



Digital
Marketing
Institute

CREATIVITY AND PROBLEM - SOLVING SKILLS

Study Notes

CREATIVITY AND PROBLEM SOLVING SKILLS

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LESSON 1: ENHANCING YOUR CREATIVITY

GENERATING NEW IDEAS

Thinking creatively

The ability to be creative, and to think creatively, is an invaluable skill in today's workplace. It can lead to the development of new products and services, and optimizing business processes. It can lead to marketing campaigns that stand out and really catch the customer's attention. And, down the line, it can lead to business growth and increased revenues.

Anyone can be creative. However, it's important to remember that creative thinking doesn't happen by accident, and it doesn't occur in a vacuum. It's a skill that needs to be consciously applied, honed, and practiced. When practiced successfully, it can reveal effective and innovative solutions to various types of problems, from marketing communications to operational roadblocks, and it can generate new ideas.

Creative thinking stages

Stage 1: Prepare

In this stage, you research whatever problem you are faced with. Say, for example, you are tasked with promoting a new product line, but aren't sure what direction to take. Researching this problem might involve doing a factory tour, and reading as much as you can about the product, audience, market, and competitors.

Further your research by reviewing solutions to similar problems. These could be case studies, advertising tag lines, or campaigns. Try to learn and understand as much as you can about the audience, the product, or the problem you are trying to solve. Observe how and why a product is used or might be used. Ask, who are the people who might use it, what are their motivations for using it, why is it useful to them? Find out as much as you can. Immerse yourself in the details.

Stage 2: Incubate

In this stage, you incubate the findings of your research and let them simmer. Start by taking some time to write down exactly what you are trying to achieve and everything you discovered from your research. Read it, then leave it for a while. When you go back, try writing it another way. Then let go again, and let your mind wander: take a walk, take a bath, read, daydream. In short, do something else.

Stage 3: Illuminate

This is the 'eureka' stage when all the elements you've been mulling over in the previous stage connect together in your subconscious, and an idea forms in your conscious mind. Write your idea down. Remember the mantra, 'write it straight, then write it great'. Just concentrate on getting the idea down on paper so you don't forget it. Once you've safely written it down, leave it alone.

Stage 4: Verify

At this stage, go back to your idea and sense check it against the original problem and verify that it is the correct approach. Critically assess whether it satisfies all elements of the problem you are solving. Ask, will it solve the problem in such a way to give me the result I need? For example, will this

slogan drive awareness of my brand? Is the tone right for the audience or market? Will team operations work more efficiently if this solution is introduced? Ask, what are the various outcomes we could expect if we went ahead with this idea? How might the audience engage with the campaign or how would the team adopt this new process?

If, after asking yourself these types of questions, you find that your idea doesn't solve the original problem, put it aside. Holding on to it could take you down the wrong path and stop you from finding other, possibly better, ideas. It's better to work on your next idea instead.

Once you've settled on an idea, consider: you've written it straight, now it's time to write it great. So take some time to craft and refine the idea, so it can be effectively understood and internalized by your stakeholders – or whoever has the final say on your idea.

Stage 5: Practice

This is where you practice generating ideas using the five-stage process. The more ideas you generate using this process, the faster you get at coming up with better solutions. This, in turn, can help you discount poor ideas early on and reduce the amount of time that's wasted in following paths of enquiry that lead to dead ends, or are likely to drive less effective ideas. Practice also helps to focus the way you approach problems. As the process gets more familiar, it can help to naturalize creativity in your thinking.

REMOVING BARRIERS TO CREATIVITY

Barriers

Successful creative thinking requires you to be aware of the barriers which may weaken your creativity, and prevent you from coming up with innovative ideas and finding great new solutions to problems. One of the most common barriers to creativity is fear of failure. This barrier might stop you putting ideas out there, in case someone laughs at them or even ridicules you for coming up with such crazy thoughts.

