

CREATIVITY IS THE KEY OF PROBLEM SOLVING AND INNOVATION

Ruzmetova Zilolakhon Dilmuradovna

Ma'mun University

zilola.ruzmetova111@gmail.com

ABSTRACT

Edward de Bono believes that without creativity, there would be no progress, and we would be forever repeating the same patterns. Over the course of the previous decade, several useful frameworks have been established to solve complicated organizational issues. But in terms of creative thinking, what we truly want, and need are the abilities that will assist us in addressing difficulties in a holistic manner, both in our professional and personal lives. Fortunately, the ability to solve problems is one that can be honed with practice and experience. In order to solve a problem, we must first identify the problem that needs to be solved. We can figure out what triggered it and why once we get to that point. After that, we will be able to devise a solution. If we can solve problems effectively, we will be able to go to the bottom of problems and find lasting answers to them, rather than just applying temporary fixes. The ability to effectively solve problems may also assist enhance personal and professional connections.

Key words: *creativity, creative thinking, critical thinking, problem-solving, innovation.*

Introduction

According to author and specialist on visual thinking, Tom Wujec, “We instinctively think breaking down complicated things into basic things and then put them all back together again.” While doing so, we may lessen the unknowns involved with a problem’s complexity. Understanding that is borne of creativity does not forsake itself, its own position in time, or its own culture; moreover, it does not forget anything. It is of the utmost importance for the person who understands to be placed outside the object of his or her knowledge, whether that be in time, in space, or in culture. This is necessary for the person to comprehend. Because it is impossible to truly see one’s own exterior and comprehend it in its entirety, and because mirrors and photographs are of no assistance in this regard, the only people who can see and comprehend our

true exterior are other people, because they are located outside of us in space and because they are different from us. (Bakhtin, 1986, p. 7)

As Welby Altidor noted that not everyone is artistic, but we are all creative. There is a life hack for pretty much every conceivable issue that might arise over a normal day, but there are certain aspects of life that we are so used to that we never even considered the possibility that they could be improved. Until someone demonstrated it to us! Who would have ever guessed, for example, that we would want a vending machine stocked with fresh eggs from a farm, a color-chart label on the appropriate time to eat avocados, or a ramp for frogs to use when they get out of the pool? After viewing some of the items on this list, you won't be able to imagine your life without some of them. Below, we have compiled a list of innovative life solutions to issues that you were unaware required fixing, as well as those things that are necessary.

In the TED presentation that was given by organizational psychologist Adam Grant, we can learn more about the sometimes strange behaviors that innovative thinkers have. Adam focuses his research on what might be referred to as "originals" or extremely creative people. These are individuals that come up with novel ideas that end up influencing the world in which they live. One of the most striking tendencies shown by these individuals is their desire to welcome and celebrate defeat. According to Grant, "the most creative and innovative people are the ones that have the most failures because they are the ones who attempt the most." "In order to acquire a few brilliant ideas, you need a lot of stupid ones to work through first." What is it that keeps us from making this behavior a regular part of our lives?

Researches

If there is no difficulty, there will be no solution and no innovation. Our basic replies to the simple challenge we confront every day are the major source that steers us to innovation and creativity. Teeth are essential to our well-being because they enable us to chew the food we eat and make us seem happier. We make it a daily habit to wash our teeth to maintain their pristine condition. The act of squeezing toothpaste out of a tube may be quite aggravating. We always run out of toothpaste while we're during a hurry. Pulling and squeezing until all the minty paste has been squeezed out of the tube is what we do with one hand while squeezing it between the 4 thumb and fingers of the other hand. Our next step is to try to remove the final remaining toothpaste from the tube's shoulders using a type of gripping/twisting/squeezing action. However, these shoulders are then torn apart, allowing any remaining toothpaste to dry up within hours.

People's brains do not just randomly generate original concepts out of thin air for no apparent reason. Rather, they are the outcome of an attempt to find a solution to a

particular issue or to accomplish a certain objective. The theories of relativity developed by Albert Einstein were not the result of spontaneous inspiration. Rather, they were the outcome of an enormous amount of mental problem solving done to reconcile a difference between the rules of physics and the laws of electromagnetism as they were known at the time. This was done to narrow the gap between the two sets of laws. The dripping of toothpaste is one of the most common issues that everyone, including adults and children, must deal with twice a day. However, the loss of cleanliness in the bathroom is the most concerning issue for those of us who are female. I believe that every invention that might make our lives simpler can be considered creative or innovative in some way. As I indicated before, anybody may run across such difficulty; but younger children can take advantage of such ingenuity by holding an adult hostage (if they have teeth, of course). Even though many people think of brainstorming when they hear the term "creative issue solving," it's not all those creative problem-solving entails. According to Jeffrey Baumgartner, it is truly a well-defined procedure that may assist you from the beginning stages of issue description all the way through the implementation of solutions. Most of us are always looking for ways to save money. This includes the bottle of toothpaste in our bathroom cabinet. "Squeeze tube from the bottom and flatten as you move up" is the greatest advice on how to use toothpaste. It is simpler to get the most out of our toothpaste purchase if we follow this technique.

