

# **MAR GREGORIOS COLLEGE OF ARTS & SCIENCE**

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## **DEPARTMENT OF VISUAL COMMUNICATION**

**SUBJECT NAME: INTRODUCTION TO VISCOM**

**SUBJECT CODE: BVC-DSC01**

**SEMESTER: I**

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# Unit I

**Communication is simply the act of transferring information from one place, person or group to another.**

Every communication involves (at least) one sender, a message and a recipient. This may sound simple, but communication is actually a very complex subject.

The transmission of the message from sender to recipient can be affected by a huge range of things. These include our emotions, the cultural situation, the medium used to communicate, and even our location. The complexity is why good communication skills are considered so desirable by employers around the world: accurate, effective and unambiguous communication is actually extremely hard.

## Five Types of Communication

- **Verbal Communication.** Verbal communication occurs when we engage in speaking with others. ...
- **Non-Verbal Communication.** What we do while we speak often says more than the actual words. ...
- **Written Communication.** Whether it is an email, a memo, a report, a Facebook post, a Tweet, a contract, etc. ...
- **Listening.** ...
- **Visual Communication.**

Human communication can be subdivided into a variety of types:

- Intrapersonal communication (communication with oneself): This very basic form of information, is the standard and foundation, of all things communication. This communication with ourselves, showcases the process in which we think on our previous and ongoing actions, as well as what we choose to understand from other types of communications and events. Out intrapersonal communication, may be shown and expressed to others by our reactions to certain outcomes, through simple acts of gestures and expressions.<sup>[5]</sup>
- Interpersonal communication (communication between two or more people) - Communication relies heavily on understanding the processes and situations that you are in, in order to communicate affectively. It is more than simple behaviors and strategies, on how and what it means to communicate with another person. Interpersonal communication, reflects the personality and characteristics, of a person, seen through the type of dialect, form, and content, a person chooses to communicate with. As simple as this is, interpersonal communication can only be correctly done if both persons involved in the communication, understand what it is to be human beings, and share similar qualities of what it means to be humans. It involves acts of trust and openness, as well as a sense of respect and care towards what the other person is talking about.<sup>[6]</sup>
  - Nonverbal communication: The messages we send to each other, in ways that cover the act of word-by-mouth. These actions may be done through the use of our facial features and expressions, arms and hands, the tone of our voice, or even our very appearance can display a certain type of message.<sup>[7]</sup>
  - Speech

Group and Organizational Communication, done by President Elect Joe Biden and Richard Haass. Uploaded a work by The White House from [https://www.instagram.com/p/BKrNYL\\_g3Ai/](https://www.instagram.com/p/BKrNYL_g3Ai/) with UploadWizard

- Conversation
  - Visual communication
  - Writing
  - Mail
  - Mass media
  - Telecommunication
- Organizational communication (communication within organizations)
  - Mass communication: This type of communication involves the process of communicating with known and unknown audiences, through the use of technology or other mediums. There is hardly ever an opportunity for the audience to respond directly to those who sent the message, there is a divide/separation between the sender and receiver. There are typically four players in the process of mass communication, these players are: those who send the message, the message itself, the medium in which the message is sent, and those who receive the message. These four components come together to be the communication we see and are a part of the most, as the media helps in distributing these messages to the world everyday.<sup>[8]</sup>
  - Group dynamics (communication within groups)
  - Cross-cultural communication (communication across cultures)

### **Nature of Communication:**

#### **Communication has the following features:**

##### **1. Two-way process:**

Communication is a two-way process of understanding between two or more persons – sender and receiver. A person cannot communicate with himself.

[Exchange of ideas and opinion amongst people is an ongoing process in business and non-business organisations. Continuous interaction promotes understanding and exchange of information relevant for decision-making.](#)

##### **3. Dynamic process:**

[Communication between sender and receiver takes different forms and medium depending upon their moods and behaviour. It is, thus, a dynamic process that keeps changing in different situations.](#)

##### **4. Pervasive:**

#### **ADVERTISEMENTS:**

[Communication is a pervasive activity. It takes place at all levels \(top, middle, low\) in all functional areas \(production, finance, personnel, sales\) of a business organisation.](#)

## 5. Two people:

A minimum of two persons — sender and receiver — must be present for communication to take place. It may be between superiors, subordinates and peer group, intra or inter se.

## 6. Exchange:

### ADVERTISEMENTS:

Communication involves exchange of ideas and opinions. People interact and develop understanding for each other.

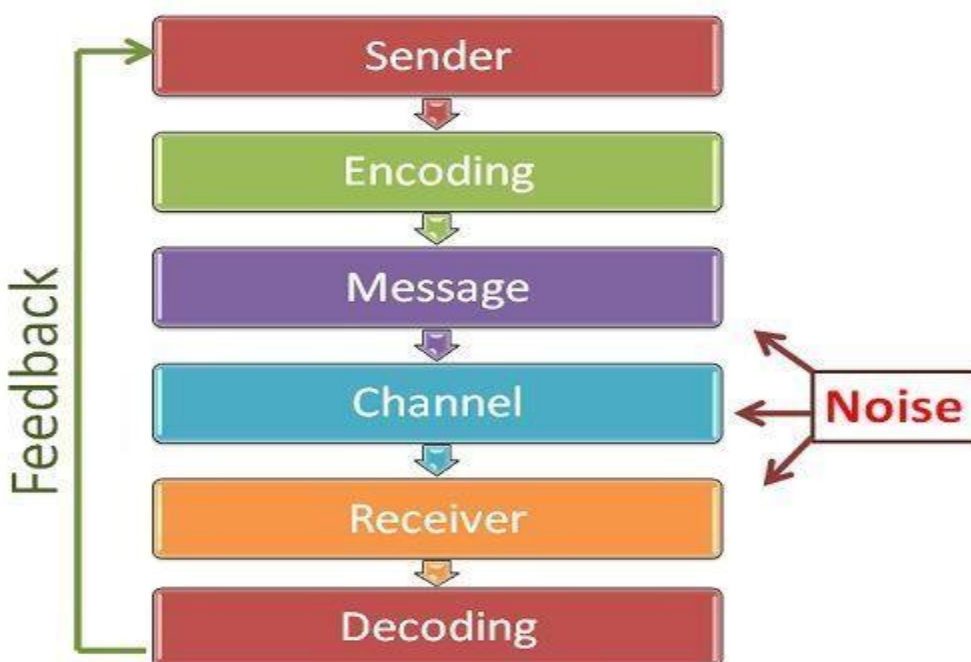
## 7. Means of unifying organisational activities:

Communication unifies internal organisational environment with its external environment. It also integrates the human and physical resources and converts them into organisational output.

**Communication skills** are needed to speak appropriately with a wide variety of people whilst maintaining good eye contact, demonstrate a varied vocabulary and tailor your language to your audience, listen effectively, present your ideas appropriately, write clearly and concisely, and work well in a group.

## **Communication Process**

The communication is a dynamic process that begins with the conceptualizing of ideas by the sender who then transmits the message through a channel to the receiver, who in turn gives the feedback in the form of some message or signal within the given time frame. Thus, there are Seven major elements of communication process:

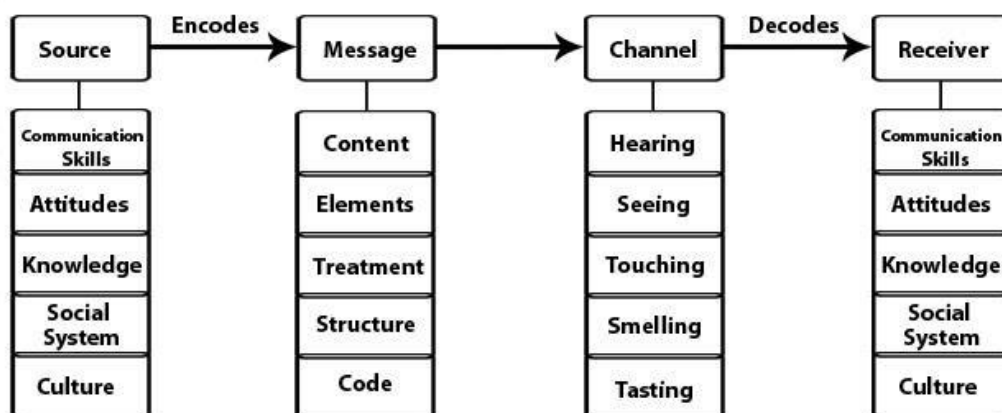


1. **Sender:** The sender or the communicator is the person who initiates the conversation and has conceptualized the idea that he intends to convey it to others.
2. **Encoding:** The sender begins with the encoding process wherein he uses certain words or non-verbal methods such as symbols, signs, body gestures, etc. to translate the information into a message. The sender's knowledge, skills, perception, background, competencies, etc. has a great impact on the success of the message.
3. **Message:** Once the encoding is finished, the sender gets the message that he intends to convey. The message can be written, oral, symbolic or non-verbal such as body gestures, silence, sighs, sounds, etc. or any other signal that triggers the response of a receiver.
4. **Communication Channel:** The Sender chooses the medium through which he wants to convey his message to the recipient. It must be selected carefully in order to make the message effective and correctly interpreted by the recipient. The choice of medium depends on the interpersonal relationships between the sender and the receiver and also on the urgency of the message being sent. Oral, virtual, written, sound, gesture, etc. are some of the commonly used communication mediums.
5. **Receiver:** The receiver is the person for whom the message is intended or targeted. He tries to comprehend it in the best possible manner such that the communication objective is attained. The degree to which the receiver decodes the message depends on his knowledge of the subject matter, experience, trust and relationship with the sender.
6. **Decoding:** Here, the receiver interprets the sender's message and tries to understand it in the best possible manner. An effective communication occurs only if the receiver understands the message in exactly the same way as it was intended by the sender.
7. **Feedback:** The Feedback is the final step of the process that ensures the receiver has received the message and interpreted it correctly as it was intended by the sender. It increases the effectiveness of the communication as it permits the sender to know the efficacy of his message. The response of the receiver can be verbal or non-verbal.

## BERLO'S SMCR MODEL OF COMMUNICATION

in [Communication Models](#), [Interpersonal Communication](#)

### Berlos's SMCR Model of communication



Berlo's model follows the SMCR model. This model is not specific to any particular communication.

