

How do the simple actions of individuals add up to the complex behavior of a group...

[Business](#), [Management](#)



Collective Intelligence Animal swarms are bewildering, awe-inspiring, mesmerizing, and to some level hair-raising. Various events in nature are very mystifying with various questions being raised concerning how various animals interact within the swarms as they move and how each individual member of the swarm leaves its own agency to make up a fraction of a whole. From the article "Swarm Theory" by The National Geographic, it is clearly that individual animals that make up the swarms are not as intelligent as they may appear, and that it is the collective environment within a swarm that enables these animals or insects to coordinate their activities towards a single cause of the organization (Miller). In this view, the author introduces the concept of 'Swarm Intelligence' which is based on self-organization and decentralized control. With reference to colonies of termites and ants, flocks of birds, schools of fish, various land animal herds including elephants, and swarms of bees, it is evident that these swarms utilize collective intelligence to coordinate the various activities conducted by various subgroups to ensure the key objectives of the swarms such as collecting of food, protecting the habitat, and finding shorter paths to food sources are performed (Miller). This can be employed in the organizational setting with inclusion of mechanisms that would allow self-sufficiency of each of the members towards a collaborate approach towards the goals of the organization.

For instance, a company referred to as American Air Liquefied based in Houston employed the behavior of foraging Argentine ants in establishing a pheromone trail through which successive ants can follow in going to get more food for the colony. In this case, Air Liquefied merged the ants'

approach with techniques of artificial intelligence to regard all permutation of weather, plant scheduling, and truck routing decisions. The model allows for inclusion of daily forecasts of manufacturing costs and customer demand (Miller). An important lesson that I learnt from the ants is decentralized control, through which my assignment group members can be allowed to make independent decisions without reliance on any form of supervision from a group leader, towards meeting the predetermined objectives of the group.

#### Work Cited

Miller, Peter. Swarm Theory. July 2007. 21 April 2015. .