Multi-Agent Orchestration:

Swarms was designed to faciliate the communication between many different and specialized agents from a vast array of other frameworks such as langchain, autogen, crew, and more.

In traditional swarm theory, there are many types of swarms usually for very specialized use-cases and problem sets. Such as Hiearchical and sequential are great for accounting and sales, because there is usually a boss coordinator agent that distributes a workload to other specialized agents.

Name	**Description**	**Code Link**	**Use Cases**
Hierarchical Swarms	A system where agents are organized in a hierarchy, with higher-level agents coordinating lower-level agents to achieve complex tasks.	[Code Link](#)	Manufacturing process optimization, multi-level sales management, healthcare resource coordination
Agent Rearrange	A setup where agents rearrange themselves dynamically based on the task requirements and environmental conditions.	[Code Link](https://docs.swarms.world/en/latest/swarms/structs/agent_rearrange/)	Adaptive manufacturing lines, dynamic sales territory realignment, flexible healthcare staffing
Concurrent Workflows	Agents perform different tasks simultaneously, coordinating to complete a larger goal.	[Code Link](#)	Concurrent production lines, parallel sales operations, simultaneous patient care processes

| Sequential Coordination | Agents perform tasks in a specific sequence, where the completion of one task triggers the start of the next. | [Code Link](https://docs.swarms.world/en/latest/swarms/structs/sequential_workflow/) | Step-by-step assembly lines, sequential sales processes, stepwise patient treatment workflows |
| Parallel Processing | Agents work on different parts of a task simultaneously to speed up the overall process. | [Code Link](#) | Parallel data processing in manufacturing, simultaneous sales analytics, concurrent medical tests |