Berlo's model includes a number of factors under each of the elements:

**Source:** The source is situated where the message originates.

**Communication skills** – It is the skill of the individual to communicate. For example, the ability to read, write, speak, listen etc.

**Attitudes** – This includes attitudes towards the audience, subject and towards oneself. For example, for the student, the attitude is to learn more and for teachers, it is to help teach.

**Knowledge**– Communicating also means that the person needs to be knowledgeable about the subject or topic. For e.g. a teacher needs to know about the subject in detail that he or she teaches so that they can communicate properly such that the students understand here.

**Note:** It refers, not to the general knowledge, but to the knowledge of the subject that the person is communicating and their familiarity with it.

**Social system** – The social system includes the various aspects of society like values, beliefs, culture, religion and a general understanding of society. It is where the communication takes place.

For example, classrooms differ from country to country just like people's behaviours and how they communicate, etc.

**Note:** We can communicate only to the extent that the social system allows. When we communicate, we take the social system into account.

**Culture:** Culture of a particular society also comes under the social system.

According to this model, people can communicate only if the above requirements are met in the proper or adequate proportion.

**Encoder:** The sender of the message, from where the message originates, is referred to as the encoder. So the source encodes the message here.

### **Message**

**Content** – The body of a message, from the beginning to the end, comprises its content. For example, whatever the class teacher teaches in the class, from beginning to end, is the content of the message.

**Elements** – It includes various things like language, gestures, body language, etc. They constitute all the elements of a particular message. Any content is accompanied by some elements.

**Treatment** – It refers to the packing of the message and the way in which the message is conveyed or the way in which it is passed on or delivered.

**Note:** When there is too much treatment, communication will not go smoothly.

**Structure**– The structure of the message refers to how it is arranged; the way people structure the message into various parts.

**Note:** Message is the same, but if the structure is not properly arranged then the receiver will not understand the message.

**Code**– The code of the message refers to the means through which it is sent and in what form. It could be, for example, language, body language, gestures, music, etc. Even culture is a code. Through this, people give and receive messages and communication takes place.

**Note:** Only when the code is clear, the message will be clear. The wrong usage may lead to misinterpretation.

**Channel**– It refers to the five sense organs. The following are the five senses:

- Hearing
- Seeing
- Touching
- Smelling
- Tasting

Communication occurs through one or more of these channels.

**Hearing:** The use of ears to receive the message. For example, orally transmitted messages, interpersonal communication etc.

**Seeing:** Visual channels, for example, Watching television so the message is conveyed through the scene/film.

**Touching:** The sense of touch can be used as a channel to communicate. For example, we touch, buy food, hugging our loved ones,etc.

**Smelling:** Smell also can be a channel to communicate. For example, perfumes, food, fragrances etc. Charred smell communicates something is burning. People can deduct which food is being cooked by its smell etc.

**Tasting :** The tongue is a muscular organ used in the act of eat and taste food. For example, while a food is being shared, the communication can happen regarding its taste.

**Note:** Despite not mentioning a medium, we need to assume that as communication is taking place, channels can be any of the 5 senses or combination.

**Decoder :** The person who receives the message and decodes it is referred to a decoder.

**Receiver:** The receiver needs to think all the contents and elements of the source, so as to communicate/responds to sender effectively.;

## Unit II

### Connotation vs. Denotation

Here's another way to look at it. Denotation is the standard definition of a word, whereas connotation is the feeling evoked by a word. Let's consider another word: gritty.

The [definition of gritty](#) is "having a rough texture." So, in a literal sense (denotation), we might say:

This sandpaper is gritty. It'll make that countertop nice and smooth.

But, consider this sentence:

That side of town is pretty gritty.

In that sense, we're not saying that section of the city has a "rough texture" in a literal sense. Instead, we're saying it's a tough neighborhood, perhaps with issues related to crime and poverty. As such, you'll want to have your wits about you when walking through its streets. That's connotation.

### Connotation and Denotation Examples

Now that you know the difference between the meanings of connotation vs. denotation, check out these examples of how you can use the same word in a denotative and connotative way.

#### Cheap: to cost very little

- **Denotation:** This shirt is cheap enough for me to afford.
- **Connotation:** That t-shirt was so cheap, it pilled in a matter of weeks.

The second sentence suggests that the t-shirt wasn't just a bargain buy. Rather, it was of poor quality. The implication is that a higher-quality garment wouldn't have pilled.

#### Dabble: to show a superficial interest

- **Denotation:** I dabble in painting.
- **Connotation:** You should never dabble in drugs.

When someone says you should never dabble in drugs (or anything harmful), they mean you shouldn't touch them, never mind a superficial interest or momentary experimentation. The connotation of "dabbling in drugs" is to "stay back." Don't even go there.



### Innocent: free from guilt or wrongdoing

- **Denotation:** The court said she was innocent.
- **Connotation:** What does she know. She's so innocent.

In this context, the implication is that she's not just free from guilt; she's lacking in worldly knowledge or experience. She's naive. It carries a derogatory connotation, implying that the speaker has more "smarts" than the woman she's talking about.

### Organizational Communication Flows

Information can flow in four directions in an organization: downward, upward, horizontally, and diagonally. The size, nature, and structure of the organization dictate which direction most of the information flows. In more established and traditional organizations, much of the communication flows in a vertical—downward and upward—direction. In informal firms, such as tech start-ups, information tends to flow horizontally and diagonally. This, of course, is a function of the almost flat organizational hierarchy and the need for collaboration. Unofficial communications, such as those carried in the company grapevine, appear in both types of organizations.

#### Downward Communication Flows

Downward communication is when company leaders and managers share information with lower-level employees. Unless requested as part of the message, the senders don't usually expect (or particularly want) to get a response. An example may be an announcement of a new CEO or notice of a merger with a former competitor. Other forms of high-level downward communications include speeches, blogs, podcasts, and videos. The most common types of downward communication are everyday directives of department managers or line managers to employees. These can even be in the form of instruction manuals or company handbooks.

Downward communication delivers information that helps to update the workforce about key organizational changes, new goals, or strategies; provide performance feedback at the organizational level; coordinate initiatives; present an official policy (public relations); or improve worker morale or consumer relations.

#### Upward Communication Flows

Information moving from lower-level employees to high-level employees is upward communication (also sometimes called vertical communication). For example, upward communication occurs when workers report to a supervisor or when team leaders report to a department manager. Items typically communicated upward include progress reports, proposals for projects, budget estimates, grievances and complaints, suggestions for improvements, and schedule concerns. Sometimes a downward communication prompts an upward response, such as when a manager asks for a recommendation for a replacement part or an estimate of when a project will be completed.

An important goal of many managers today is to encourage spontaneous or voluntary upward communication from employees without the need to ask first. Some companies go so far as to organize contests and provide prizes for the most innovative and creative solutions and suggestions. Before employees feel comfortable making these kinds of suggestions, however, they must trust that management will recognize their contributions and not unintentionally undermine or ignore their efforts. Some organizations have even installed “whistleblower” hotlines that will let employees report dangerous, unethical, or illegal activities anonymously to avoid possible retaliation by higher-ups in the company.

## Horizontal and Diagonal Communication Flows

Examples of channels that carry external communication include press briefings, fact sheets, press kits, newsletters, magazines, brochures, news releases, annual reports, invoices and purchase orders.

Horizontal communication involves the exchange of information across departments at the same level in an organization (i.e., peer-to-peer communication). The purpose of most horizontal communication is to request support or coordinate activities. People at the same level in the organization can work together to work on problems or issues in an informal and as-needed basis. The manager of the production department can work with the purchasing manager to accelerate or delay the shipment of materials. The finance manager and inventory managers can be looped in so that the organization can achieve the maximum benefit from the coordination. Communications between two employees who report to the same manager is also an example of horizontal communication. Some problems with horizontal communication can arise if one manager is unwilling or unmotivated to share information, or sees efforts to work communally as threatening his position (territorial behavior). In a case like that, the manager at the next level up will need to communicate downward to reinforce the company’s values of cooperation.

## Barriers to Effective Communication

The process of communication has multiple barriers. The intended communicate will often be disturbed and distorted leading to a condition of misunderstanding and failure of communication. The Barriers to effective communication could be of many types like linguistic, psychological, emotional, physical, and cultural etc. We will see all of these types in detail below.

### Linguistic Barriers

The language barrier is one of the main barriers that limit effective communication. Language is the most commonly employed tool of communication. The fact that each major region has its own language is one of the Barriers to effective communication. Sometimes even a thick dialect may render the communication ineffective.

As per some estimates, the dialects of every two regions changes within a few kilometers. Even in the same workplace, different employees will have different linguistic skills. As a result, the communication channels that span across the [organization](#) would be affected by this.

Thus keeping this barrier in mind, different considerations have to be made for different employees. Some of them are very proficient in a certain language and others will be ok with these languages.

### Browse more Topics under Communication

- [Types of Communication](#)
- [Network in Communication](#)
- [Characteristics of Effective Communication](#)
- Interpersonal Skills, Listening Skills and Emotional Intelligence

*Learn more about [the Characteristics of Effective Communication here in detail.](#)*

### Psychological Barriers

There are various mental and psychological issues that may be barriers to effective communication. Some people have stage fear, speech disorders, phobia, depression etc. All of these conditions are very difficult to manage sometimes and will most certainly limit the ease of communication.

### Emotional Barriers

The emotional IQ of a person determines the ease and comfort with which they can communicate. A person who is emotionally mature will be able to communicate effectively. On the other hand, people who let their emotions take over will face certain difficulties.

A perfect mixture of emotions and facts is necessary for effective communication. Emotions like anger, frustration, humour, can blur the [decision-making](#) capacities of a person and thus limit the effectiveness of their communication.



### Physical Barriers to Communication

They are the most obvious barriers to effective communication. These barriers are mostly easily removable in principle at least. They include barriers like noise, closed doors, faulty equipment used for communication, closed cabins, etc. Sometimes, in a large office, the physical separation between various employees combined with faulty equipment may result in severe barriers to effective communication.