Another common barrier to creativity is relying too much on old ideas and established ways of thinking. This might be due to simple laziness on your part, or it could be that you are operating in an environment that puts too much emphasis on maintaining the status quo. To overcome these kinds of barriers, it is essential that you begin to 'think outside the box', travel down roads you are not used to, move out of your comfort zone, and abandon familiar practices. Luckily, there are tactics you can use to help you eliminate the typical barriers to creativity you may encounter.

Tactics to remove barriers

Tactic 1: Challenge your biases and preconceptions

A bias is an inclination towards one way of thinking. Having a bias means you lean in a certain direction from the outset. You tend to believe what you want to believe, and are reluctant to take other people's opinions into consideration. This can obviously have a negative impact on your creative thinking.

To overcome this barrier, it is important to examine any problems you are faced with from many angles. To begin, assume your understanding of the problem is correct. Now, assume your understanding is incorrect – what does this mean? Then, view the problem from the perspective of a

third party; how would someone else view the problem? When you do this, you may find that the nature of the problem you are trying to solve has changed – opening up the possibility of many different solutions.

Tactic 2: Use different thought processes to generate ideas and solutions

Avoid over-using the same old thought process you have always used. A thought process is the way ideas suggest other ideas to you in a sequence. First, get familiar with the thought process you typically use yourself. It may be that you are a highly analytical thinker, or perhaps you are more instinctual or intuitive.

When you have figured out how you naturally tend to think, start to observe how other people think. Choose a suitable third party whose thinking you are familiar with, and apply their thought process to your task or problem. Ask how that person would tackle this problem or what they would do in this situation. This frees you up to think like someone else, which can help you explore new lines of enquiry on a particular problem and come up with innovative solutions. Using this approach, you can also develop scenarios for how your idea might be received by different stakeholders down the line, and prepare responses that drive towards a suitable solution.

Tactic 3: Avoid ‘Functional Fixity’

‘Functional Fixity’ is the inability to look beyond how an object works or is designed to function. With this way of thinking, spoons can only be used to stir or drink liquids – but never to spread butter; or paperclips can only be used to fix sheets of paper together – but not to collect magnets or open locks. By being aware of ‘Functional Fixity’, and the danger this approach holds for creative thinkers, it can open your mind to new ways of looking at, and using, objects. This can have a positive impact on your creative mind, and can drive you further in your quest for creative solutions.

Tactic 4: Change your daily routine

Doing the same thing every day, over and over again, can have a detrimental effect on your creativity. The changes you make don’t have to be dramatic, as even small changes can shake things up and lead to a burst of creativity. For example, try changing where you work a couple of times each week. This might mean working in a conference room instead of at your desk, or in a coffee shop around the corner. Even if you are doing the same work, doing it in new surroundings can help you discover things you may have overlooked, or see problems in a different light.

You could also try changing the order in which you tackle your work every day. So if you usually leave your most important tasks until the afternoon, try doing them in the morning instead. Alternatively, try working at a different time of day, if that’s possible, or even changing the agenda or format of regular meetings. Once you have tried out a few new routines, maintain the ones that are working for you. But remember to change things up again when your creativity next takes a dip.

Tactic 5: Take creative risks

It takes courage to be the first person to think of an idea or a new solution. You can’t be sure if it will work, or be accepted, or even if people will find it ridiculous. Nevertheless, the ability to take risks goes hand in hand with innovation and problem solving. So be brave, put your ideas out there, and keep looking at new ways of doing things and of overcoming barriers to creativity.

PERSEVERING WHEN YOUR IDEAS FAIL

Importance of persevering

Sometimes an idea just isn't as good as you think it is. It may fail when you put it into practice, or it might be rejected before you have even finished presenting it. If your idea is rejected by your boss or by other stakeholders, it can be embarrassing. However, it is important not to get disheartened or to give up. Instead, you need to be resilient, persevere, and bounce right back. You can do this by shifting your focus and coming up with another solution that is acceptable to all involved and minimizes the risk of straining relationships.

