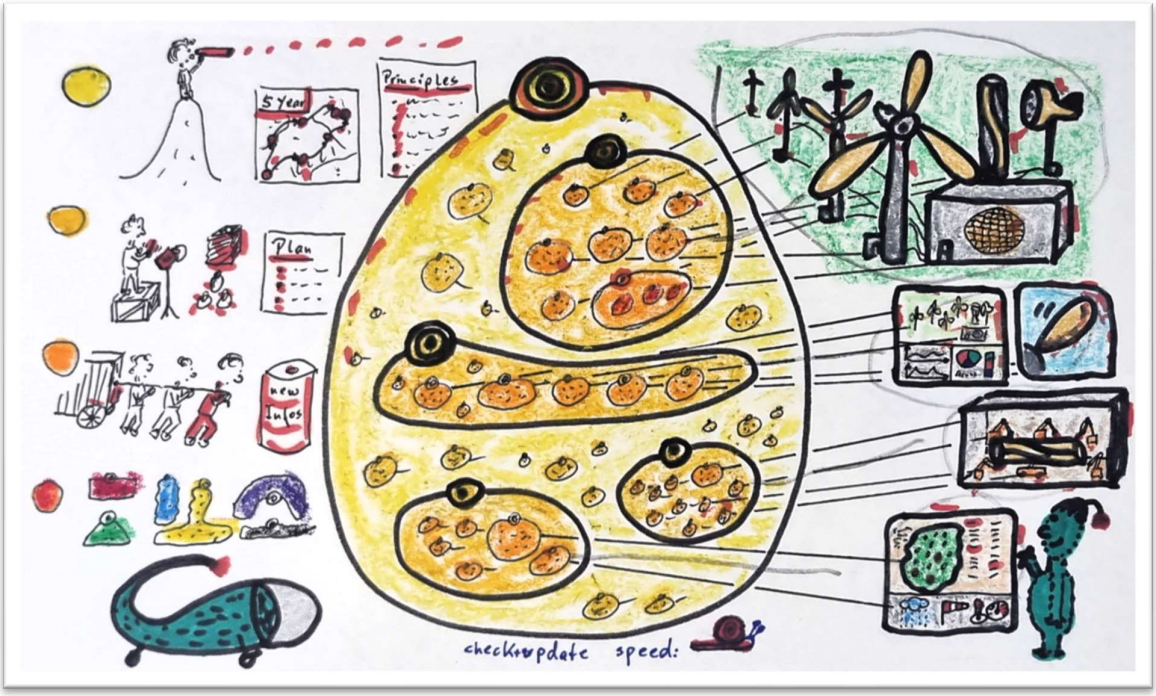
Season 4, Sequel 2

Example of a rigid AI hierarchy: managing a power facility.



This is an example of a rigid hierarchy, an artificial intelligent agent hierarchy that is not changing very fast. An example is about managing a power facility.

You have different devices in your power facility, for example, different windmills with different characteristics, and energy storage devices. That is the physical reality. Then you have a virtual area where you simulate different types of windmills and the whole park. The third big area is a prototyping facility where you create new windmill types based on experience. And the fourth level is the monitoring and control level, you manage the whole park, the weather, and how you operate it.

On the highest level you have one top-level agent responsible for the overall energy facility. Then you have one sub-agent managing the physical facility, one agent for each windmill, one agent with sub-agents for the energy storage. The next hierarchy agent manages all the simulations and optimizations. The third one manages the prototyping facility, where new windmills are created to optimize efficiency. The last one is the operations agent who manages all the different facility elements, the weather, the requests for energy, and so on.

This is an example of a rigid hierarchy, which means it changes with snake speed. Since it is a real-world physical facility, the hierarchy managing it cannot change every five minutes. The update and check speed is quite slow.

On the highest level, the top agent is responsible for strategic operation, looking far into the future, overseeing all the different operations and optimizations, having a long-term strategy, and defining all the principles, rules, and basics of the operation. On the next level, the agent is more like a conductor, conducting the operation of a specific area, responsible for agents, for assets and resources, having a plan and

delivering against it. The third level is team leadership, an agent responsible for a specific element with all its sub-agents, creating and using information, and getting the job done. On the lowest level you have just specialists, each agent working on its own, specializing in one or several specific things.

This rigid hierarchy is required because the task is not changing very fast, the physical energy facility doesn't change much, the prototyping facility is relatively stable, and the monitoring must be online all the time. So the hierarchy must be more rigid. Just one example of how organization type matches the nature of the task.