*Learn more about [Interpersonal Skills and Emotional Intelligence here in detail.](#)*

### Cultural Barriers of Communication

As the world is getting more and more globalized, any large office may have people from several parts of the world. Different cultures have a different meaning for several basic values of society. Dressing, Religions or lack of them, food, drinks, pets, and the general behaviour will change drastically from one culture to another.

Hence it is a must that we must take these different cultures into account while communication. This is what we call being culturally appropriate. In many multinational companies, special courses are offered at the orientation stages that let people know about other cultures and how to be courteous and tolerant of others.

### Organisational Structure Barriers

As we saw there are many [methods of communication](#) at an organizational level. Each of these methods has its own problems and constraints that may become barriers to effective communication. Most of these barriers arise because of misinformation or lack of appropriate transparency available to the employees.

### Attitude Barriers

Certain people like to be left alone. They are the [introverts](#) or just people who are not very social. Others like to be social or sometimes extra clingy! Both these cases could become a barrier to communication. Some people have attitude issues, like huge ego and inconsiderate behaviours.

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These employees can cause severe strains in the communication channels that they are present in. Certain personality traits like shyness, anger, social anxiety may be removable through courses and proper training. However, problems like egocentric behaviour and selfishness may not be correctable.

## Perception Barriers

Different people perceive the same things differently. This is a fact which we must consider during the [communication process](#). Knowledge of the perception levels of the audience is crucial to effective communication. All the messages or communicate must be easy and clear. There shouldn't be any room for a diversified interpretational set.

## Physiological Barriers

Certain disorders or diseases or other limitations could also prevent effective communication between the various channels of an organization. The shrillness of voice, [dyslexia](#), etc are some examples of physiological barriers to effective communication. However, these are not crucial because they can easily be compensated and removed.

## Technological Barriers & Socio-religious Barriers

Other barriers include the technological barriers. The technology is developing fast and as a result, it becomes difficult to keep up with the newest developments. Hence sometimes the technological advance may become a barrier. In addition to this, the cost of technology is sometimes very high.

Most of the organizations will not be able to afford a decent tech for the purpose of communication. Hence, this becomes a very crucial barrier. Other barriers are socio-religious barriers. In a patriarchal society, a woman or a transgender may face many difficulties and barriers while communicating.

## What is Semantics

Semantics is simply the branch of linguistics that concerns studying the meanings of words as well as their meanings within a sentence. Thus, it is the study of linguistic meaning, or more precisely, the study of the relation between linguistic expressions and their meaning. Therefore, it considers the meaning of a sentence without paying attention to their context.

To explain further what semantics means in linguistics, it can be denoted that “it is the study of the interpretation of signs or symbols used in agents or communities within particular circumstances and contexts”. Hence, according to this, sounds, facial expressions, body language, and proxemics have semantic (meaningful) content, and each of these comprises several branches of study. Moreover, in written language, things like paragraph structure and punctuation bear semantic content; other forms of language bear other semantic content.

Thus, semantics focuses on three basic aspects: “the relations of words to the objects denoted by them, the relations of words to the interpreters of them, and, in symbolic logic, the formal relations of signs to one another ([syntax](#))”. Therefore, semantics also looks at the ways in which the meanings of words can be related to each other.

## What is Pragmatics

Pragmatics is another branch of linguistics. Similar to semantics, pragmatics also studies the meanings of words, but it pays emphasis on their context. In other words, pragmatics is “the study of the use of linguistic signs, words, and sentences, in actual situations.”

Thus, it looks beyond the literal meaning of an [utterance](#) or a sentence, considering how the context impacts its meaning to be constructed as well the implied meanings. \_

Therefore, unlike semantics, pragmatics concern the context of that particular words and how that context impacts their meaning.

For example, think of a situation when you and your friends are planning to give a surprise birthday party to one of your colleagues, and after everything is ready you see the colleague is on the way to the classroom and suddenly one of your friends shout “Candles?”. “Candles?” might

indicate that you forgot to put candles on the birthday cake. Therefore, here that single word 'candles' convey a lot of meaning to you and your friends except for the colleague who has no idea that you have planned a surprise birthday party for him/her.

This is what pragmatics is about. Unlike semantics, which only concerns the meaning of the words, pragmatics goes a step further by looking at the same word in relation to its context. Thus, pragmatics explains how language users are able to overcome apparent ambiguity since it explains the meaning relies on the manner, time, place, etc. of an utterance.

**A semiotic system, in conclusion, is necessarily made of at least three distinct entities: signs, meanings and code. Signs, meanings and codes, however, do not come into existence of their own. Ferdinand de Saussure**

Ferdinand de Saussure founded his semiotics, which he called semiology, in the social sciences:<sup>[14]</sup>

It is...possible to conceive of a science which studies the role of signs as part of social life. It would form part of social psychology, and hence of general psychology. We shall call it semiology (from the Greek *semeîon*, 'sign'). It would investigate the nature of signs and the laws governing them. Since it does not yet exist, one cannot say for certain that it will exist. But it has a right to exist, a place ready for it in advance. Linguistics is only one branch of this general science. The laws which semiology will discover will be laws applicable in linguistics, and linguistics will thus be assigned to a clearly defined place in the field of human knowledge.

Thomas Sebeok<sup>[c]</sup> would assimilate "semiology" to "semiotics" as a part to a whole, and was involved in choosing the name *Semiotica* for the first international journal devoted to the study of signs. Saussurean semiotics have exercised a great deal of influence on the schools of Structuralism and Post-Structuralism. Jacques Derrida, for example, takes as his object the Saussurean relationship of signifier and signified, asserting that signifier and signified are not fixed, coining the expression *différance*, relating to the endless deferral of meaning, and to the absence of a 'transcendent signified'. For Derrida, "*il n'y a pas de hors-texte*" (transl. "there is nothing outside the text").

### **Charles Sanders Peirce**

In the nineteenth century, Charles Sanders Peirce defined what he termed "semiotic" (which he would sometimes spell as "semeiotic") as the "quasi-necessary, or formal doctrine of signs," which abstracts "what must be the characters of all signs used by...an intelligence capable of learning by experience," and which is philosophical logic pursued in terms of signs and sign processes.

Peirce's perspective is considered as philosophical logic studied in terms of signs that are not always linguistic or artificial, and sign processes, modes of inference, and the inquiry process in general. The Peircean semiotic addresses not only the external communication mechanism, as per Saussure, but the internal representation machine, investigating sign processes, and modes of inference, as well as the whole inquiry process in general.

Peircean semiotic is triadic, including sign, object, interpretant, as opposed to the dyadic Saussurian tradition (signifier, signified). Peircean semiotics further subdivides each of the three triadic elements into three sub-types, positing the existence of signs that are symbols; semblances ("icons"); and "indices," i.e., signs that are such through a factual connection to their objects.

Peircean scholar and editor Max H. Fisch (1978) would claim that "semeiotic" was Peirce's own preferred rendering of Locke's Charles W. Morris followed Peirce in using the term "semiotic" and in extending the discipline beyond human communication to animal learning and use of signals.

While the Saussurean semiotic is dyadic (sign/syntax, signal/semantics), the Peircean semiotic is triadic (sign, object, interpretant), being conceived as philosophical logic studied in terms of signs that are not always linguistic or artificial.

## Unit III

### Principles of Design

The principles of design describe the ways that artists use the elements of art in a work of art.

Balance is the distribution of the visual weight of objects, colors, texture, and space. If the design was a scale, these elements should be balanced to make a design feel stable. In symmetrical balance, the elements used on one side of the design are similar to those on the other side; in asymmetrical balance, the sides are different but still look balanced. In radial balance, the elements are arranged around a central point and may be similar.

Emphasis is the part of the design that catches the viewer's attention. Usually the artist will make one area stand out by contrasting it with other areas. The area could be different in size, color, texture, shape, etc. Movement is the path the viewer's eye takes through the work of art, often to focal areas. Such movement can be directed along lines, edges, shape, and color within the work of art.

Pattern is the repeating of an object or symbol all over the work of art. Repetition works with pattern to make the work of art seem active. The repetition of elements of design creates unity within the work of art. Proportion is the feeling of unity created when all parts (sizes, amounts, or number) relate well with each other. When drawing the human figure, proportion can refer to the size of the head compared to the rest of the body.

Rhythm is created when one or more elements of design are used repeatedly to create a feeling of organized movement. Rhythm creates a mood like music or dancing. To keep rhythm exciting and active, variety is essential. Variety is the use of several elements of design to hold the viewer's attention and to guide the viewer's eye through and around the work of art.



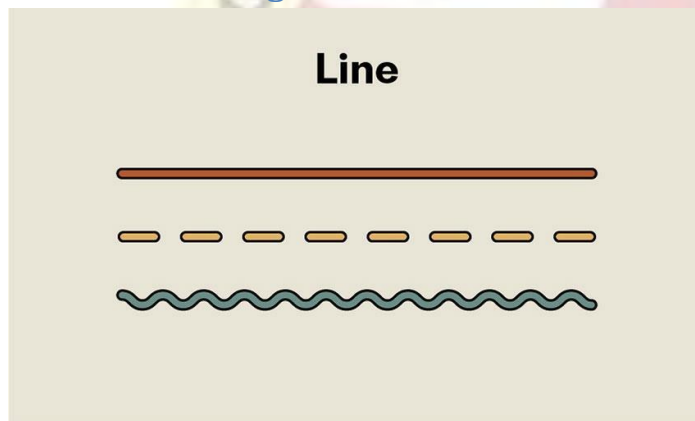
Unity is the feeling of harmony between all parts of the work of art, which creates a sense of completeness.

The main elements are:

- Line
- Color
- Shape
- Form
- Value
- Space
- Texture

A solid understanding of these concepts gives you the ability to understand your design pieces and others you come across. You'll be able to dissect a design piece and see the behind-the-scenes process. Let's take a closer look at each element to have a better understanding of how they work and how to use them.

