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## Struggling to Hire the Right People? Learn From Bees

By S. L. Mintz



When a money manager expressed to me frustration over prolonged failure to rekindle stellar growth, I wanted to tell him that would remain stuck so long as he kept hiring too many of the right people. Before I had a chance to share the advice -not that he would have applied it-he sold his investment firm and retired to New Hampshire.

But the hunch stayed with me. Now I see evidence that lends credence to it, even if comes from virtual models of the bee world. Yes, humble bees help illustrate why rigid hiring practices can strip a company of a competitive edge at pivotal times.

Company managers who orchestrate ten or ten thousand people usually prefer that everyone hew as much as possible to average expectation. But some randomness adds distinct value to a versatile knowledge work force. A zoologist, a professional athlete or a former naval officer - or maybe a beekeeper -- without some prerequisites might furnish fresh thought leadership when rivals change the game or markets shift in new directions.

In their thoughtful book, "Complex Adaptive Systems: An Introduction to Computational Models of Social Life," authors John Miller and Scott Page envision two beehives.

One hundred bees in hive A are all as skittish as the 50<sup>th</sup> bee. None will join a swarm until 49 other bees leap into action. Thus, one or two hyperactive guard bees won't mobilize hive mates to attack *en masse*. Like the honeybees in this video, the whole angry horde won't launch an attack.

Uniformity sounds like an asset for hive stability, posing fewer distractions from the business of making honey. But what if threats are real? Bees in hive A might not react in time.

Over in heterogeneous hive B there is one bee for every level of skittishness from 1 to 100. A single hyperactive bee in the heterogeneous hive can trigger a chain reaction. When one bee goes crazy the second bee follows suit. Seeing the first two, the third bee joins in, alerting the forth and so on, until every bee has abandoned the hive and entered the fray.

In corporate environments, both hives court disaster. Rigid worker uniformity hinders response to new threats and rigid diversity of skills invites chaos. What if the intruder is a business problem that flies in the window? Companies that resemble hive A are somnolent. Overreaction in companies that resemble hive B divert attention and deplete resources.

A remedy might lie in hiring policies that look for employees outside a strict mold. Job one, to be sure, is lining up the workforce for today's challenges. Those skills are easy to identify. But challenges that will decide a company's fate might require skills you're not looking for today.

Ask Matt Asher who writes code designed to stimulate financial behavior and blogs on statistics and probability at statisticsblog.com under the tag line "In Monte Carlo We Trust." (Monte Carlo, the world famous gambling Mecca, lends its name to mathematical models that predict outcomes amid uncertainty.) Where Miller and Page had 100 bees either with identical inclination to swarm or every bee with unique inclination to swarm, Asher wanted to know how randomness might affect the bees.

It turns out in 50,000 computer trials that stability prevails in the random hive. Bees stay focused on routine tasks, as any manager would hope, but some also rise to challenges, as managers also hope. Would hair-trigger overreactions by guard bees empty the nest? Very seldom, Asher determined. The most frequent swarms involve 7 to 9 bees and max out around 20 bees before they taper off, with a small spike mobilizing the whole bee population about 1 percent of the time.

I asked Asher if he thinks virtual bees really furnish a proxy for humans? "I don't see why not," Asher told me. "Certainly mob situations work in a somewhat similar way. The more people who are engaging in a behavior, the more will join in, and everyone has his own 'threshold."

If you manage ten or ten thousand people, you might prefer that they hew as much as possible to expectation. But if bees offer valid insight, nurturing a random element might prepare key knowledge workers with leadership skills not found in the usual suspects.

S.L. Mintz covers finance and investment strategy and was a writer of the best-selling Financial Crisis Inquiry Commission Report.

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