



Received: 26-11-2025  
Accepted: 06-01-2026

## International Journal of Advanced Multidisciplinary Research and Studies

ISSN: 2583-049X

### Mind maps, tools for personal development

<sup>1</sup> Gheorghe Neamțu, <sup>2</sup> Marinela Intă, <sup>3</sup> Ioan Țincu, <sup>4</sup> Claudiu Isarie

<sup>1</sup> Ph. D. Engineer, Associate Professor at "Lucian Blaga" University of Sibiu, 10 Victoriei Street, Sibiu, Romania

<sup>2</sup> University Lecturer, Ph. D. Engineer, Professor at „Lucian Blaga” University of Sibiu, 10 Victoriei Street, Sibiu, Romania

<sup>3</sup> Ph. D. Mathematician, Lecturer at „Lucian Blaga” University of Sibiu, 10 Victoriei Street, Sibiu, Romania

<sup>4</sup> Ph. D. Engineer, University lecturer at „Lucian Blaga” University of Sibiu, 10 Victoriei Street, Sibiu, Romania

DOI: <https://doi.org/10.62225/2583049X.2026.6.1.5608>

Corresponding Author: Gheorghe Neamțu

#### Abstract

This scientific paper proposes to highlight the different techniques and strategies through which researchers explore the concept of effective mental maps, thus exploring how they become revolutionary when they think, work or learn. Thus, those interested can gather information on the areas of use of mind maps, learn about the important steps in

constructing a mind map, the benefits of using mind maps, as well as the importance and the way in which these graphical structures are realized and used in doctoral thesis research. At the end of the scientific paper, a case study of ten mind map models and their templates is presented and conclusions are drawn in the field of research.

**Keywords:** Research, Note, List, Mind Map, Creativity, Memory, Organizational Skill

#### 1. Introduction

The usual note taking methods or lists made for the exposition of ideas are not always sufficient for the collection of complex opinions to make some connections or links between the observations or concepts of the researchers. They are also called spider diagrams. For this reason, the mind map method was invented, which is an effective technique by which the considerations, findings, observations, opinions or views of some researchers in certain fields of work are represented. Through them researchers better organize their thoughts, increase their scientific productivity, creativity, memory and organizational skills. Practically speaking, a mind map is a diagram that connects information around a central topic <sup>[1]</sup>. Some authors call it a diagram used for visually organizing information in a hierarchy, showing the relationships between elements of the whole <sup>[2, p. 139]</sup>. Mind maps can be used professionally, personally or educationally. When it comes to organizing thoughts or ideas, this concept can be extremely effective. Everyone should agree that extracting ideas is much more effective in memorization than writing them down in sentences, because our brains capture more images than letters. Therefore, let's make the most of mind maps by using different, but creative, mind map ideas, depending on the subject addressed <sup>[3]</sup>. According to other authors the mind map is also called mindflow or brainweb <sup>[4, p. 453]</sup>. Mind maps differ from concept maps in that mind maps are based on a radial hierarchy (tree structure) denoting relationships with a central concept <sup>[5, p. 4]</sup>, whereas concept maps can be more free-form, based on connections between concepts in more diverse patterns <sup>[6, p. 78]</sup>. Also, concept maps typically have text labels on the links between nodes. However, either can be part of a larger personal knowledge base system. In our conception, mind maps are the way in which we, as a researchers, can graphically, visually represent certain thoughts, concepts or ideas that occur in my mind about a particular area of research in my everyday life. They help me to think in depth, to make certain connections between concepts and to train my mind by using memory and personal creativity. So mind maps, because of their visual, radiant nature and the fact that they faithfully represent what I am thinking, are an ideal tool in reading materials intelligently for study or research.

#### 2. Literature review

The concept of a mind map first officially appeared under this name in 1974, when British author Tony Buzan <sup>[7, pp. 249-257]</sup> who popularized this concept, also known at the time as 'radiant thinking'. His thought-mapping techniques were inspired by great personalities in history, such as Leonardo Da Vinci, Galileo Galilei and Albert Einstein, who used images, diagrams and symbols to transcribe their ideas and thoughts onto paper.