### Elements of Design: Line



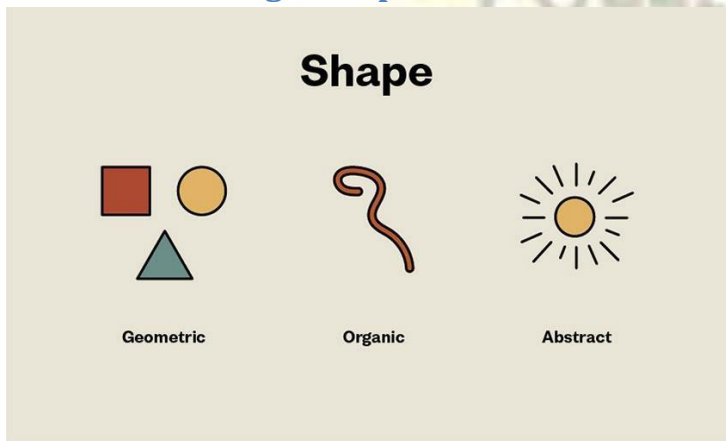
Lines are the most basic elements of design. They come in all shapes, sizes, and colors. Once you start noticing them, you'll see grids all around you. Lines have direction; they can be visible or invisible and can help direct the eye to a specific spot. The thickness of a line can also communicate certain cues. Bold and thick lines can draw attention, while thin lines are the opposite.

Most if not all layouts contain invisible lines. Grids are made of multiple lines and lend structure to a page. Lines can be used to create demarcation on a specific section of a design. Depending on the form of the line, you can convey different moods. A simple line can carry so much—for instance, a squiggly line is perceived as young and fun compared to a straight line.

Lines don't necessarily have to be solid. Dashed and dotted lines can also be used and have a friendlier feel than a solid line. Straight lines usually come across as a steady and static element. On the other hand, curved lines are dynamic and give energy to your design.



## Elements of Design: Shape



A shape is the result of enclosed lines to form a boundary. Shapes are two-dimensional and can be described as geometric, organic, and abstract.

- **Geometric shapes** have structure and are often mathematical and precise (squares, circles, triangles). You'll notice that the Swiss graphic design movement from the 1950s used mostly geometric shapes in their designs. Shapes can add emphasis to a layout.
- **Organic shapes** lack well-defined edges and often feel natural and smooth. Shapes add emphasis to a layout.
- **Abstract shapes** are a minimalist representation of reality. For instance, a stick figure of a person is an abstract shape. Logos are mostly represented by abstract figures to show the type of business. The icon pack below is a great example of abstract shapes conveying real-life objects and situations.



Depending on the color, form, and size of shapes, we can determine particular moods and send messages. For instance, triangles direct the eyes to a specific point and can also represent stability.

We are surrounded by shapes that we may not think about much; we usually think of shapes as the main geometric structures. For designers, shape is one of the most important elements when it comes to branding development. These figures are at the root of logos and illustrations.

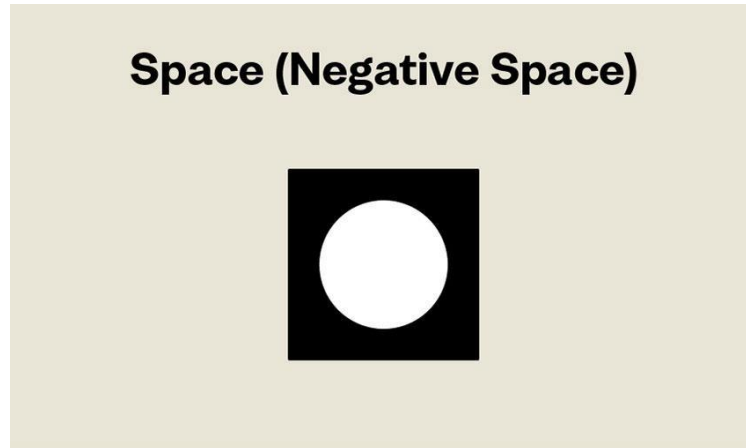
### Elements of Design: Form (Positive Space)



On a page, form is the positive element over the space, the negative element. A dot, line, or shape is a form when placed on a page. Unfortunately, form and shape are mostly used interchangeably. A form can be either two-dimensional or three-dimensional. Many also believe that form is a shape that acquires three-dimensional values, but the correct term is volume.

Form and shape are mutually dependent because changing one would affect the other. The spatial relationship between form and space can create tension and add 3D qualities to your design. Form and space will lend the design lots of visual activity that can help keep viewers engaged. To create a 3D effect in your design, you can add shadows, stack multiple elements, or play with color.

## Elements of Design: Space (Negative Space)



Space is the area that surrounds a shape; it creates a form within the space. Think of it as music: space is the silence between the notes of a song. If all the notes were played together, that would turn into noise.

If you look at a design piece, the negative space is the area that is not occupied by any elements. In essence, it is the background color that you are able to see. For instance, abundant negative space in a layout results in an open, airy, and light background. The lack of negative space can result in a cluttered design. Visually speaking, a layout needs space to achieve a level of clarity within the design. Negative space is a very important element to consider as you are designing a piece.

## Elements of Design: Color



We can apply color to any of the elements we mentioned before this point. Colors create moods and can say something different depending on the connotations associated with it. Color can create an emphasis on specific areas of your design layout.

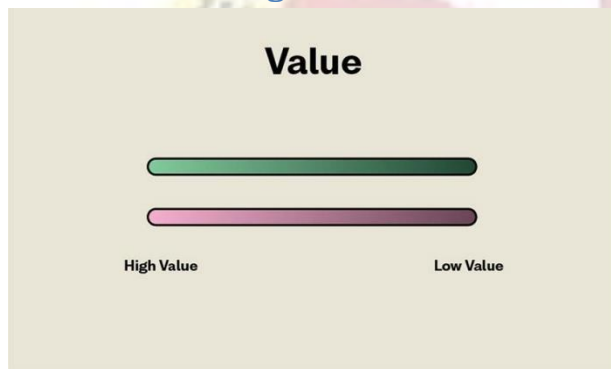
This element contains multiple characteristics:

- **Hue** is the name of a color in its purest form. For instance, cyan, magenta, and green are pure colors.
- **Shade** is the addition of black to a hue in order to make a darker version.
- **Tint** is the addition of white to a color to make a lighter version.
- **Tone** is the addition of grey to make a color muted.
- **Saturation** refers to the purity of a color. A specific color is most intense when it is not mixed with white or black.

In design, there are two color systems, RGB and CMYK. RGB is a system dedicated to digital design. This additive system stands for red, green, and blue. The colours are produced by adding primary colours together to create various combinations. This mode should be used for designs that will only be used on a screen.

If you want to output your design as a printed piece, you need to use the CMYK system. This subtractive system stands for cyan, magenta, yellow, and black (key). CMYK reduces the light that would be reflected on a white background to create color. It is extremely important to start a file using the right color system. Converting colors between the systems can result in muted and inaccurate colors.

### Elements of Design: Value

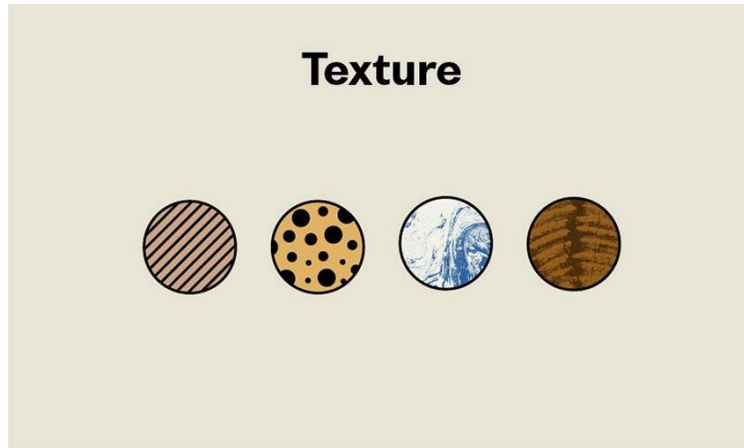


Value refers to the degree of lightness and darkness of a specific hue. Yellow has a higher value than purple because it is closer to white. Value changes create contrast on a page. The reason you can read this text is that the black content contrasts with the white background.

In design, use different tonal values to create emphasis in your design. Create the illusion of movement by overlapping multiple elements with different values. Value is also important in photography. You'll notice that high-value images have a light and airy feel to them, while dark value images feel heavy and dramatic.

Value also defines the spatial relationship between elements. If color values are close between the elements and space, then the design will look flat. If there is a strong contrast between the elements, then the form will be extremely noticeable. The example below features multiple colors with multiple values, which helps add a sense of depth to the design.

## Elements of Design: Texture



Texture adds a tactile appearance to a design layout. Imagine how a design piece would feel if you touched it. The goal of texture is to add depth to a 2D surface. Texture can be applied graphically through patterns, either digitally created or an image mimicking the desired pattern. Below is an example of an abstract geometric pattern made up of basic geometric elements.



To achieve an authentic vintage feel, you may try a rough effect as a background or a natural pattern like the wood pattern below. Highly texturized patterns like this can translate the feel of wood grains visually. Textures can also be physical—for example, laser cutters give you the ability to stack multiple shapes and intensify a tactile response.

Add real tactile texture to your design by embossing a texture to paper. This way, you have the chance to create a memorable piece that will certainly stand out from the crowd. Stylistically, it is not ideal to blend multiple textures in a design (unless necessary) as it can be overwhelming for the viewer.

In graphic design, texture can also refer to the elements placed on a page. Multiple layers of text placed on top of each other can lend a unique texture that can't be mimicked by anything organic.

Different textures give off a different vibration—try thinking of different materials if you work with physical shapes. For instance, try using soft surfaces like felt for children’s books. Art book designs are the most forgiving for thinking outside the box.

## Design and Communication

Communication holds the key to success in the design world. It isn’t an exaggeration to say that two-thirds of a designer’s job is communication.

1. The first part of a designer’s job is to find the right people with the right information.
2. The second part is the actual work of design.
3. The last part is relaying information from the finished product to the right people in the right way.

Following these steps, a designer can begin to create solid designs.

Essentially, the first and last parts each hang on one’s ability to communicate. The era when one could sell something simply by creating a good product has ended. It is necessary for designers to think about how to present and relate their creation via marketing, promotion and presentation.

## Environmental Differences Surrounding Designers in the US and Japan

There doesn’t seem to be a gap in the abilities of designers in the US and Japan. There are a large number of excellent designers in Japan more sensitive to the intricacies of design. However, when it comes to the quality of the designs as they are actually produced on a global scale, it is true that Japanese design is, to some extent, viewed unfavorably.