Overcoming rejection

Remember, rejection is never easy. So when an idea is rejected, the first thing you should do is stop and pause. Don't react rashly or quickly. Don't run from the room. And don't sigh audibly. Instead, compose yourself by lightly exhaling. Take a drink of water to help reduce stress and defensiveness. Above all, remain calm.

As well as giving you time to compose yourself, pausing in this way also gives space to the person who rejected your idea to offer more information or explain why they don't want to proceed with your idea. As the focus now moves away from you and towards the rejector, they may feel obliged to justify their skepticism. This can help you refocus your thinking and come up with alternative solutions.

Try to see the objections as requests for clarity or for more information. So, for example, if someone says, "I don't like that advertising tag line you've come up with", you could reframe this objection as, "Can you help me see how our audience might connect with this phrase?" By reframing the objection in this way, you may find that you are able to offer additional information and clarifications that satisfy the concerns raised.

It is also a good idea to try to empathize with the person who rejected your idea. Try saying something like, "I understand why you might feel that way." This allows you to put yourself in the rejector's place and see your idea as they do. This approach also has the added benefit of helping to ease any strain that the rejection may have wrought on your relationship with that person. Moreover, you can then adapt your idea to their viewpoint, if the viewpoint is valid.

Listen to any objection that is raised and verify the objector's expertise on the subject by inquiring about their assumptions. When you respond to the objection, use facts and hard data, but don't rely on emotion. Avoid using unfounded opinions to verify your position. As Jim Barksdale, CEO of Netscape once said, "If we have data, let's look at data. If all we have are opinions, let's go with mine."

If you feel the expertise of the objector is questionable, or that they are not seeing the full picture, explain your reasoning using the word 'because'. For example, you could say, "I believe this campaign will engage our audience and drive sales because..." or, "Team efficiency and job satisfaction will improve with these changes because..." By providing valid reasons and sound arguments for your approach, you may find that you are able to win the objector over to your way of thinking.

Finally, be sure to wrap up the discussion with a motivated response to find a solution. Try asking a question like, "How do you think this idea could be improved?" Or say, "Thanks for your time and the feedback. I'll see what else I can come up with". In this way, you are ending the discussion on a

positive note, and are in the right frame of mind to refine your original idea or come up with a new solution that is acceptable to all stakeholders.

When an idea is rejected, you may find that you just need to make a couple of small tweaks to your original solution to get back on track; or it might mean going back to the drawing board and starting over. Either way, by using all your powers of creative thinking, it should be possible to find a great solution that solves your original problem and is acceptable to everyone – and to come out of the whole process with your working relationships still intact.

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LESSON 2: ENHANCING YOUR PROBLEM- SOLVING SKILLS

APPROACHING PROBLEMS IN THE WORKPLACE

What is a problem-solving approach?

Many different types of problems can arise in the workplace. It's extremely useful to have strong problem-solving skills so that you are prepared to solve them in the most efficient way possible when they arise, saving you time and money.

It's important to be able to identify the full extent and cause of a problem before you begin to think about implementing a solution strategy. Workplace problems arise for various reasons. For example, interpersonal conflict, not having enough time to complete tasks, lack of self-belief, a shortage of tools or resources, poor communications, undue competitiveness within the workplace, conflicting job priorities, malicious gossip, culture clash, lack of opportunity, poor incentives, disconnection from company culture, lack of training, and so on.

Taking a problem-solving approach means viewing the issue at hand from different viewpoints – that is, objectively and subjectively – to allow you to implement the most suitable solutions.

Describing a problem *objectively* involves outlining it in a fact-based way that is observable, counted, quantifiable, provable, and impossible to deny. It presents complete truth, and is free from individual influences, so it proves helpful in rational decision-making.

If there is a lack of facts, then the problem becomes *subjective*, as you are describing the problem from a biased point of view or expression of opinion. Your point of view is based on your experiences, assumptions, beliefs, and opinions; and is influenced by emotions and personal feelings. The difference between viewing a problem objectively or subjectively depends on whether the evidence available is fact or opinion.

