

DOES COMPETITION MAKE US MORE **CREATIVE?**

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Daniel P. Gross

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Competition can bring out the best in many people in many jobs, but can it make employees more creative? The answer lies in the Goldilocks Zone. Research by Daniel P. Gross.

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16 NOV 2015 BY MICHAEL BLANDING

Competition can bring out the best in salespeople, athletes, and participants in hot dog eating contests—but can it make employees more creative?

A recent working paper by Daniel P. Gross finds that competition can motivate creative types to produce radically novel, untested ideas, but that too much competition pushes them in the opposite direction.

The findings could help organizations generate more innovative ideas, sharpen R&D, and even improve "bake-off" competitions between vendors used to award contracts.

"You could see very clearly when participants were tweaking a single idea, over and over" Gross, a postdoctoral fellow at Harvard Business School and the National Bureau of Economic Research, reports his findings in Creativity Under Fire: The Effects of Competition on Creative Production. (Gross will join the HBS faculty as an assistant professor in the Strategy unit in fall 2016.)

"We tend to study innovation in terms of inputs like R&D spending or outcomes like patents," says Gross, "but creativity is really about what happens in between. It's really about this process of exploring new and untested ideas."

Peering inside that black box to observe the creative process and then understand how it works is very difficult, however. Gross showed some creativity in finding an innovative way to do just that.

His study looked at graphic design competitions that take place via online platforms that help companies commission custom logos and other commercial graphics. After providing information about its business and goals, a company sponsors a tournament of successive rounds where designers submit proposals to capture the winner-take-all award. Following each round, designers can modify their submissions by a little or by a lot after feedback by the sponsor.

As Gross analyzed data from one of these websites, he noticed a pattern.

"You could see very clearly when participants were tweaking a single idea, over and over," he says. "Other times, they [would] branch out and completely change course. I wanted to understand what was driving that decision."

Software was used to compare multiple submissions and numerically calculate their similarity. At the same time, Gross was able to view the ratings—from one to five stars—that sponsors had given to different designs throughout each round of the tournament.

By understanding how participants changed their designs in response to feedback, Gross had a better understanding of the incentives driving their creative choices and what spurred them to try out new ideas.

"Think of them as having a choice between three options," says Gross. "They can try something incrementally different by making a minor modification; they can try something radically different by making a fundamental departure; or they can stop investing, stop trying to improve their product."

Analyzing data from 122 tournaments on the website, Gross found that designers with high positive feedback scores were more apt to follow the first course, discarding creativity in favor of playing it safe by sticking with the design that was highly rated. Why mess with success?

"Once they get their first five-star review, they generally make a full transition from experimenting to tweaking," Gross says. "The similarity to their previous work basically goes from 0 to 100."

THE COMPETITIVE EDGE

Where the story gets interesting, however, is when a participant faced competition from other toprated designs. Going up against just one other five-star designer shook off the participant's complacency by about half, Gross says, spurring him or her to once again experiment with substantively different ideas rather than producing incremental variations. "It's more like a 50," he says.

As the number of top-rated competitors increased, however, a discouragement effect kicked in. And once they were up against four to six high-rated competitors, they were likely to stop investing altogether.

Overall, Gross found that participants were most given to produce designs that were at least 70 percent original when they faced just one or two competitors—the "Goldilocks" zone where competitive pressure is neither too low nor too hot, just right, and creativity shines forth.

Gross sees this as a very clear indication of the relative risks and rewards of the creative process.

"Taking a chance on an untested, new idea is risky, and if the [potential] payoffs are too low—in the probability that it will either improve on your existing product, or produce incremental market share in a crowded market—then it's not worth pursuing," he says.

IMPLICATIONS FOR MANAGERS

The implication for managers is that sharp incentives can be effective in eliciting creative effort from employees—but require balanced competition to function most effectively.

"As a professor of mine once put it, you want to scatter your seeds widely to see what sprouts," says Gross. "But you ought not try to make a thousand flowers bloom, or else they will all turn out weak. To get a few beautiful blossoms, you have to thin the flowers to allow the strong ones to grow."

Gross suggests tasking a group of employees with a problem to see what solutions they develop, but then focusing the competition to just a few people with the most powerful ideas, transitioning the other employees to projects where they might have comparative advantage.

Similarly, when soliciting bids from suppliers to procure a new product or service, it may be most effective to cast a wide net at first, but then bound the competition to a smaller bake-off to spur the most original results.

"In a procurement setting, you want to manage the intensity of the competition," says Gross, "eliminating the low-performing bids and limiting the competition to only a few high-quality contenders—fortunately, that's what we often see in practice."

While we may never be able to completely understand the kind of creative energy that goes into creating an artistic masterpiece or a hit new song, we may at least be able to spur individuals to become their best creative selves.

ABOUT THE AUTHOR

Michael Blanding is a writer based in Brookline, Massachusetts

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COMMENTS



SHARON 740 days ago

I think this is what firm should be focused on because offerings life cycle will be shorter and shorter due to global competition. Firms need to plan accordingly to build and sustain competitive advantage. Business environment turbulence level is on the creative level. This will be soon the day to day managers mentality like the internet usage today.

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Dr NO 832 days ago

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Like Reply 0

ulfateh 832 days ago

Competition is good but creativity is very different subject. It is how much passion you have in the job and what level of core competency anyone want to develop in services or products. Data is not enough to prove the mentioned subject. Thank you

Muhammad Naeem ul Fateh

Like Reply



PGS 832 days ago

One needs to understand what drives innovation. Is it only competition or something else? The answer is if all innovations need competition there will be no innovations or original ideas which have flowed down over the years and led to path breaking developments. Competition may at the most spur people who participate in innovation activities specifically aimed at gathering more ideas. Let us not kill innovation which originates.

Like Reply 0



Jiten 832 days ago

Very good....anyone can not be creative if there is so much pressure on our brain.....and competition creates this pressure.....I remember there was one team exercise or experiment....
how well a task finished so well with or without "clock"..........The moment you start clocking then the pressure starts.

The latest Business research methods and human resource innovation papers suggests the same.

Thanks - Jiten Quality Manager

Like Reply



Xioling von chang 833 days ago

The sampling probably does not include the more seasoned and commercially successful desiners, as only rookies work for free.

Like Reply 2 replies 0



Steve 833 days ago

Does it say these were for free competitions? Article implies these are a way to solicit bids.

Like Reply 1 reply 0



Xioling 833 days ago

A call for spec work cloaaked as a Design competition with a winner take all award is another way to say, 'work for free, and if we like it, we will pay you.' Designers who earn money at their craft, don't enter spec work competitions. This study sampled designers who are under-employed, rookies, up-and-comers and/or wannabes.

Like Reply 0



John Carlisle 833 days ago

What about Ma Bell? A monopoly that had some of the most creative products the USA has ever seen, and which the best minds flocked to. Seven Nobel prizewinners who competed against no-one but their own ingenuity. Competition is very over-rated.

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