Rather than a gap in the quality of designers, this can be attributed to the intrusion of Japanese business structure in creative work.

The ideal design process is one that provides an environment in which the designer’s ideas can flow from start to finish. However, most Japanese businesses tend to focus on organization and debate ideas during meetings.

Meetings are really no more than a place for organizing existing ideas and searching for keywords for already developed thoughts. Even by lining up work product and feeling as if the work was done collectively, these meetings do not result in producing creative elements.

Excellent ideas don’t come from meetings but reside in a more relaxed space. For that reason, designers must, and will, come up with ideas more efficiently in their own systems and environments. If one is relaxed, for example, more alpha waves will result in the flow of interesting ideas. Businesses in San Francisco and the Silicon Valley are particularly aware of this and are building create office environments as a result.

On top of that, organizations in Japan tend to favor the group rather than the individual, so the group squashes the creativity of the designer as an individual, and it's not uncommon for the concept originally developed by a passionate designer to fall apart.

Despite the many designers in Japan doing excellent and very creative work, it is a shame that their individual gifts and talents are squashed by organizational systems. If the importance of a designer in an organization were to increase and their thoughts valued in society and business, there would be greater capacity for the development of extremely profitable products.

### The Importance of the Designer

Going forward, creative work is sure to become more common place. Today, despite the many professions available, creative work seems to be on the rise. Just outside the boundaries of the system, risks are being taken in new ventures. In a creative enterprise, the most important factor is to give life to innovation.

The job of the designer when creating new products is to clearly relay the benefits of a product to the layman and lead them to a proper understanding. There are also cases where a supervisor makes a judgment without the presence of the designer, and this is part of the difficulty of the profession.

Despite putting in thousands of hours into one project, most are sure to end in failure. Nevertheless, in order to create an impact on the world, it is necessary to continue on. The designer, even when not actually designing, must be continually sharpening their insight so that they may regularly contribute fresh ideas.

In that sense, our work can't be clocked in the normal way. But there are many things only a designer is capable of bringing about and that thought alone is truly exciting. That's why I believe it is a noble profession.

## Unit IV

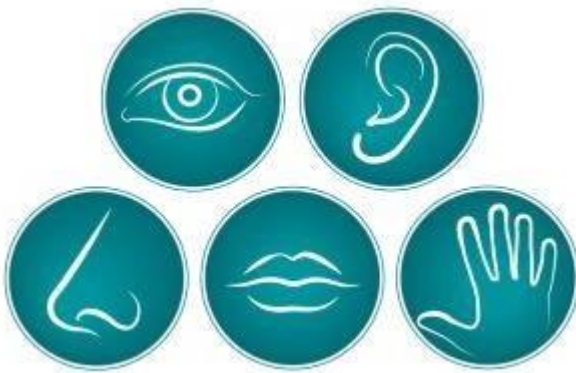
What is meant by visual perception?

**Visual perception** is what happens after the picture reaches the eyes – the image forms a pattern of activity on the array of receptors in the eye, and the detailed pattern is analyzed by the **visual** centers of the brain, thereby revealing what is where.

### Sensory Perception

An individual or organism capable of processing the stimuli in their environment is called to have a **sensory perception**. This processing is done through the coordination between sense organs and the brain. Hearing, **vision**, taste, smell, and touch are the five senses we possess.





### Sensory organs

Sensory organs are organs that sense and transduce stimuli. Humans have various sensory organs (i.e. eyes, ears, skin, nose, and mouth) that correspond to a respective visual system (sense of vision), auditory system (sense of hearing), somatosensory system (sense of touch), olfactory system (sense of smell), and gustatory system (sense of taste)]. Those systems, in turn, contribute to vision, hearing, touch, smell, and the ability to taste.<sup>[2][1]</sup> Internal sensation, or interoception, detects stimuli from internal organs and tissues. Many internal sensory and perceptual systems exist in humans, including the vestibular system (sense of balance) sensed by the inner ear and providing the perception of spatial orientation; proprioception (body position); and nociception (pain). Further internal chemoreception- and osmoreception-based sensory systems lead to various perceptions, such as hunger, thirst, suffocation, and nausea, or different involuntary behaviors, such as vomiting.<sup>[5][6][7]</sup>

Nonhuman animals experience sensation and perception, with varying levels of similarity to and difference from humans and other animal species. For example, mammals in general have a stronger sense of smell than humans. Some animal species lack one or more human sensory system analogues and some have sensory systems that are not found in humans, while others process and interpret the same sensory information in very different ways. For example, some animals are able to detect electrical fields<sup>[8]</sup> and magnetic fields,<sup>[9]</sup> air moisture.<sup>[10]</sup> or polarized light,<sup>[11]</sup> Others sense and perceive through alternative systems such as echolocation.<sup>[12][13]</sup>

Recent theory suggests that plants and artificial agents such as robots may be able to detect and interpret environmental information in an analogous manner to animals

### Basic Color Theory

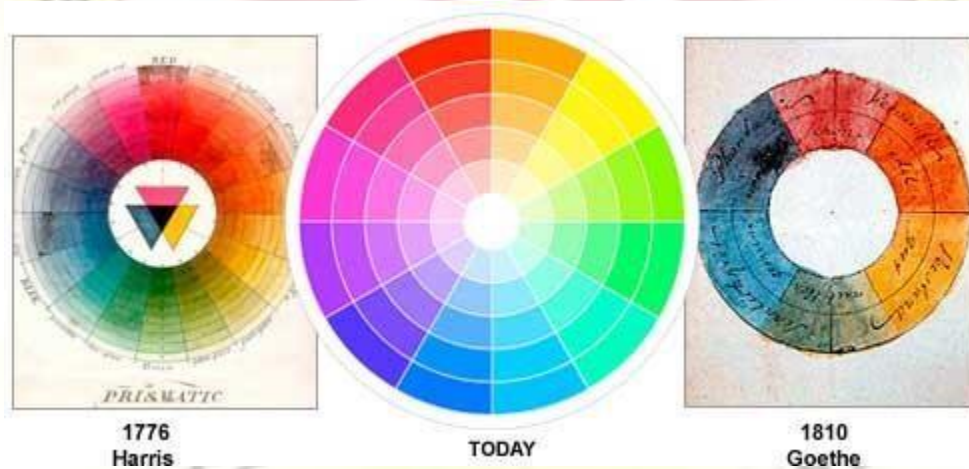
Color theory encompasses a multitude of definitions, concepts and design applications - enough to fill several encyclopedias. However, there are three basic categories of color theory that are logical and useful : The color wheel, color harmony, and the context of how colors are used.

Color theories create a logical structure for color. For example, if we have an assortment of fruits and vegetables, we can organize them by color and place them on a circle that shows the colors in relation to each other.



### The Color Wheel

A color circle, based on red, yellow and blue, is traditional in the field of art. Sir Isaac Newton developed the first circular diagram of colors in 1666. Since then, scientists and artists have studied and designed numerous variations of this concept. Differences of opinion about the validity of one format over another continue to provoke debate. In reality, any color circle or color wheel which presents a logically arranged sequence of pure hues has merit.



There are also definitions (or categories) of colors based on the color wheel. We begin with a 3-part color wheel.



**Primary Colors**



**Secondary Colors**



**Tertiary Colors**

**Primary Colors:** Red, yellow and blue

In traditional color theory (used in paint and pigments), primary colors are the 3 pigment colors that cannot be mixed or formed by any combination of other colors. All other colors are derived from these 3 hues.

**Secondary Colors:** Green, orange and purple

These are the colors formed by mixing the primary colors.

**Tertiary Colors:** Yellow-orange, red-orange, red-purple, blue-purple, blue-green & yellow-green

These are the colors formed by mixing a primary and a secondary color. That's why the hue is a two word name, such as blue-green, red-violet, and yellow-orange.

**Color Harmony**

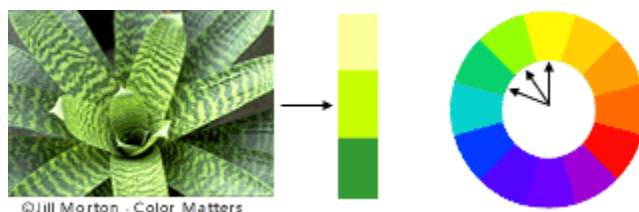
Harmony can be defined as a pleasing arrangement of parts, whether it be music, poetry, color, or even an ice cream sundae.

In visual experiences, harmony is something that is pleasing to the eye. It engages the viewer and it creates an inner sense of order, a balance in the visual experience. When something is not harmonious, it's either boring or chaotic. At one extreme is a visual experience that is so bland that the viewer is not engaged. The human brain will reject under-stimulating information. At the other extreme is a visual experience that is so overdone, so chaotic that the viewer can't stand to look at it. The human brain rejects what it cannot organize, what it cannot understand. The visual task requires that we present a logical structure. Color harmony delivers visual interest and a sense of order.

In summary, extreme unity leads to under-stimulation, extreme complexity leads to over-stimulation. Harmony is a dynamic equilibrium.

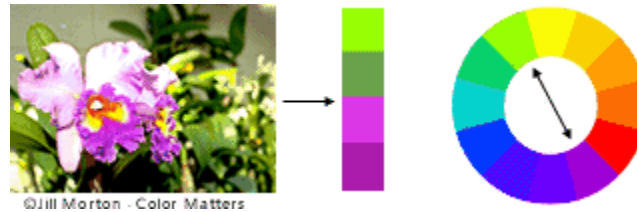
**Some Formulas for Color Harmony**

There are many theories for harmony. The following illustrations and descriptions present some basic formulas.

**1. A color scheme based on analogous colors**

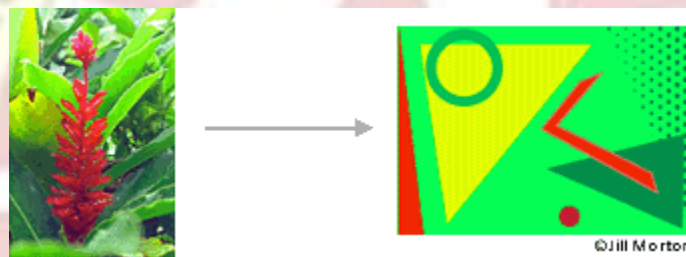
Analogous colors are any three colors which are side by side on a 12-part color wheel, such as yellow-green, yellow, and yellow-orange. Usually one of the three colors predominates.