Results of creativity...

A dispenser for toothpaste and brushes, a holder for toothbrushes, and a UV sterilizer are all automatic features. While we are brushing our teeth, a big number of germs are left in the toothbrush; these microbes cannot be removed with ordinary water, and the moist atmosphere of the bathroom aids in the active development of microorganisms, which will give us a bacterial infection. This challenge may be conquered with the assistance of a toothbrush disinfectant or sterilizer. Built-in magnetic sensor to guarantee safe usage, and user-friendly design. If people do not go at least two meters away, the ultraviolet light will turn on automatically. The mechanical dispenser may be folded up into a smaller size for storage. Its components of it are simple to clean. It is necessary to press our palm on the head of the toothbrush in order to squeeze out the toothpaste. It is done in a casual manner. Even when you squeeze the tube, you have perfect control over the quantity of toothpaste that comes out. Simple to put in place: Simply remove the double-sided tape and ensure that we will be installing it on a smooth and clean wall. Soap dispensers are an easy way to make applying toothpaste more convenient for our children. There is a chance that this will protect and help our bathrooms to be clean. Eratosthenes' calculation of the Earth's

circumference around 200 BC and Hippolyte Fizeau's measurement of the speed of light in 1849 were both remarkable scientific breakthroughs that were made possible by the application of simple, innovative approaches. Adam Savage guides us through many of these discoveries in his TED talk titled "How simple ideas lead to scientific discoveries." While you are listening to this session, give some thought to whether these innovative approaches may be used in the work of various types of scientists.

On the way of innovation

Whether in the realm of technology, science, or even humanitarian organizations, the concept of "innovation" is frequently associated with concepts like expansion, possibilities, and the attitude of doing more and doing so in a more effective manner. It's thrown about a lot, but most people don't really understand what it means, much like "innovation" and "creativity". So, here are some definitions to distinguish them:

- Innovation is the process of translating a novel notion into commercial success or broad usage.
- Invention is the invention of a new idea or notion.
- Creativity is the act of putting fresh and inventive ideas into reality.

The creative process may also be seen as a humanistic force, contributing to continual growth and development as well as the actualization of potentialities inside an individual. The relevance of creativity as a force in human welfare and development is further shown by a recent study on the relationship between creativity and health. Abraham Maslow, who popularized the concept of self-actualizing people, ranked self-actualization at the pinnacle of his hierarchy of needs. Maslow believed that self-actualizing creativity (as opposed to creativity based on unique talents) was connected to this goal. The internet and other digitally networked technologies have caused disruptions in practically every aspect of daily life, including the distribution of research findings. Over the course of the last two decades, most academic journals have made the transition to being published online, and academic books may now be found online in addition to being published in print. Despite this, many aspects of these old modes of communication, such as their forms and purposes, have remained substantially unchanged throughout this transformation. However, digital dissemination may take place in several methods in addition to the conventional modes: the usage of social media has grown increasingly widespread among researchers, and the use of blogs and wikis as a special type of "open notebook science" has been popular for more than a decade.

Within its psychological manifestation, human action incorporates cognitive, affective, volitional, and motivational components. Human action both constitutes and articulates both a "internal" and "external" dynamic. From this vantage point, creativity

may be seen at work as an integral component of each action that we do (Joas, 1996). To solve an issue, someone may have to think too much or perhaps take a risk without thinking at all. Some thoughts occur to you while you go about your day-to-day routine. Finding a solution might take a lot of time and effort at times. The ability to solve problems is in and of itself a talent. Those who are active in the process of problem-solving, on the other hand, would be well to master additional talents that complement problem-solving.

Coming up with unique, original solutions

Thinking creatively outside of the box may help people come up with useful answers that aren't already on the table. It compels us to think and act in more daring ways because of the pressure it puts on us. The ability to think creatively gives us the ability to question established concepts and to comprehend the need, importance, and function of innovative solutions. Convincing someone of something by gathering facts in their favor and creating an alliance with other members of the team who support our approach are both effective ways of persuasion. Human activity is inherently creative (Joas, 1996) since at every instant in time, it is situated within a horizon of possible outcomes. This field of potential is, however, nevertheless confined at every moment of every day (by our intents, by physical affordances, by cultural standards; see also: (Glaveanu, 2012a)). Because of this, most of the circumstances that we encounter during our day-to-day lives present us with a future that is reasonably predictable in terms of the activities that we engage in as well as the manner in which we engage in interactions with other people or make use of objects. This gives rise to a set of expectations regarding the social and material reality that we inhabit.

