

SYNCHRONISED HARMONY

Co-ordination is a critical management function. Co-ordination is the process of providing required information and resources at appropriate times. For instance, if an organization is organizing a major convention in a big city, then there will be different committees taking care of different functions like Fund raising, Publicity, Stage and Hall arrangements, Transportation, Accommodation, Printing, Public Relations and so on. Each of these committees will not be functioning independently but they will depend on each other. The degree of dependence may vary between committees. Fund raising committee members must know well in advance the budget requirements from all other committees and should make adequate funds available at appropriate time.

Smooth co-ordination needs to be ensured by organizational structure, systems and communication. An organizational structure defines the responsibilities and reporting relationships. Every employee will know to whom they are reporting to and who will report to him. Systems determine at what point in time information or resource is required or needs to be provided. Communication is the actual process of conveying the information. So, effective co-ordination is ensured only when all the three factors mentioned above are consistent. Any dissonance either in structure, system or in communication may lead to co-ordination failures.

Co-ordination failures are typically attributed to individuals and not to technology or machines. This failure attribution invariably leaves a scar in the minds of individuals affecting their relationships with others. Is there a way out to ensure effective communication without creating frictions in interpersonal relations? There seems to be a way out if we look into the co-ordination patterns of ants.

A colony of ants communicates among themselves about possible food sources through the pheromones they leave along their footpath. This is referred to as Stigmergy. The ants follow a very simple rule: follow the pheromone trails left

behind by other ants to find out the source of food. An ant moving randomly, if it comes across a pheromone trail left behind by another ant, will start moving along that pheromone trail. The more the number of ants moves in a particular path, the stronger the pheromone trail and this in turn, with its strong presence, invites more ants along that path. This ensures communication and co-ordination among most of the members of the ants colony.

What are our lessons from this concept of stigmergy? Number one lesson is “follow simple rules”. In the context of organizations, as mentioned above, there are at least three important factors that determine the effectiveness of a co-ordination. Each of these factors has their own set of rules.

So, an employee has to follow all the three sets of rules to ensure effective co-ordination. Our human mind has a capacity constraint in terms of how many rules can be followed simultaneously. This puts pressure on the effectiveness of co-ordination causing subsequent frictions and irritations. Using stigmergy, we can replace multiple sets of rules into a set of one or two rules. In a Highway, smooth co-ordination among all the vehicles plying in that road is ensured by the simple rule like “keep left”. In a traffic junction, one more rule is added in the form of signals. With just these two rules, enormous number of vehicles co-ordinate among themselves effortlessly, avoiding chaos in traffic.

In an organizational environment, where the processes are highly technology driven, it is quite easy to leave “pheromone trails” to indicate completion or non-completion of a particular task in a sequential set of tasks, which can trigger the green signal for the next person to start his task in the sequence. This technique can also be used to record and give feedback about positive / successful actions, strategies, techniques or behaviours.

Stigmergy provides enormous scope for Indian corporates to explore and innovate.