## 2. A color scheme based on complementary colors



Complementary colors are any two colors which are directly opposite each other, such as red and green and red-purple and yellow-green. In the illustration above, there are several variations of yellow-green in the leaves and several variations of red-purple in the orchid. These opposing colors create maximum contrast and maximum stability.

## 3. A color scheme based on nature



Nature provides a perfect departure point for color harmony. In the illustration above, red yellow and green create a harmonious design, regardless of whether this combination fits into a technical formula for color harmony.

# Color Harmony for Logos and Branding

Empower your brand. Learn online in 2 hours time.



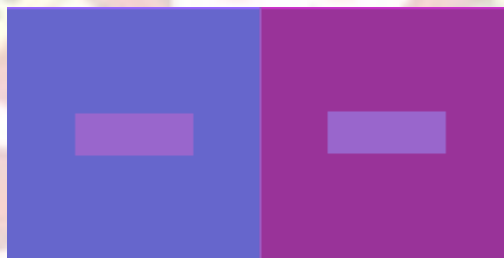
## Color Context

How color behaves in relation to other colors and shapes is a complex area of color theory. Compare the contrast effects of different color backgrounds for the same red square.



Red appears more brilliant against a black background and somewhat duller against the white background. In contrast with orange, the red appears lifeless; in contrast with blue-green, it exhibits brilliance. Notice that the red square appears larger on black than on other background colors.

### Different readings of the same color



If your computer has sufficient color stability and gamma correction (link to [Is Your Computer Color Blind?](#)) you will see that the small purple rectangle on the left appears to have a red-purple tinge when compared to the small purple rectangle on the right. They are both the same color as seen in the illustration below. This demonstrates how three colors can be perceived as four colors.



Observing the effects colors have on each other is the starting point for understanding the relativity of color. The relationship of values, saturations and the warmth or coolness of respective hues can cause noticeable differences in our perception of color.

### Why Is Color Psychology Important in Marketing?

Color evokes feeling. It incites emotion. And it's not any different when it comes to selecting colors for your business.

Choosing the right colors for your marketing efforts can be the difference between your brand standing out from the crowd, or blending into it. By using colors strategically for your marketing efforts, you can get your audience to see what you want them to see and help them perceive you

the way you aim to be perceived. This is why understanding color psychology can be so useful for your marketing efforts. Because it can help you portray your brand the way you want to.

While choosing the right colors can enhance your brand perception, poor color selection can do damage to your brand image. For instance, if you choose the wrong colors for your content or logo, it can turn out to be less readable, and hard for your audience to understand. Or you can risk being ignored all together.

Color can be used by marketers to influence how people think and behave toward a brand, and how they interpret any information. The choice of colors can help people decide what is important. And that's why content marketers need to understand what different colors mean.

## List of Color Meanings

### Red Color Psychology

Marketing colors like red can capture attention. The red color meaning is associated with excitement, passion, danger, energy, and action. You might've noticed that some brands use red for 'order now' buttons or for their packaging as a way to stand out on the shelf. In color psychology, red is the most intense color. And thus, can provoke the strongest emotions. Red can also trigger danger so you want to use the color sparingly. If you add the color red to your website, save it for the call to action or sale icons if it'll contrast well with your store design.

Red is the iconic color used for brands like Coca Cola and YouTube. The color red tends to encourage appetite hence why brands like Coca Cola use it often in their branding. They also use words like happiness in their branding so they use the color red to build excitement. YouTube likely uses the color red due to the excitement of watching videos online. Notice how the red part of their logo is the play button which can help compel someone into action. It encourages you to want to press play on their videos.

### Orange Color Psychology

In color psychology, orange represents creativity, adventure, enthusiasm, success, and balance. The color orange adds a bit of fun to any picture, website, or marketing material it's on. Despite it's attracting color, it's not as commanding as the color red. Many marketers still use the color for call to actions or areas of a website that they want to draw the eye too.

Orange's color meaning shines through in logos like Nickelodeon and The Home Depot. Nickelodeon is a children's channel and so the logo accurately represents the creativity and enthusiasm that a children's show would need through their playful orange color. The Home Depot sells products that you can use for your home. Many Do it Yourselfers (DIY) head to Home Depot to buy products to renovate their home or make adjustments. The orange logo here also represents creativity.

## Yellow Color Psychology

In color psychology, the color meaning for yellow revolves around sunshine. It evokes feelings of happiness, positivity, optimism, and summer but also of deceit and warning. Some brands choose to use a cheerful yellow color as the background or border for their website design. You can also choose to use yellow for your 'free shipping' bar at the top of your website if it matches the rest of your website's design. A little touch of yellow can help your website visitors associate your store with something positive.

The color yellow is used by brands such as Ferrari and Ikea. Many people dream of driving a Ferrari. The luxury brand is associated with this feeling of happiness, summer and a carefree lifestyle. The Ikea brand also uses the color yellowing in their branding. What does buying furniture have to do with happiness? Well, let's look at who's likely buying those products. Many people who've just bought their first home or are moving out for the first time, will head to Ikea to buy products to furnish their home. This milestone is usually filled with happiness and optimism for the new change making yellow a great color to associate with the brand.

## Pink Color Psychology

Pink is a popular color for brands that primarily serve a female audience. In color psychology, pink's color meaning revolves around femininity, playfulness, immaturity and unconditional love. Some brands have chosen to use the color pink for the product packaging especially for girl's toys. Whereas other brands highlight the pink color in their logo, website design, or to highlight key messages.

Since the color meaning for pink includes femininity, it's no surprise that brands like Victoria's Secret and Barbie use the color so heavily. Victoria's Secret even named one of their brands Pink. On their website they use a combination of pink and black to highlight key marketing details. Their logo and certain marketing messages also uses the color pink. On Barbie's website, CTA's are in a bright pink color. Their top navigation and drop down menu also subtly use the color. And of course, their product packaging and logo reinforce the feminine pink color in their branding.

## Green Color Psychology

In color psychology, green is highly connected to nature and money. Growth, fertility, health, and generosity are some of the positive color meanings for the color. The color meaning for green also carries some negative associations such as envy. If you're in the health or fitness niche, you might choose to add more green to your online store. For example, your homepage banner image or logo might include a green background.

The use of green is made popular by brands such as John Deere and Roots. John Deere's entire brand revolves around nature. Their product line centers around landscaping, agriculture, lawn care equipment and more. The color green is so ingrained into their branding that even their

equipment is the same shade of green as their logo. That way, when someone sees that product, they'll immediately know it's a John Deere. Roots is a fashion retailer. However, when browsing their banner images and marketing materials, you'll often find their models in natural outdoor settings. The green logo blends well with their nature imagery helps them attract outdoor enthusiasts as their target market. So even if your products don't necessarily tie to a niche, you can use color to help you attract a specific demographic.

### Color Psychology Blue

In color psychology, blue's color meaning ties closely to the sea and the sky. Stability, harmony, peace, calm and trust are just some of the feelings your customer may feel about your brand when you integrate the color blue into your branding. Conversely, blue can also carry some negative color meanings such as depression and can bring about a sense of coldness. Blue can be used in your website's logo or on your website's top navigation. Some retailers add their guarantee, trust certification or free shipping icons in a blue color to strengthen the trust aspect the color is known for.

Tech brands like Facebook, Twitter and Skype often use blue in their marketing. But retailers like Walmart and Oral B also use the color. The blue in the Walmart logo can help position the brand as trustworthy, reliable, and relaxing. After all, Walmart is a place where you can buy groceries and do shopping all in one convenient location. Oral B is a dental health brand that sells toothbrushes. Healthcare niches, like Oral B, typically use blue in their branding to help people associate the brand with a quality, reliable and safe product.

### Purple Color Psychology

In color psychology, purple is a royal color. The color meaning for purple is connected to power, nobility, luxury, wisdom, and spirituality. But avoid using the color too much as it can cause feelings of frustration. Some perceive its overuse as arrogant. You can add hints of purple to your website's design such as on your free shipping bar, [your logo](#), and as an accent color in your graphics.

Purple is a color brands like Hallmark and Yahoo use. When browsing both websites, you'll notice that purple is an accent color. On Hallmark, the logo and the top navigation are purple but the rest of the website uses a variety of other colors. On Yahoo, the logo, top navigation words, and Yahoo icons like Mail use the color purple.

### White Color Psychology

In color psychology, white showcases innocence, goodness, cleanliness, and humility. Keep in mind, that this is the meaning in North American culture. In some parts of the world, white has the opposite meaning. You'll want to keep this in mind based on the target audience you serve. The color meaning for white also has a negative side where it symbolizes sterility and cold. On an ecommerce website, white tends to be the most used color. You'll likely use it as the



background color for your product photo. Your pages will likely have a white background with a black font. This is because, black font on a white background is the best color combination for readability.

White is the color ASOS and Adidas uses in their marketing. On ASOS, the words in the header, logo, and background are white. When the background is grey or black, the font is white and when the background is white the font is black. On Adidas' online store, the top navigation is black. The use of a white logo helps create contrast. Since their background is white, they've chosen to use grey as a background for product photos to add another tone to the mix. Many brands who have white as a central color tend to pair it with black or grey.

### Black Color Psychology

Black is a popular color in retail. In color psychology, black's color meaning is symbolic of mystery, power, elegance, and sophistication. In contrast, the color meaning can also evoke emotions such as sadness and anger. Many fashion retailers have used black in their logos. Black is also a popular color for text as it's an easy color to read. Some brands choose to use black and white photos for lifestyle banner images or icons to create a certain tone or consistency on their website.

Black is a color retailers such as Chanel and Nike use. Chanel uses black for their logo and has several black and white images on their website to maintain a consistent look. Once you start browsing their website, a thick black top navigation background appears. They use a black font on their graphics for images and for their text. Noticeably, their call to actions are also black. Many retailers in the fashion niche, especially, use black call to actions that contrast well against a white background. Nike also uses a black, white and grey color scheme for their website. Their logo and font is black throughout their website. Thus, making the website easy to read. Like Chanel, their call to actions are also black which draws visual emphasis to add to the item to your 'bag' (cart).