The first mind map to be discovered dates back to 300 AD, drawn by the ancient philosopher Porphyry, demonstrating the relationship between the material and immaterial things in our world. In Porphyry's mind map, he illustrates how he categorizes life on Earth, including living things and inanimate objects. As he categorizes our world philosophically, he shows a connection between all of these by depicting a tree. This concept is used as a technique for generating ideas or solutions and can be used individually, as part of a team, in the workplace or at school as brainstorming. Brainstorming is a dynamic, collaborative technique that encourages the free flow of ideas and creativity, fostering an environment conducive to innovation. It is a powerful tool that allows individuals and teams to think outside the box, explore new possibilities and

find new solutions and ideas. Mind mapping and brainstorming are two techniques that can be used together to generate new ideas and concepts, increase creativity and productivity, as well as solve problems and find solutions. Although distinct, the two concepts share a common goal of stimulating the mind and organizing thoughts and ideas in an efficient and practical way. The two can be integrated together by making mind maps during a brainstorming session so that ideas can be mapped visually. The theme or problem can be placed at the center, and various ideas or solutions can flow from this.

As the brainstorming progresses, participants can add branches, sub-branches and keywords to capture and connect related ideas. An example of a mind map is shown in Figure 1.

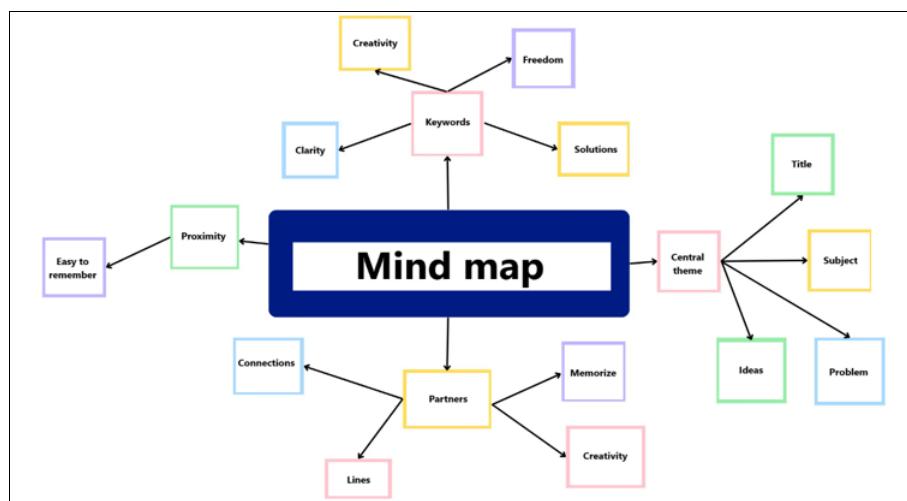


Fig 1: Example of a mind map project

### 3. Domains of use of mind maps

**3.1 On a personal plan.** Mind maps can be used in processes involving personal development. The concept can be a valuable facilitator in our discovery and development as researchers, providing a creative and effective approach to organizing, selecting and prioritizing our own thoughts or ideas. For example, we can use this concept to gain insights into our strengths or weaknesses, likes and dislikes, emotions, discovering passions or even weighing a decision we are making. In this case, we can use a mind map to clarify our primary or secondary research goals, our aspirations and desires, effectively visualizing the steps that need to be taken, following a "red wire", to get to the outcome or results we want.

**3.2 On a educational plan.** In educational environments that require critical thinking, creativity, and effective organization, we often find ourselves looking for new tools to enhance our learning experience. Therefore, mind maps have been a powerful ally in our academic journey. This concept has given us a more structured and creative approach to traditional note-taking, brainstorming, organizing ideas, and learning more effectively. Because of this, our brains have been programmed to learn more easily with visual techniques, mind maps are an extremely effective way to learn new information, improve memory and creativity, and a deeper understanding of the information we had to accumulate for educational purposes during our training as PhDs in engineering science.

**3.3 On a professional plan.** Today, organizations are constantly looking for new ways to increase efficiency, productivity, collaboration and finding effective solutions. Mind maps can be a great way of unlocking the potential of all employees and giving them the opportunity to come up with new ideas or solutions. This concept offers an approach that can be found within a team as well as on an individual level, stimulating employees' creativity, memory and communication to solve problems, plan and organize ideas.

