

# **The Emerging Crisis and the Phenomenon of the Stakeholder Swarm: Tracking the Emergence Brand Trauma Resulting from the Decay of Network Order to Network Chaos**

## **Abstract**

Swarm theory is used to study collective behavior, most often among homogenous, like-minded agents, aimed at achieving a common goal. This study applies the theory to examine instances where swarms of organizations form despite the fact they may not share common goals and are comprised of heterogeneous sometimes even adversarial entities. The analysis illustrates ways emerging swarm networks and behavior can stress a target organization's operations, be instrumental in altering an organization's direction and behavior and, at times, impact local, national and sometimes international ecological profiles. When these spontaneous networks form in response to alleged behavior or actions -- it's a phenomenon we label "stakeholder swarms." Results and the methodologies used apply across different types of organizations and where an engulfing crisis can result in landscape littered with fallen political stars, disgraced leaders and professionals, even terrorist zealots that failed to manage their engulfing swarm.

## **Introduction.**

Swarm theory applications to organizations typically seek to use aspects of swarm behavior to improve operations. Gloor and Cooper (2007a, 2007b; Gloor, 2006) illustrate ways swarm theory can be used to improve business operations or at least standard operating procedures. Others use swarm theory to design algorithms to improve crowd control or public safety (Batty, 2007) or for better ways to generally route people or ideas. (Kennedy, Eberhart, and Shui 2001) In this paper the focus is on those instances when an organization's membership finds itself in a crisis -- a crisis fueled and sometimes exacerbated by the swarming of other organizations, a phenomenon we refer to as a "stakeholder swarm."

In many ways the behaviors examined more closely parallel early studies associated with the swarming of ants (Gotward 1995; and Holldobler and Wilson, 1990), the schooling of fish when threatened (Camazine, et al. 2001) or the foraging of locust (Buhl, 2006) or honey bees (Camazine, and Sneyd, 1991) when feeding. In these and similar studies the need for food, shelter or protection from predators create potential crisis situations for the species studied. Behavior in these instances can serve as a model for examining a crisis setting facing a human organization and its membership. To explore this topic we focus on four things. First we begin with operational definitions and a review of the relationship between events, organizations, and stakeholder's inter-relationships among these elements.

Next, we examine an organization's stakeholder network before and after a crisis event has emerged. This analysis illustrates differences between swarm behavior of humans versus those typically examined in the natural sciences and it illustrates what the make-up and motivations of a swarm's membership contributes to and is shaped by the inter-relationships among their network.

Third, comparisons are offered regarding the emergence of stakeholder swarms across different organizations and/or different types of events. This is important for it allows us to talk about the formation of "swarm communities" and their needs, interests and behaviors. In nature swarms are "way of being"; they're part of the functional make-up of the species. These swarms behave in utilitarian ways -- behavior aims at achieving the greatest benefit for the greatest number. Stakeholder swarms in contrast, aren't motivated to act for a greater good, even if that is an outcome. In the swarms we investigate the stakeholders strive to meet the individual stakeholder organization's needs over any collective goal. So, even if part of the same network and brought together by the same event, a government agency seeks to fulfill it's goal, a special interest group it's mission and the news media theirs'. This is a decidedly human element of stakeholder swarms.

Finally, we return to our example of swarms emerging around a particular organization and its attempts to manage a crisis and offer a long view of the effects of a crisis on an organization(s). In this case the crisis, in conjunction with the acts of the stricken organization and swarming stakeholders illustrated, serve as a catalyst for ecological succession, sometimes on a societal scale. Our interest in this segment illustrates ways a crisis, networks, emerging stakeholder swarms can dramatically affect not only the organizations involved but the environment in which the systemic network operates -- in short, the system's ecological make-up. This analysis also gives us an opportunity to introduce and talk about important ancillary topics like factors effecting a swarm's growth, its possible life cycle and the continuing evolution of human swarms.