### Grey Color Meaning

In color psychology, grey represents neutrality and balance. Its color meaning likely comes from being the shade between white and black. However, grey does carry some negative connotations, particularly when it comes to depression and loss. Its absence of color makes it dull. Grey can be used for font color, headers, graphics, and even products to appeal to a mass audience.

Apple is an example of a brand who uses the color grey in their branding. After all, many of their laptops are in a grey or silver-tone as its neutral color doesn't put anyone off. On their website, they use the color grey for their header to contrast against a white logo. However, throughout their branding, you'll see a balance between white, black and grey used which can help maintain a clean, neutral look.

### Brown Color Psychology

Brown is an earthy color. After all, it's the color of earth, wood and stone. So naturally, color psychology highlights that the color meaning for brown relates to comfort, security and a down to earth nature. In marketing, you'll find that brown is often used for natural products and food. Brown is a color that shows up in logos, banner images, and sometimes even text due to its contrast on a white background.

### Optical illusions don't "trick the eye" nor "fool the brain", nor reveal that "our brain sucks", ... but are fascinating!

They also teach us about our visual perception, and its limitations. My selection emphasises beauty and interactive experiments; I also attempt explanations of the underlying visual mechanisms where possible.

Optical illusion« sounds derogative, as if exposing a malfunction of the visual system. Rather, I view these phenomena as highlighting particular good adaptations of our visual system to its experience with *standard* viewing situations. These experiences are based on normal visual conditions, and thus under unusual contexts can lead to inappropriate interpretations of a visual scene (=“Bayesian interpretation of perception”)

An **optical illusion** (also called a **visual illusion**<sup>[2]</sup>) is an illusion caused by the visual system and characterized by a visual percept that arguably appears to differ from reality. Illusions come in a wide variety; their categorization is difficult because the underlying cause is often not clear<sup>[3]</sup> but a classification<sup>[1][4]</sup> proposed by Richard Gregory is useful as an orientation. According to that, there are three main classes: physical, physiological, and cognitive illusions, and in each class there are four kinds: Ambiguities, distortions, paradoxes, and fictions.<sup>[4]</sup> A classical example for a physical distortion would be the apparent bending of a stick half immersed in water; an example for a physiological paradox is the motion aftereffect (where, despite movement, position remains unchanged).<sup>[4]</sup> An example for a physiological fiction is an afterimage.<sup>[4]</sup> Three typical cognitive distortions are the Ponzo, Poggendorff, and Müller-Lyer illusion.<sup>[4]</sup> Physical illusions are caused by the physical environment, e.g. by the optical properties of water.<sup>[4]</sup> Physiological illusions arise in the eye or the visual pathway, e.g. from the effects of excessive stimulation of a specific receptor type.<sup>[4]</sup> Cognitive visual illusions are the result of unconscious inferences and are perhaps those most widely known.<sup>[4]</sup>

### Stages in the Design Process

*Design is a creative process that occurs in many settings. The steps outlined below offer a structured format for a formal design process based on models from industry.*

**Analyze the situation**

Before beginning the design, sort out what problem you are trying to address.

**Write a brief**

Write a short statement giving the general outline of the problem to be solved.

**Research the problem**

Sometimes a problem can be solved "straight out of your head," but in most cases you will need to gain some new information and knowledge.

**Write a specification**

This detailed description of the problem spells out what the design must achieve and what limitations will affect the final solution.

**Work out possible solutions**

Combine your ideas with information obtained from your research to suggest several possible design solutions. Sketch several possibilities on paper.

**Select a preferred solution**

Decide which solution to develop. Although the chosen solution should, ideally, be the one that best satisfies the specifications, other constraints such as time, cost, or skills may limit the decision.

**Prepare working drawings and plan ahead**

Draw the chosen design including all the details that are important to its construction.

**Construct a prototype**

Make the product. In industry a model is usually built first and the final product is developed from it, but in most classrooms, the model is the final product.

**Test and evaluate the design**

Testing is ongoing as the construction progresses, but a final test of the entire system or model proves if the project does the job for which it is designed. Look back at the specifications and check the requirements carefully. Ask such questions as: How well does the design function? Does the design look good? Is the product safe to use? Were suitable materials used? How could I have improved on my design?

**Write a report**

The report provides evidence of your work in analysis, planning, designing, carrying out the practical work, evaluating, and communicating.

## Unit V

**The Graphic Design Process In 6 Steps**

- Step 1 - Review the Design Brief. Read through the design brief several times. ...
- Step 2 - Research and Discovery. Research will make you a better designer, saving you a lot of thinking time. ...
- Step 3 - Brainstorm and Sketch Concepts. ...
- Step 4 - Build On Your Concepts. ...

- Step 5 - Evolve and Iterate Your Concept. ...
- Step 6 - Finished.

### The Graphic Design Process in 5 Steps

- **STEP ONE: INFORMATION GATHERING.**
- **STEP TWO: CONDUCT RESEARCH.**
- **STEP THREE: BUILD A STRATEGY.**
- **STEP FOUR: DEVELOP YOUR CONCEPTS AND PRESENT.**
- **STEP FIVE: PRODUCTION & COMPLETION.**

### What is Idea Generation? - Definition, Techniques and Success Factors

Ideas are the key to innovation. Without them, there isn't much to execute and because execution is the key to learning, new ideas are necessary for making any kind of improvement.

It's obvious that ideas alone won't make innovation happen, as you need to be able to build a systematic process for managing those ideas. The point of ideation isn't just about generating tons of them but about paying attention to the quality of those as well.

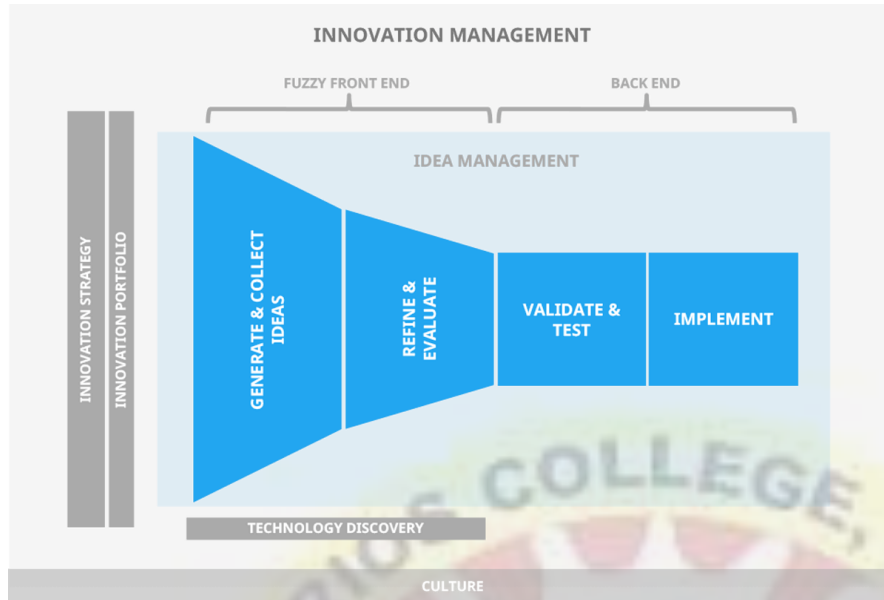
We agree that it can sometimes be difficult to come up with more of those high-quality ideas. It's not unusual to get stuck in our old habits and routines when we're supposed to be creating something new.

To break out of that rut, we've decided to look into idea generation as a whole as well as to introduce some of our favorite **tips, tools and techniques** that can be used to generate new ideas more systematically.

#### What is idea generation and why it's important?

Idea generation is described as the process of creating, developing and communicating abstract, concrete or visual ideas.

It's the front end part of the idea management funnel and it focuses on coming up with possible solutions to perceived or actual problems and opportunities.



As mentioned, ideas are the first step towards making improvement. Us making progress as individual **human beings** depends on new ideas. From the perspective of an individual, new ideas can help you to move forward if you feel stuck with a task or are unable to solve a certain problem.

Perhaps you're looking for new ways to overcome a creative block or you're after a better solution to your problem?

Maybe you need new ideas so that you can fully explore a new opportunity?

When it comes to your **organization**, generating and collecting new ideas from your employees is the best way to uncover creative, tacit knowledge. The ability to create and develop new ideas allows you to:

- **Stay relevant**
- **Make positive change happen in your organization**

**“Creative thinking inspires ideas. Ideas inspire change” – Barbara Januszkiewicz**

Perhaps your organizational goal is to improve your and your team's efficiency or you need new ideas for making your product better?

Regardless of your goals or the types of ideas you're looking for, the purpose of new ideas is to **improve the way you operate**.

On a larger scale, **economies** depend on innovation to drive growth and increase well-being. Innovation creates new technologies and businesses, which provide new jobs for people.

So, although innovation isn't about ideas alone, they are an important part of the equation as there wouldn't be one without the other.

### Tools and techniques for generating ideas

Okay, now you need ideas. What do you do?

The odds are that you'd run a brainstorming session. It has, however, been shown that brainstorming not only takes more time and leads to less ideas, but also worse ideas than if the same participants had just tried to come up with ideas by themselves.

There are several other reasons why brainstorming may not be the best way to come up with ideas. Scheduling, organizing and documenting the session in a usable format will all take up even more time.

Although there are certain ways to improve brainstorming performance, it's beyond the point. The point is that you shouldn't automatically default to brainstorming.

There are, however, some other useful techniques that might be worth giving a shot to challenge conventional thinking. Because you're going to need different ideas, it's good to have a few techniques in mind for generating them. Most of these ideation methods can be used for more effective brainstorming but also for other type of ideation.

