of manufacturing process. |
| **R10** | Model should be stable to minor changes | The changes in the deployment of a specific alternative to achieve the main-goal should not affect the process-model itself. |