When considering a problem, subjective information is influenced by the personality of the person providing it. It is an interpretation or analysis of the facts based on personal beliefs, opinions, perspectives, feelings, and so on. In comparison, objective information produces the complete truth, as it presents a story from all angles in a systematic way. It describes the facts, which can be proven to be true.

Improving your problem-solving skills

The following methods for viewing and describing problems in the workplace can help you to improve your approach to problem solving:

First, consider your approach to the problem. Is it objective or subjective? Since an objective approach is best for allowing problem-solving, what do you need to do to gather facts? Be sure you have gathered all of the information available to you before making a decision.

Next, make sure you are as well informed as you can be about the problem. Consider what it is that you do not know about a specific subject, issue, area, or skill. Then consider how to equip yourself to attain this shortfall in knowledge.

And finally, take a moment to pause and reflect on the reasons why the problem arose in the first place. A little introspection is useful to help you to recognize if you have deviated from the plan and whether or not you need to re-align your focus.

Problem-solving in action

You drop a jar of pickles onto the floor and it smashes. Obviously, action needs to be taken. So, you pause for a moment and consider what your immediate responses should be, and in what order you are going to carry them out.

Your responses could include: Cordoning off the area, telling everyone not to step in the mess, grabbing a dust-pan and brush, grabbing a floor-mop and a bucket of soapy warm water, and reminding people that the floor is now wet.

Or, instead of taking any of those actions, you might view the situation objectively, and decide to investigate what caused you to drop the jar in the first place. You may realize that the jar is simply covered in something oily and this caused you to lose your grip. Or you might suspect you were affected by a gas leak in your kitchen and decide to investigate and fix this potentially dangerous leak first, and then attend to the mess on the floor later.

When in the workplace, consider your held knowledge and ability to subjectively and objectively view an arising problem, before considering how you should go about solving it.

THE STAGES OF PROBLEM SOLVING

Problem-solving approach

A methodical approach should be taken to solving problems. Here is a six-step method you can use:

1. Identify the problem
2. Analyze the problem
3. Look for solutions
4. Make a decision
5. Implement the solution
6. Get feedback

Step 1: Identify the problem

In order to **identify the problem**, you need to ask: “Is the problem arising from a person, team, department, company, system, process, or malicious act?”, or, “Is the cause known yet?”

Step 2: Analyze the problem

Once you have identified the problem, it's time to **analyze it**. Where is your information coming from? Are the facts on which you are basing your decision coming from an objective or subjective viewpoint? And are you able to accurately base your decision on facts vs. opinion?

Step 3: Look for solutions

Next, you'll need to **look for solutions**.

A problem-solving solutions strategy can help you to come up with workable solutions for your problems. Solution strategies include:

- Trial and error

- Using an algorithm, and
- Applying a heuristic technique

The old adage, 'If at first you don't succeed, try, try again' describes the trial and error strategy. For example, if your printer is broken, you could try checking the ink levels, and if that doesn't work, you could check to make sure the paper tray isn't jammed. Or perhaps the printer isn't actually connected to your laptop – check your connecting cables and power outlets. When using the trial and error strategy, you would continue to try different solutions until you have figured out an appropriate solution to your problem. Although trial and error is not typically one of the most time-efficient strategies, it is a commonly used one, and very effective.

An algorithm is a problem-solving formula that provides you with step-by-step instructions to help you achieve a desired outcome. You can think of an algorithm as a recipe with highly detailed instructions that produce the same result every time they are performed. Algorithms are used frequently in our everyday lives, offline as well as online. When you run a search on the Internet, search engines like Google use algorithms to decide which entries will appear first in your list of results. Facebook uses algorithms to decide which posts to display on your newsfeed. You can design your own algorithm as a solution to a problem and repeat the process as necessary.