### 4. Important steps in creating a mind map

Whether it's a necessity at work, whether we want more effective learning or clarity to achieve personal ideals and goals, here are six simple steps to create a mind map:

**1. Establishing the main topic.** Start by identifying the central idea or main topic you want to explore. This central idea should be concise and clear, as it will serve as the focal point of your mind map. From the center, where this main idea will be located, other ideas or concepts will start;

**2. Add the main ideas.** Starting from the central idea, draw some main ideas outwards. Each main branch represents a key category or sub-theme related to the central idea. Use short phrases or keywords for each main branch;

**3. Expand by sub-points.** From each main idea, you can draw subpoints that further expand the topic or problem. These sub-points can be supporting ideas, examples or details related to the main ideas. Try to use keywords or short phrases for these sub-points;

**4. Use pictures, symbols or other visual elements.** Try to consider incorporating visual elements, such as photos, symbols or pictures, to make your mind map more visually appealing and easier to memorize and visualize;

**5. Make connections.** Look for connections and relationships between different main ideas and sub-points. Use lines or arrows to connect related ideas or to suggest the flow of information. This will help you better visualize the connections and associations between the different concepts in your mind map;

**6. Check and refine.** Once you have finalized your mind map, step back and revise it. Make sure the structure and organization of your mind map makes sense to you. You can also refine and adjust the layout, colors, and visuals to make your mind map more visually appealing and effective.

## 5. Benefits of using mind maps

Mind maps have many benefits, expanding our thinking capacity and our ability to think laterally in any situation, thus:

- ⊕ improves the ability to see situations as a whole;
- ⊕ improves the ability to see detailed information;
- ⊕ improves the ability to remember complex information;
- ⊕ improves the ability to sort through mental clusters;
- ⊕ improves the ability to cope with information overload;
- ⊕ improves imagination;
- ⊕ improves memory and retention;
- ⊕ improves concentration;
- ⊕ improves note-taking ability;
- ⊕ improves the ability to study;
- ⊕ improves the ability to learn;
- ⊕ helps us discover hidden meanings in bits of information;
- ⊕ helps save time;
- ⊕ makes learning more fun;
- ⊕ clarifies our goals;
- ⊕ clarifies our ideas;
- ⊕ stimulates creative associations through brainstorming.

## 6. Creating and using mind maps in PhD thesis research

The research methodology in a PhD thesis, with specific approaches, decisions and tools, aims to fulfill the requirements of the main objective of the research activity, but also to create the premises for further research. The research methodology is always completed in the course of scientific research through the use of mind maps, designed and developed in a reference work on creative clarification of topics<sup>[8]</sup>. Through this method, the scope of study for the current state of research in the field was delimited, by going through a number of stages that are directly linked to the main objective, in order to outline the logical thread of the research. It was carried out taking into account the requirements of the main objective and the requirements of the specific objectives related to each part of the PhD thesis<sup>[9, p. 138]</sup>. The key words characterizing each stage of research formed the foundation on which the PhD thesis was developed. The applied research methodology is the authors original conception. It can be easily applied in any research and has helped us to deepen our understanding of the procedures, good practices and concrete methods for obtaining results, developing our research skills and capacity, our behavior and our professional ethics and deontology. The research methodology used is the know-

how of a rational approach to find the truth, to find the right, appropriate and precise solution, which is how we have achieved our goal in this PhD thesis<sup>[9, p. 138]</sup>.

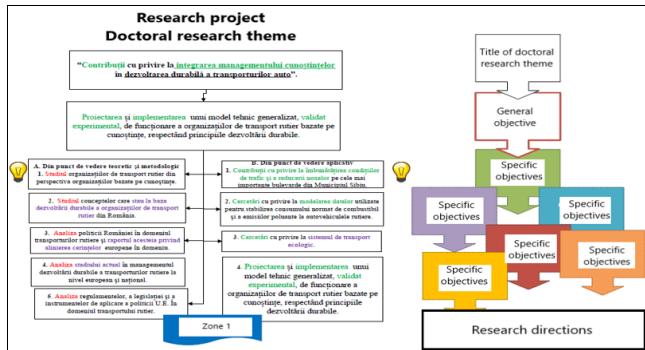
We would like to mention that during the 3-5 years of doctoral studies in the doctoral school where he/she is registered, each doctoral student will have to present and defend a number of four to six progress reports, plus the PhD thesis in the form of a project in front of a committee of four to five members. For this reason, mind maps used for PhD thesis research are the support tools to concretize the visual communication of personal achievements.

For the realization of the mind maps for the PhD thesis we used:

- ⊕ keywords (ex. knowledge, management, sustainable development, organization, car transport, analysis, study, research);
- ⊕ color coding to follow the 'red thread' of the research (e.g. red - presentation, study, analysis; purple - current status; green - own, original contributions);
- ⊕ linking elements (e.g. arrows colored red, purple, green, black, black, blue, yellow);
- ⊕ marking of the chapters and sub-chapters from which the structure of the scientific works, elaborated and presented in periodical publications of the genre, in congresses or exhibitions or national or international meetings (conferences), have resulted (e.g. "paper").

