
Motivating Creativity in Organizations:

ON DOING WHAT YOU LOVE AND LOVING WHAT YOU DO

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Arthur Schawlow, winner of the Nobel prize in physics in 1981, was once asked what, in his opinion, made the difference between highly creative and less creative scientists. He replied, "The labor of love aspect is important. The most successful scientists often are not the most talented. But they are the ones who are impelled by curiosity. They've got to know what the answer is."¹ Schawlow's insights about scientific creativity highlight the importance of *intrinsic motivation*: the motivation to work on something because it is interesting, involving, exciting, satisfying, or personally challenging. There is abundant evidence that people will be most creative when they are primarily intrinsically motivated, rather than extrinsically motivated by expected evaluation, surveillance, competition with peers, dictates from superiors, or the promise of rewards.²

Interestingly, this Intrinsic Motivation Principle of Creativity applies not only to scientific creativity, but to business creativity as well. Often, financial success is closely tied to a passion for the work itself. Michael Jordan, who by the mid-1990s was the most financially successful basketball player in history, insisted on a "love of the game" clause in his contract—securing for him the right to play in "pick-up" games whenever he wished. Robert Carr, a primary developer of the first pen computer, was captivated by the opportunity to do something spectacular that had never been done before. When entrepreneur Jerry Kaplan described the idea to him, Carr reacted with intense excitement: "Jerry, it's not a question of *whether* I want to do this. I *have* to do this. This is important. This is profound. . . . It's not very often that opportunities like this come along—something really big, a chance to really make a difference. Maybe once a decade or so. I think you've got one here."³

When Steve Wozniak invented the micro-computer, he demonstrated creativity in new product development; for all intents and purposes, such a thing had not existed before. When Walt Disney created Disneyland, he demonstrated creativity in new service development; he essentially invented a new form of entertainment. Although most people think of creativity in business as limited to the creation of something new to sell, there are other forms as well. When Fred Smith developed the concept for Federal Express, he certainly was not inventing a new service or a new product; humans had been delivering messages and packages to each other for thousands of years. In this instance, the creativity resided in the system for delivery: a hub system, where all packages were flown to Memphis on the same day, sorted, and distributed for air delivery the next day. Creativity exists in less famous, more humble, examples as well: the ad campaign that revitalizes a dying brand, or the product line extension that captures additional market share.

At its heart, creativity is simply the production of novel, appropriate ideas in *any* realm of human activity, from science, to the arts, to education, to business, to everyday life. The ideas must be novel—different from what's been done before—but they can't be simply bizarre; they must be appropriate to the problem or opportunity presented. Creativity is the first step in innovation, which is the successful implementation of those novel, appropriate ideas. And innovation is absolutely vital for long-term corporate success. Because the business world is seldom static, and because the pace of change appears to be rapidly accelerating, no firm that continues to deliver the same products and services in the same way can long survive. By contrast, firms that prepare for the future by implementing new ideas oriented toward this changing world are likely to thrive.⁴

Individual Creativity

To some extent, intrinsic motivation resides in a person's own personality.⁵ Some people are more strongly driven than others by the enjoyment and sense of challenge in their work. For example, Pablo Casals was driven by passion for the cello from the day he first heard the instrument played: "I had never heard such a beautiful sound before. A radiance filled me. I said, 'Father, that is the most wonderful instrument I have ever heard. That is what I want to play.'"⁶ The novelist John Irving, in explaining his motivation to write for up to 14 hours in a single day, said, "The unspoken factor is love. The reason I can work so hard at my writing is that it's not work for me."⁷

Although part of intrinsic motivation depends on personality, my students, colleagues, and I have discovered in 20 years of research that a person's social environment can have a significant effect on that person's level of intrinsic motivation at any point in time; the level of intrinsic motivation can, in turn, have a significant effect on that person's creativity. Einstein described the dampening effect of a militaristic classroom environment on his own intrinsic motivation when he said, "This coercion had such a deterring effect upon me that, after

I had passed the final examination, I found the consideration of any scientific problems distasteful for an entire year."⁸ He later concluded, "It is a very grave mistake to think that the enjoyment of seeing and searching can be promoted by means of coercion and a sense of duty."⁹

Much of the evidence on this connection between the social environment, intrinsic motivation, and creativity comes from controlled laboratory experiments.¹⁰ In one such study, for example, college students were presented with a simple artistic creativity task—making a paper collage with a standard set of materials.¹¹ Half of the students were randomly assigned to a condition where they were offered a reward (money) for making the collage, and half were simply given the collage activity to do. In addition, half within each group were given a choice; they were asked whether they would agree to make the collage in order to get the money (in the choice/reward condition), or they were simply asked whether they wanted to make the collage (in the choice/non-reward condition). Students in the no-choice condition were not offered any choice in the matter; those in the no-choice/reward condition were simply presented with the reward as a bonus, and those in the no-choice/non-reward condition were simply given the collage task.

The results were quite clear and striking. The students who had essentially made a contract to do the activity in order to get the reward (choice/reward condition) exhibited strikingly lower levels of creativity in their collages than the other three groups. The "means-end" work environment—"Do this task as a means to the end of getting this reward"—appears to have undermined their creativity. In contrast, however, those students who received the reward as a bonus showed no diminishment in creativity. In fact, their creativity was *higher* than those of the other groups. And, in keeping with the Intrinsic Motivation Principle of Creativity, students' creativity was correlated with their reported interest in the collage activity; the more interested they were, the more creative their collages were judged by art experts. Thus, it was not the *fact* of reward, but the *perception* of reward (resulting from the way in which it was presented) that made the difference.

Another experiment addressed the Intrinsic Motivation hypothesis even more directly. In this study, young creative writers were asked to fill out a short questionnaire before writing a poem.¹² The questionnaire was designed to have them focus on either their intrinsic reasons for being a writer (such as getting a lot of pleasure out of something good that you have written) or their extrinsic reasons for being a writer (such as getting rich and famous). (Participants in a control condition filled out an unrelated, non-motivational questionnaire.) They then wrote poems, which were later judged by experts in creative writing. The writers in the intrinsic condition and the control condition wrote poems that were judged as quite creative, on average. However, those who had focused for just a few minutes on the extrinsic motivations for their work wrote poems that were significantly less creative.