A heuristic is another type of problem-solving strategy. While an algorithm must be followed exactly to produce a correct result, a heuristic is a general problem-solving framework. You can think of heuristics as mental shortcuts that are used to solve problems. A 'rule of thumb' is an example of a heuristic. Such a rule saves the person time and energy when making a decision, but despite its time-saving characteristics, it is not always the best method for making a rational decision. Working backwards is a useful heuristic in which you begin solving the problem by focusing on the end result. Another useful heuristic is the practice of accomplishing a large goal or task by breaking it into a series of smaller steps.

Step 4: Make a decision

Once you have found a solution, the next step is to **make a decision**. These days it is relatively easy to make an informed decision with the amount of information freely available on the internet. Take the appropriate time to research the problem and potential solutions so that you have all of the information you need to make a decision and find the best solution to your problem.

Research has found that most people fall into four decision-making styles: Directive, Conceptual, Consultative, or Consensus.

Directive is an autocratic model where the decision-maker uses their own knowledge and experience to select the best course of action. The decision-maker that uses a directive style practices rationality and displays a low tolerance for ambiguity.

Conceptual decision-makers approach problems in a more relaxed way. They are not averse to high-risk decisions and are comfortable without a full knowledge of all of the facts. They thrive on considering and analyzing different alternatives without singling out any one particular idea.

Consultative decision-making allows for input from others, while you are still in charge of the final outcome of the decision-making process. While you don't bargain agreement within the group, you seek the knowledge and expertise of others and everyone is aware that the final decision rests with you.

Consensus decision-making is where there is no single person responsible for the decision-making. The problem is challenged, debated, and concluded together. Everyone who is present can voice their opinion and have input into the course of action they believe will work. Personal views need to be set aside to support and action a team decision.

Step 5: Implement the solution

Once you have made a decision, you can then **implement it**. To implement the decision, action needs to be taken. It's important to keep on track throughout the process and to review your performance. Use the 3 As to do this: Action, Affirmation, and Assessment. *Act* on the decision you have made, *affirm* that it is the correct action to take, and then assess the effect it has had – that is, did it solve the problem?

Step 6: Get feedback

When your solution has been implemented, it's important to **ask for feedback** to ensure that it has been successful. Encourage a culture of open and honest opinions, and make sure that all of your team members are aware that their feedback will be considered carefully – this is an important part of motivation and confidence-building for future problem-solving tasks. When requesting feedback, be specific. The more specific your feedback request is in terms of context and detail, the more specific the answer you receive will be. Honestly and openly recognizing shortfalls in your own knowledge will help bring different opinions to the table. The encouragement of team discussion ensures that everyone's voice is heard and understood. And finally, remember to offer thanks to your team for their input and commitment and where possible, show them the positive impact their feedback has had. This will in turn empower them to look for solutions more proactively, and for future involvement in the decision-making process.

A useful and simple tip for problem-solving is to use a pen and paper when brainstorming solutions for your problem. Using pen and paper, rather than an app or online tool, to map out your potential problem-solving solutions can enable you to draw out the blockers from your subconscious and to gain a more objective overview. Now, different methods will suit different people, but the main goal is to find a method that works best for you and allows you to gather and organize your thoughts in the easiest way possible. Once you have clearly identified the potential solutions, it is easier to compare them and choose the most effective solution.

SKILLS FOR EFFECTIVE PROBLEM SOLVING

Problem-solving skills

An effective problem-solver uses many skills to devise and implement solutions including:

- Creative skills
- Research skills
- Team-working skills
- Decision-making skills, and
- Risk-taking skills

Creative skills

Creative skills allow big and boundless thinking. They involve the consideration and analysis of ideas, concepts, and solutions that no one else has considered before. Thinking creatively requires

you to set aside any biases or assumptions that you may hold and to take a different look at things. By approaching a problem with an open mind, you allow yourself the chance to think creatively. Often, a problem may seem to be insurmountable and it is only by practicing creativity and innovation that a workable solution can be found. Considering a problem from different viewpoints and being open to a change in perspective is key.