A "red wire of research" is followed during the research of a PhD thesis, starting with the research project, continuing with the 4 research reports and finally with the PhD thesis, using the mind map method.

All mind maps in the PhD thesis, have been created using VISIO computer software. When we create a brainstorming diagram (or mind map) in VISIO computer software, you create a visual archive of your ideas, like the drawings in the figures below. The diagram can help you quickly recognize and order themes and hierarchies, making it easier to develop a plan of action out of a chaotic brainstorming session. VISIO is a very popular software because it's a Microsoft tool intentionally designed for making diagrams and vector graphics. In addition, using VISIO for mind mapping will allow us to access its beautiful templates, templates and presets that are very useful in building creative and persuasive maps. Therefore, let's now move on to the much awaited part, where you will learn the simplest steps on how to use it in mind mapping. VISIO offers great tools for users to enjoy. It's part of the Microsoft family, so the interface is similar to all the software in that family, especially Word. However, there would still be divergences in each program, as would VISIO. The mind maps made for the PhD thesis are the masterpieces created using this software. In VISIO software there are two main ways to use a brainstorming diagram (mind map). The first is the main idea that we started with and then hierarchically generated related topics and sub-topics to arrive at a large number of different possible approaches. The second is how we captured all the ideas as they are expressed which we then organized into a hierarchical diagram. We then reviewed and refined the results between us and the scientific supervisor (coordinating professor) of the PhD thesis. This method is very useful during a brainstorming session where the PhD student and the coordinating professor contribute ideas in rapid succession. In this setting, hierarchies are not always obvious and we need to capture ideas quickly.



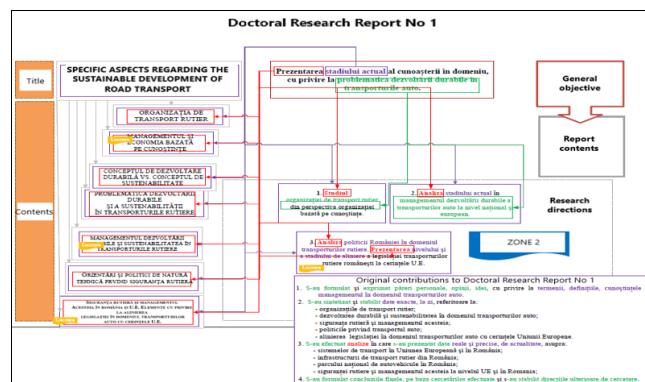
**Fig 2:** Mind map for PhD thesis research project [9, p. 337].

The doctoral research project (Figure 2), contains:

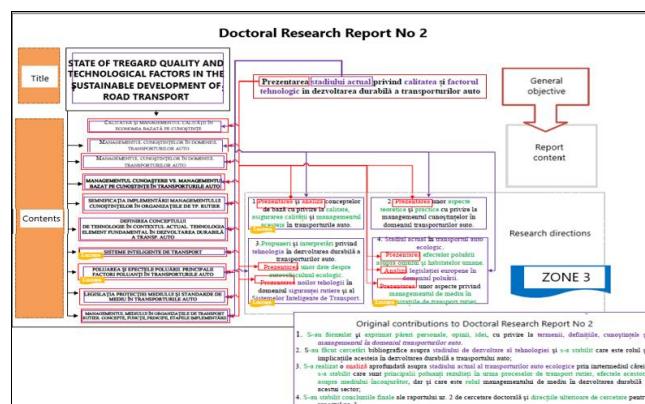
- doctoral research topic;
- title of the doctoral research topic;
- general objective of the doctoral research topic;
- specific objectives of the doctoral research topic;
- doctoral research directions.

For the conception and writing of the PhD thesis we have realized four research reports.

