Driving Innovation

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Where do you get your most innovative ideas?

How do you increase the rate of innovation in your company?

It's probably the most important question a CEO or entrepreneur can ask. Here are three strategies to increase the rate of novel idea generation in your company.

1. **Mash-Ups Matter**

As you might imagine, if new idea generation is a function of "idea interaction," then the rate of people interacting matters a lot. For most of human history, human populations were spread out over vast distances and interaction was limited.

More recently, we've been moving into cities:

- In the 1950s, 7% of the population lived in cities.

- Today, a little over 38% of people live in cities.

- By 2050, 70% of the world's population will live in cities.

Intuitively enough, as the rate of urbanization (and the density of a group of people) increased, so too did the rate of invention – one study suggests that doubling a city's population drives a 15% increase in income, wealth, and innovation.

This principle is equally applicable to your business. Here are a few ideas:

1. **Use an Open Office Layout:** Open environments encourage interaction and random conversations. They allow for the free flow and exchange of ideas.

2. **Design Spaces for Employee Interaction:** When Steve Jobs was designing the new headquarters for Pixar, he obsessed over how the atrium should be structured. Jobs was very particular about where the bathrooms were placed in Pixar's office because he wanted "serendipitous personal encounters" to occur.

3. **Unconference Your Team:** One fun way to drive employee idea exchange is called an 'Unconference'. Say you have 100 people in your group. Allocate 40 speaking slots (say 5 different rooms with 8 timeslots of 10 minutes each). Then, ask people to pick a spot and sign up to give a 10-minute talk on any subject, personal or professional. All of a sudden you have a random agenda that's been populated by your employees. You will be amazed to see what comes out when people are given a platform to share their passions.

4. **Allow Ideas to Come from All Levels of Your Organization:** As a manager, you might pay more attention to your VP than you do to the person who works in the mailroom. But breakthrough

ideas can come from unexpected places. Make sure you have a communication outlet that allows ideas to bubble up from anywhere, across disciplines and layers of the organization.

2. The Power of Constraints

You've probably heard the phrase "Think outside the box" (a thousand times). The truth is: to be really innovative, you need to start thinking *in a really small box*.

When you give people a hard problem, and then give them unlimited resources to solve it, they typically take a conservative route… spending a lot of money and taking a lot of time in an effort to avoid failure. It's human nature.

However, when you ask them to deliver 10x performance, with severely limited resources (i.e. 1/10th the budget and 1/10th the time), it drives invention and innovation.

Typically, one of two results emerge:

- Participants shrug their shoulders and say, "That's crazy, it can't be done." They write it off immediately, and they're out of the game (this is what the majority of people do).

- A few brave souls will give it a try. Knowing that the old ways can't possibly work, they start with a clean sheet of paper and invent new approaches. Even if they don't succeed, they will pioneer new strategies that didn't exist before.

Musk did this with Tesla, creating an epic car company with no legacy, no unions, no old factories and no old approaches.

> **Key Takeaway:** Create hyper-constraints on your team. Set a difficult goal driven by a powerful massively transformative purpose and incentivize them to try new ways of attacking the problems you want solved.

3. Young & Naive Drives Innovation

We have an age bias in most companies. We tend to give the oldest, most experienced people the hardest jobs and the most responsibilities.

But history tells us that if you want true innovation, give the hardest, craziest challenges to the youth (or at least youthfully minded) in your company. Consider this data …

At what age do you think most Noble Laureates do their prize winning work? Not win their medal, but actually publish the research? Turns out, it's in their mid to late twenties. A few examples, Nobel and otherwise, follow.

- Albert Einstein was 26 when he published the Special Theory of Relativity.

- Jonas Salk was 30 when the March of Dimes funded his polio research.

- James Watson was 25 when he co-published his breakthrough scientific paper on DNA.

- Isaac Newton was 23 when he began inventing calculus.

- Marie Curie began investigating radioactivity at age 30 and earned two Nobel Prizes by age 45.

- Galileo published his first piece at age 22, and began experimenting with gravity in his late 20s.

What do you think was the average age of the engineers who invented the Apollo program in the 1960's (designed the propulsion, guidance, etc.)? **It was about 27 years old.**

Fast forward 30 - 40 years to the dot.com revolution… What was the average age of the innovators building the startups we know and love? Microsoft, Apple, Google, Paypal, Facebook, etc? **They were in their 20's.**

As Pearl S. Buck, the first woman to win the Nobel Prize in Literature, said,

> "The young do not know enough to be prudent, and therefore they attempt the impossible… and achieve it, generation after generation."

Therefore, be careful of your age bias. It shows up *everywhere.* Check out these stats from the National Institute of Health (NIH), where funding is increasingly goes to older researchers.

- In 1980, 10% of all NIH grants went to 'young researchers' – between the age of 31 and 33.

- In 2006, only 1% went to 'young researchers'.

- In 2007, more grants were given to 70-year-old researchers than those under age 30.

  Key Takeaway: Make sure to provide an open environment where your youngest (both physically and mentally) aren't afraid to share their ideas and test their assumptions.

Finally, remember, *the day before something is a breakthrough, it's a crazy idea.* Where in your organization do you allow your teams to try crazy ideas?

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