To the same extent that there is a solution to every issue, it is only inevitable that any solution would also have some drawbacks. We attach the device that compresses the toothpaste to the wall using glue, but in certain cases, these adhesives are also required to provide a justification. This automated toothpaste squeezer has a few benefits, one of which is that it does not have an extremely high price point. It is available for purchase to even the average person. Finding a resolution to this issue will make my day-to-day responsibilities easier, it will help me maintain a clean bathroom, and it will make it easier for me to efficiently clean my children's teeth. The well-known academic Don Norman makes a claim that may come as a surprise to some people: that objects that are effectively designed should make the people who use them happily. Both Gruber and Wallace (1999) and Weisberg (1993) maintained that intentional conduct is a prerequisite for creative thinking. Not only does the postulate of intentionality protect creative expression from being reduced to just accidental discoveries, but it also differentiates creative expression from reactions that are merely

habitual or automatic. These divisions are echoed by common-sense thinking on the subject, where terms such as "divine creation" and "slavish imitation" reflect an obvious hierarchy of values. Baldwin (1906, page 100) made this observation early in the discussion of the issue.

Conclusion

Growth cannot take place without creative endeavors, which include inventing new things and coming up with new ideas. If we look at every successful firm, we will find that they have put a lot of time and effort into one of these three ideas. These are some of the ideas that we have found through doing studies and drawing on our own experiences. We can devise solutions that not only fix the issue at hand but also improve things for everyone involved. Additionally, the process of problem-solving helps to raise the likelihood that a solution will be successful by eliminating unknown factors. One more time, innovation cannot take place in the absence of creativity or invention, and neither creativity nor invention is of any benefit to a company if it is not carried out in the appropriate manner.

Innovation is a creative process, and like any other creative process, it requires room and freedom to flourish. However, innovation is also a collaborative process, and like any other collective process, it also needs participation and debate to grow. The 'lightbulb' moment of having a good idea is only the first step, according to a report on public sector innovation written by the Sunningdale Institute (Bessant et al., 2010). A good idea may not necessarily work in context and working through the issues of development and widescale adoption is the most powerful determinant of success or failure. If we are to believe Seth Godin the finest creative solutions are not those that are arrived at by providing satisfactory answers to the issues that are posed... They are the result of coming up with brand new questions!

REFERENCES

- Glăveanu, V. P. (2018). Educating which creativity? Thinking Skills and Creativity, 27, 25-32
- Glăveanu, V. P. (2010). Paradigms in the study of creativity: Introducing the perspective of cultural psychology. *New Ideas in Psychology*, 28(1), 79-93.
https://www.ted.com/talks/adam_grant_the_surprising_habits_of_original_thinkers
TED talk by organizational psychologist Adam Grant. (2015)
- Lubart, T. I. (2001). Models of the creative process: Past, present and future. *Creativity Research Journal*, 13(3-4), 295-308.
- Glăveanu, V. P. (2015). Creativity as a sociocultural act. *Journal of Creative Behavior*, 49(3), 165–180.
- Glăveanu, V. P. (2016). Perspective. In V. P. Glăveanu, L. Tanggaard & C. Wegener (Eds.), *Creativity: A new vocabulary*(pp. 104-110). London: Palgrave.
- Glăveanu, V. P. (2011). Creativity as cultural participation. *Journal for the Theory of Social Behaviour*, 41(1), 48-67
https://www.ted.com/talks/don_norman_3_ways_good_design_makes_you_happy
TED talk by Don Norman (2003)
https://www.ted.com/talks/adam_savage_how_simple_ideas_lead_to_scientific_discoveries
TED talk by Adam Savage (2020)
- Glăveanu, V. P., Lubart, T., Bonnardel, N., Botella, M., de Biaisi, M.-P., Desainte-Catherine, M., Georgsdottir, A., Guillou, K., Kurtag, G., Mouchiroud, C., Storme, M., Wojtczuk, A., & Zenasni, F. (2013). Creativity as action: Findings from five creative domains. *Frontiers in Educational Psychology*, 4, 1-14.
<https://youtu.be/1jlRBJ64GS8> TED talk "The deep future? It starts with believing in it", Walter Van de Velde (2016) <https://youtu.be/ft3a1ks7sm8>