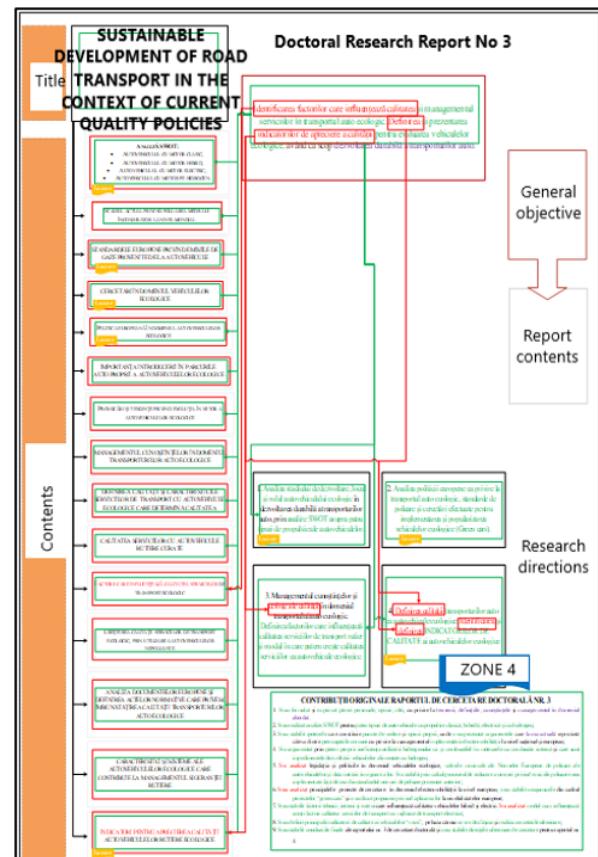
The mind maps of the four doctoral research reports, and the PhD thesis are shown in Figures 3, 4, 5, 6 and 7.



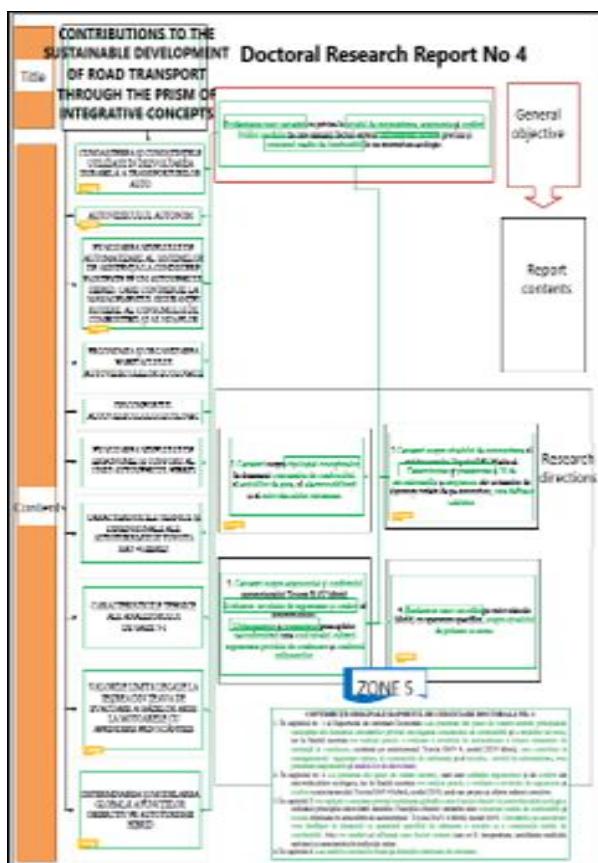
**Fig 3:** Mind map for PhD thesis progress report No 1 [9, p. 338]