### Idea Challenge

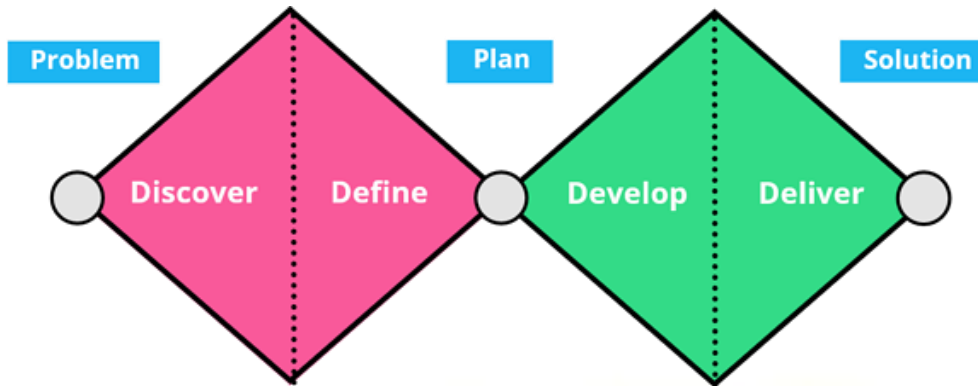
Idea challenge is a focused form of innovation where you raise a problem or opportunity with the hopes of coming up with creative solutions.

The point of idea challenge is to participate in ideation and **generate ideas around a pre-defined theme** for a limited period of time.

It allows you to form a specific question and direct that question at a specific audience to receive new ideas and unique insights.

Before setting up an idea challenge, it's important to define what you want to accomplish with it.

Because there are two types of idea challenges, **problem** centric and **solution** centric approaches, you should first clarify whether you're looking to **identify challenges** or **develop potential solutions** for them.



When organizing an idea challenge, there are different parameters that you can choose to achieve the outcomes you're looking for, such as **theme, audience, responsibilities, time, or channels**.

Keep in mind that idea challenge is the best technique when you need to generate lots of new ideas. It may not be the most effective way to generate ideas if you only involve a few experts in your ideation process as it's proven to be more useful for engaging large audiences.

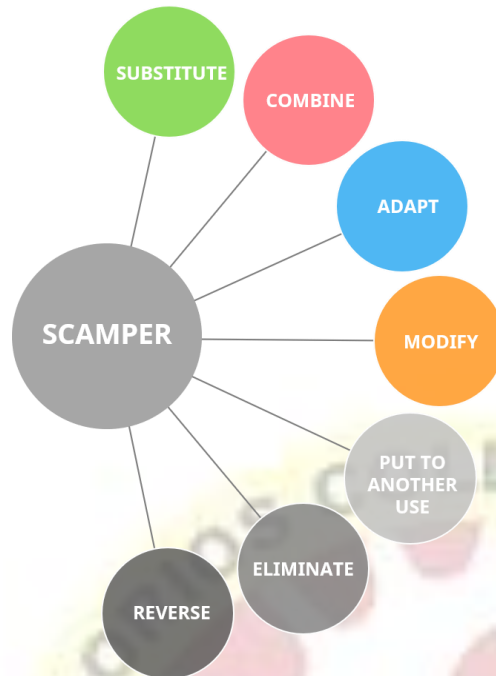
Although idea challenge enables you to gather lots of ideas fast, careful planning takes time and might not be worth the effort if there are no resources to execute it properly. Also, right timing is necessary for it to succeed.

We've written a comprehensive guide to idea challenges you can read by clicking below.

### SCAMPER Technique

The SCAMPER technique is created by Bob Eberle, and is a method used for problem-solving and creative thinking. It's a holistic way of applying critical thinking to modify ideas, concepts or processes that already exist.

The purpose of the SCAMPER is to make adjustments to some parts of the existing idea or process to reach the best solution. It consists of seven actions that can be used to replace parts in the process:



- 1. Substitute** – Substitution technique refers to replacing a part of your product, concept or process with another to achieve even better outcome.
- 2. Combine** – The combine technique explores the possibility to combine two ideas into a single, more effective solution.
- 3. Adapt** – Adaptation analyses the possibilities to make the process more flexible and focuses on other similar incremental improvements to the idea, process, or concept.
- 4. Modify** – Modifying the idea looks at the problem or opportunity from a bigger perspective and aims for improving the overall results, not just the idea.
- 5. Put to another use** – This approach focuses on finding ways to use the idea or existing solution for another purpose and analyses the possible benefits if applied to other parts of the business.
- 6. Eliminate** – The elimination technique is quite straightforward: it examines the possible outcomes if one or more parts of the concept were eliminated.
- 7. Reverse** – This action focuses on reversing the order of interchangeable elements of an idea.

Although the SCAMPER technique was originally designed for brainstorming sessions, it can be applied to your own thought processes as well.



Often, people tend to focus on finding the next big idea. When generating new ideas, it is easy to forget that the continuous incremental improvements are the ones that really make an impact in the long run.

When you make ideation a constant practice, you'll have a good chance to win that big idea through a number of small ones. Sometimes, all it may take is to have **look at what you've already got**. Using your existing ideas or processes as a starting point can reveal a lot about your current situation, which is what the SCAMPER technique is about.

### **Opposite Thinking**

Opposite/reverse thinking is a technique that can help you **question long-held assumptions** related to your business. It's a useful tool to consider if you feel your team is stuck with the conventional mindset and coming up with those "out-of-the-box ideas" seems to be difficult.

Often, finding the best solutions aren't found through a linear thought process. Although our brains are wired that way, opposite thinking can help us question the norm.

With this type of thinking, you consider the exact opposite of what's normal. You can even think backwards to find unconventional solutions.

### **Brainstorm Cards**

**Brainstorm cards** are a useful tool created by the Board of Innovation for coming up with dozens of new ideas **related to whatever challenge or problem you are currently working with**. **Brainstorm cards help you consider external factors such as: societal trends, new technologies, and regulation in the context of your business.**

## BRAINSTORM CARDS

### How to use the Brainstorm Cards?

1. Start from a challenge or problem.
2. Use the cards to be inspired; start with individual sessions of 20 minutes.
3. Share the ideas within the team and build further on the best ones.

### 4 sources of Innovation



Technological Trends



Regulatory Scenarios



Outsider Perspective



Customer Trends

## WHAT IF YOU COULD USE ARTIFICIAL INTELLIGENCE?

Imagine realtime recordings to be used as news flashes, instruction videos, condensed pieces of learning content, etc.

### Example



All online questions directed to the customer service of KLM on Facebook and related to bookings or flight numbers are handled by chat bots.

This approach allows you to generate a great number of ideas with little effort. Although many of the ideas won't make sense, this tool can still be very beneficial for getting you out of the rut if you're suffering from a creative block.

## Analogy Thinking

Analogy thinking is a technique for using information from one source to solve a problem in another context. Often one solution to a problem or opportunity can be used to solve another problem.

Analogy thinking can, for example, be used for analyzing a successful business, identifying what makes it great, and then applying those same principles for your business. This is an effortless method for coming up with **new ideas that are pre-validated**.

You've probably heard of the countless start-ups that are the "Uber for [insert industry here]". This is exactly the method every one of those companies has used. However, although this is such an easy and intuitive tool to use, the obvious combinations are likely to be very competitive.

The aforementioned techniques are some of our favorites for generating ideas but definitely not the only ones out there. The ones that work for you can be found by testing different options.

## Managing ideas

Although generating ideas is often the easy part of innovation, collecting and managing them can be challenging without a proper tool.

Because people often come up with new ideas then and there, they should be able collect these ideas right when they arise.

Many people use digital or physical notebooks to write down their ideas on the go. This method works well when you just want to make notes for your own use. However, when you want to share that information with others and ask for feedback for further improvement, this isn't the most effective way.

If you need to involve more people in your ideation process, you might want to consider a dedicated idea management tool to make sure all of the potential ideas are collected in one place.

### Idea Management Tool

As idea management is such a vast topic and larger companies are always going to have thousands of ideas, using a dedicated idea management tool often makes sense for most companies.

An idea management tool serves as the backbone of your idea management process. It's where you'll collect the ideas, discuss them, evaluate and prioritize them, and keep track of their progress, as well as the strategic direction of your ideation activities.

Managing ideas via a dedicated tool is only as effective as the underlying process behind it. To make ideation a continuous habit, you should build a process that makes generating and refining new ideas easy. Too complex processes will only frustrate users, so don't try to make it too complicated.

### Succeeding with Idea Generation

Before engaging more people to use these tools and techniques for generating more ideas, there are a few more tips that can help you get more out of your ideation methods.

- **Define the problem or opportunity**

Although this seems obvious, the more accurately you're able to describe your current or perceived problem or opportunity, the better chances you have of actually generating useful ideas.

Before you start, try to gather as much information about the problem as possible to get to the heart of the problem. Identify what you already know about it and what information is still needed.

- **Involve the right people**

For your ideation to be as productive as possible, it is important to involve the right people to the process. Engage those people who know about the topic and are genuinely interested in making a change in your organization.

If your plan is to engage a larger group of people to generate ideas, make sure your audience is relevant and well informed on the subject.

- **Set constraints**

Communicating that any idea is a good idea may hinder creativity, so make sure your goals are ambitious and specific enough. One way to get more of actually creative ideas from your audience is to set constraints.

If your general goal was to reduce costs, it's likely that people would suggest ideas such as spending less on office equipment or buying cheaper coffee. However, the ideas you'll get will be a lot different if you'd ask: "*What could we do to save 70% on costs?*".

Without constraints, people typically come up with small suggestions for improvement with little or no creativity. But when describing the challenge in more detail and setting more ambitious goals, people really need to use their imagination to achieve a desired outcome.

## Conclusion

The purpose of generating new ideas is about improving what already exists as well as coming up with something new.

Often when trying to solve a problem or approaching a new opportunity, people use existing solutions or mental models instead of trying to come up with new ones. The problem with this approach is that it doesn't allow you to **explore different opportunities** and it narrows down the number of possible solutions.

Coming up with completely new ideas can help you approach your problem or opportunity from a new perspective. It enables you to expand the range of ideas beyond your current way of thinking which eventually leads to more ideas.

There are several different methods and techniques that can be used to challenge that conventional mindset and to get more of those high-quality ideas. The ones introduced in this post can be used as a reference in your brainstorming sessions or when generating ideas on your own.

The next step towards generating more ideas would be to try some of these methods in practice. You can download our **idea generation toolkit** that consists of some of our favorite tools for idea generation.