**Rules Based Decision Engine Frameworks**

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**Our Application**

- User imports or create various rules.
- Rules selectively fire based on satisfaction of their requirements.
- Rules adjust parameters within the machine, triggering other rules to fire in succession.
- Such rule “chaining” enables expert users to create simpler rules, while more complex decisions could be handled nearly autonomously by the system.

**The Risks of Human Decision Making**

There are many situations, across a variety of industries, in which routine decisions that have real world consequences are to be made by an explicitly defined set of rules. Often times, these decisions are implemented by a human operator who has been made aware of rules and regulations governing their behavior in many different situations. However, decisions are not always cut and can be impacted by the current state of a machine the worker is operating/monitoring.

**Consequences**

Relying on a human operator has numerous consequences. Not only can a human operator make mistakes, there is also the consideration that in certain high stress situations – they may not be able to execute all of the necessary tasks in an appropriate amount of time, as the situation may be rapidly escalating, causing them to accidentally skip critical steps, or make errors due to the gravity of a situation.
Production Memory (Rules)
Inference Engine (Rete00 / Leaps)
Working Memory (Facts)
Pattern Matcher
Configured Actions (Agenda)