**Fig 4:** Mind map for PhD thesis progress report No 2 [9, p. 339]



**Fig 5:** Mind map for PhD thesis progress report No 3 [9, p. 340]



**Fig 6:** Mind map for progress report No 4 [9, p. 341].

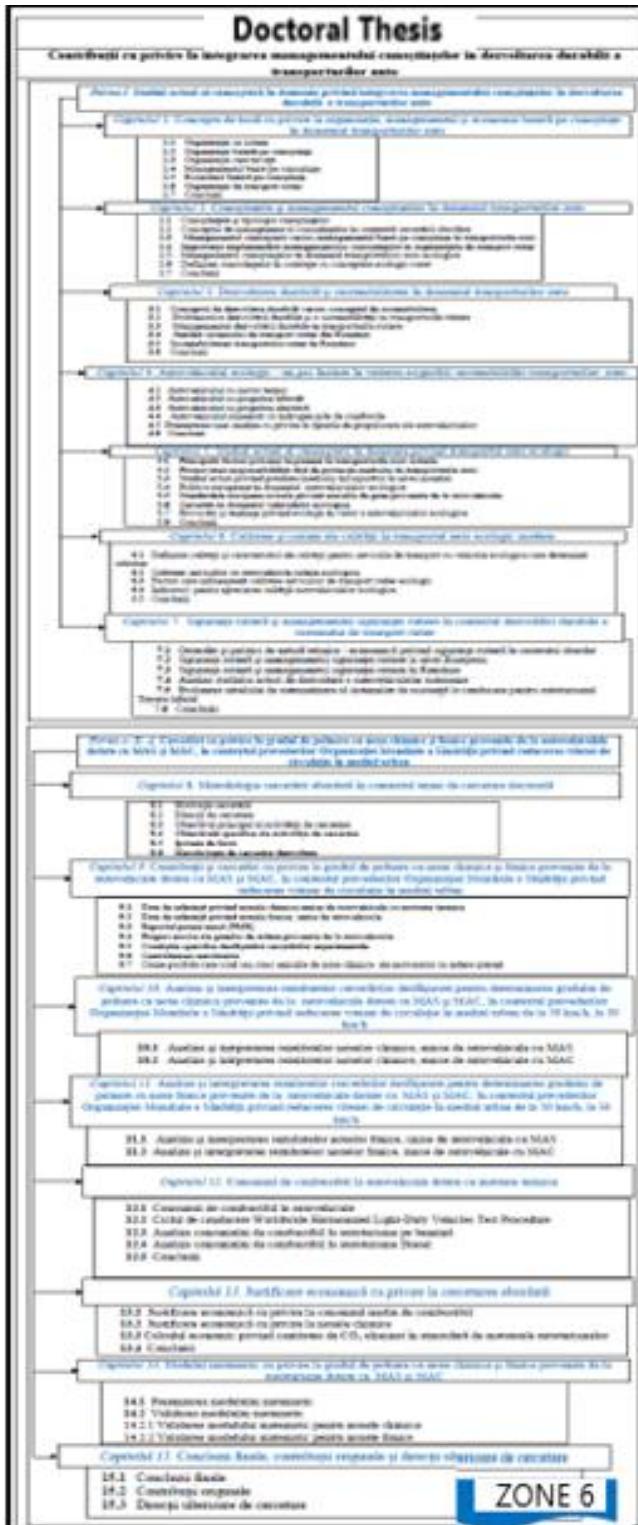


Fig 7: Mind map for PhD thesis [9, p. 342]

The PhD research project, the four progress reports and the outline comprising the PhD thesis are placed on a mind map called the general mind map, which contains all the specific elements in graphical form. These are shown in Figure 9.

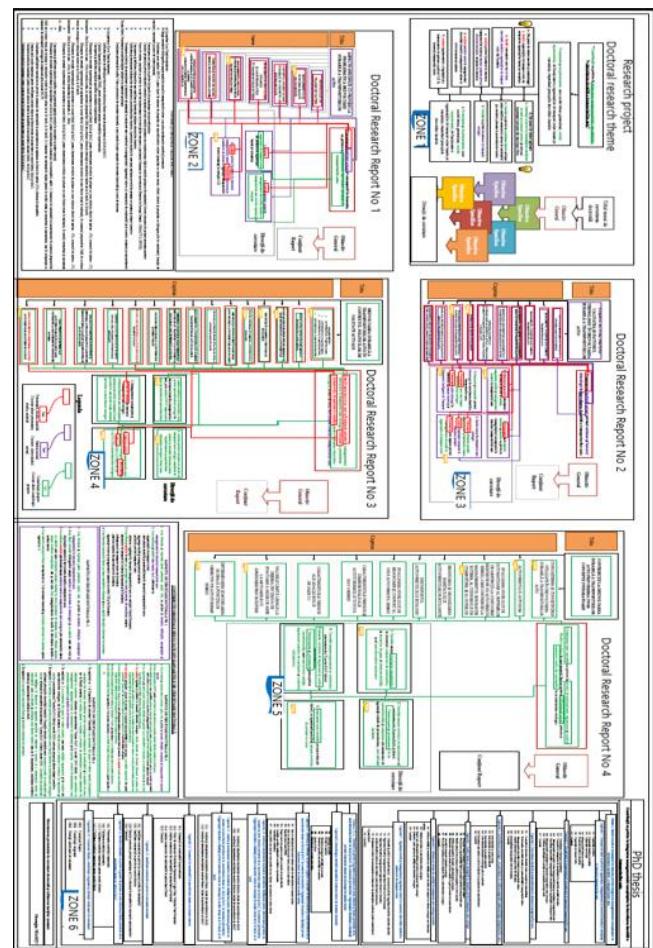


Fig 8: Overview mind map PhD research [9, p. 336].

The analysis of the data presented in Figures 3, 4, 5, 6, 7 and 8 shows the use of color-coded keywords for easy identification.