For example, the US Air Force Research Laboratory required an update for their supercomputer but the cost was well over their budget. So, by thinking creatively and looking for alternative solutions, they realized that they could purchase 300 PlayStation 3s that would fulfil their computing needs instead. To quote their creative decision: “The processors in the Sony PlayStation 3 are the only brand on the market that utilizes the specific cell processor characteristics needed for this program at an acceptable cost” (DeBoer, 2008).

Another example of creative problem-solving is from the inventor and founder of Dyson® vacuum cleaners, James Dyson. While his competitors were focused on how to design a better filter for the paper bags in their vacuum cleaners, he came to the realization that he had to approach the problem from a more creative direction (Goodman, 2012). The result was that he created a ‘cyclone’ vacuum cleaner which could separate dust from air, and brought the world’s first bagless vacuum cleaner to the market (Goodman, 2012).

Research skills

Another important set of skills for problem solving is **research skills**. How can you find out what you don’t know? By doing research.

Being able to demonstrate the following competencies is key to ensuring your research is effective:

- Attention to detail
- Critical thinking
- Planning and scheduling
- Technical skills
- Statistical and Graphical Analysis of Data, and
- Interviewing

Because data is so easily accessible these days, it is important to check that the data you are relying on has come from a trusted source.

Team-working skills

Team-working skills are also very useful when it comes to problem solving. If you lead a team, you can help your team or colleagues to solve problems in many ways.

Create easy wins to begin with. Pick the ‘low-hanging fruit’ for the team to practice upon, that is, the tasks that are easiest to achieve, or the problems that are easiest to solve. Resist the temptation to offer a solution to hurry the process along; act as a facilitator instead and guide your team toward the answers. The greatest impact can come from giving the accountability of owning both the solution and the implementation of the solution, to the team. By delegating the problem, you reinforce your confidence and trust in the work of the team.

You can also use the ‘framing effect’. The ‘framing effect’ is a cognitive bias, whereby people decide on options based on whether the options are presented with positive or negative connotations; for

example, as a loss or as a gain. Show your team or colleagues how to practice the skill of framing an issue from differing perspectives, for example, positive, negative, or neutral, and how to devise specific solutions for each frame.

Another method is to remove yourself from the team problem-solving equation. Consider the unintentional influence you may have that might lead to potential biasing of the group with your views. In addition, be understanding and willing to support the team by working across the organization to acquire resources and budgets.

Avoid getting angry at a failure by the team as this is almost always destructive. Instead, instruct the team to take a step back and pause to consider the situation and analyze what did and did not work. Give them time to consider how to respond, learn, and move on.

Be sure to avoid group-think by drawing in individuals with areas of expertise and knowledge not currently held by the team. A common pitfall of group-think is that the team narrowly focuses on their own held-knowledge and plays down any outside or differing viewpoints, limiting the possibility of the most effective solution as an outcome.

Decision-making skills

Decision-making skills are another key component of problem solving. According to the economist Evan Davis, “If you are not making mistakes, you are not trying hard.” This is true of many people, because due to their lack of experience, confidence, or authority, they resist the taking and making of decisions. The more decisions you make, the stronger your decision-making skills become. As long as you learn from your decisions and mistakes, then the more mistakes you make, the better it is for your decision-making ability!

Risk-taking skills

Having the **ability to take risks** is an important skill for effective problem solving. It is usually better to take determined risks rather than undetermined risks. Being able to distinguish between the two takes experience, skill, and knowledge.

An undetermined risk is a risk that is taken without performing due diligence or accounting for possible negative outcomes; that is, you may have found a positive solution, but you don’t know what the final cost will be or what the ‘knock-on’ effects are.

A determined risk requires detailed research, and while you may not actually achieve success, you know that enough research has been carried out to ensure that there is a high likelihood of success.

Many people become risk-averse from building pros and cons into every single decision they make. We tend to avoid taking risks for the following reasons:

- A fear of failure
- A fear of the inflated consequences of failure, and
- A fear of handling the consequences of risk

However, a certain amount of risk-taking is necessary for every new solution, particularly in the beginning. Aiming to take calculated and well-informed risks only is a healthy and effective approach to problem solving.

NOTES

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