Thus, we used:

- ✚ red color for the boxes and arrow links of the keywords "presentation", "study" and "analysis" (Figure 10);
- ✚ purple color for the boxes and arrow-links of the current status of the research topic (Figure 9);
- ✚ the green color for the boxes and arrow-links of the author's own, original contributions to the PhD thesis (Figure 9);
- ✚ blue color for the identification of the chapters in the mind map of the PhD thesis (Figure 9);
- ✚ the inscription "Area 1, 2, 3, 4, 5 and 6" for easy identification of the entities (doctoral research report, progress reports and doctoral dissertation) on the overall mind map of the PhD thesis, percentated in Figure 9;
- ✚ the inscription "Paper", for easy identification of the scientific work carried out by the author based on context information, on the mindmap of each progress report (yellow color) (Figures 4, 5, 6, 7 and 9).

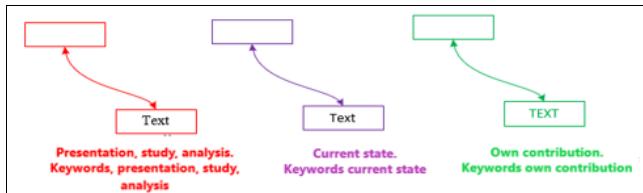


Fig 9: Keyword color code legend.

## 7. Mind map models and their templates used in everyday life

**A. Mental map model for art.** Making a mind map for our artwork will help us in so many things, such as illustrating ideas, stimulating creativity, identifying purpose, increasing confidence, etc. In figure 10 we shows a template of a mind map for an artwork.

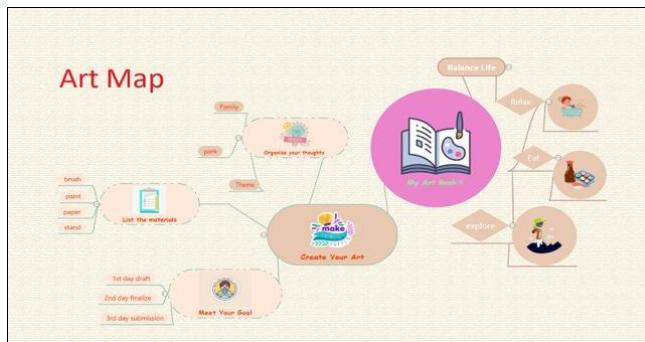


Fig 10: A mind map template for creating art [3].

With this example of an art mind map, we can get an idea of how to turn our simple thoughts into a beautiful masterpiece. While this method is perfect for those who draw by hand, we can also create a creative art mind map by using a technological gadget (e.g. a PC) to manifest our ideas.

**B. Sample mind map for personal development.** Believe it or not, we can set our personal growth through memory mapping. This method is also good for avoiding things and promoting peace of mind. Every person makes plans for the future, plans that most of the times, others fail to make due to lack of inspiration, and if we have a notebook where we have made notes about a plan it is good that based on the ideas we have noted down we can make a mind map to develop ourselves personally. Therefore, on the basis of a plan and the information in the personal agenda we can create mind maps for personal development, according to the model in figure 11.

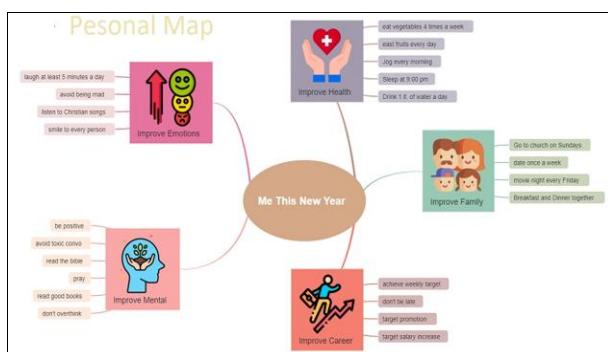


Fig 11: Personal development mind map template [3].

**C. Mental map model of organizational leadership.** We can make plans and make firm decisions as the leader of an organization. All managers have one thing in common. This is the willingness to lead and organize their employees. In addition, a good leader knows how to plan even in stressful and unexpected circumstances.

For this reason, true leaders use mind mapping, where decisions are presented and annotated in their agendas, as well as favorable perspectives, plans and solutions. Therefore, if we are an aspiring manager, we can learn how to perform better using this example of a leadership mind map. In Figure 12 we presents a template of a mind map for leading an organization.

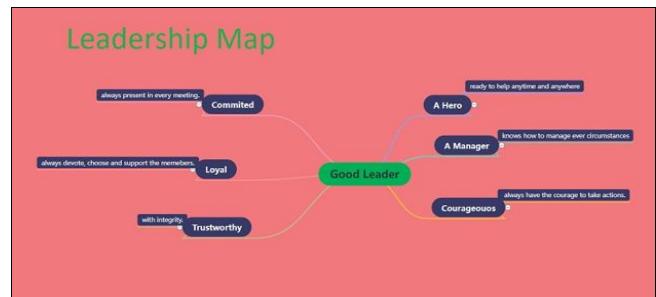


Fig 12: A mind map template for leading an organization [3].

**D. Sample mind map for writing an essay.** Essay writing may be a simple task for many, but certainly not for everyone. For this reason, some pupils or students really put in the extra effort to create a quality essay. In addition, any sswriter may consider and learn a lot of things about the topic to be able to write as comprehensively as possible. This is the reason why today, mind maps are used as a support for pupils or students to create a beautiful essay based on the ideas about the topic realized graphically. Figure 13 shows a template of a mind map for making an essay.

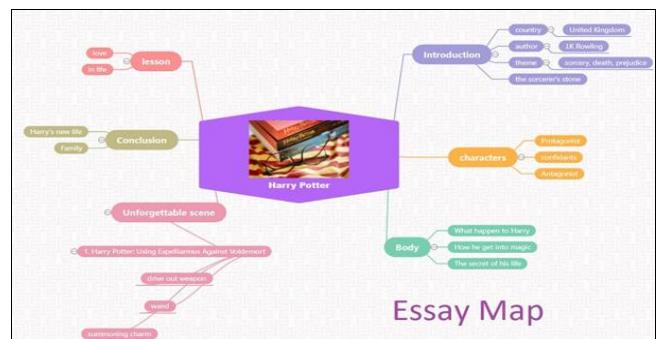


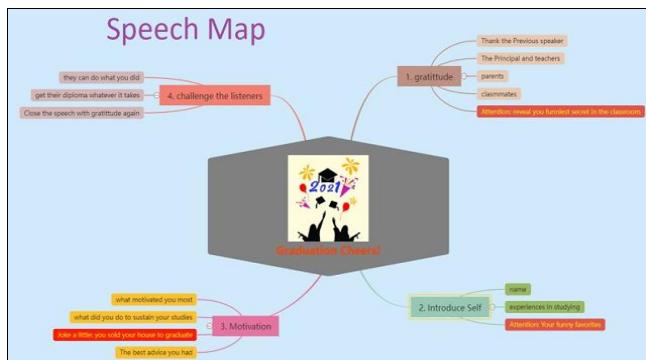
Fig 13: Mind map template for writing an essay [3].

**E. Mental map model for presentations a speech.** Memorizing a speech has never been easy with a mind map. Using this method, we can untangle jumbled ideas and put them in order while still preparing.

For sure, we will be very nervous when we know that we are going to face the auditing audience when we have to present our presentation and that is why we need to be sufficiently prepared and take care to memorize our speech before the event. It has been found on the basis of re-assessed studies that the human attention span is 12 seconds maximum, which is why the speaker has to attract attention from time

to time to make the speech as interesting as possible for the listeners.

In this regard, we presents an example of a mind map for the parts of a speech with examples of attention grabbing in Figure 14.

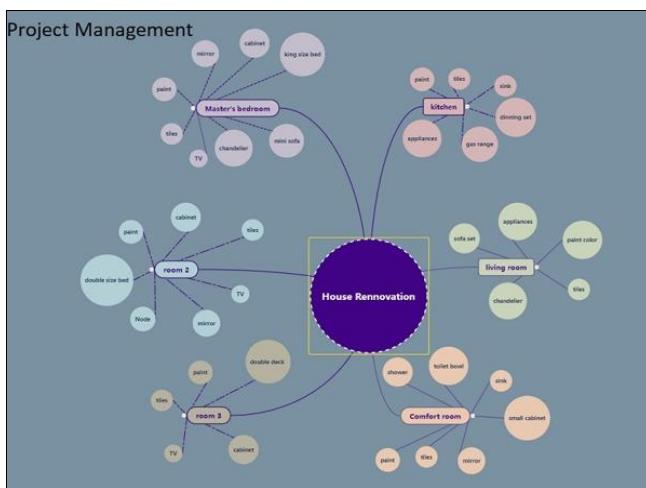


**Fig 14:** Template of a mindmap for speech presentations [3].

**F. Project management mind map model.** The mind map is also ideal in successfully managing a project. In addition, it helps us to easily check for improvements just by looking at the update in the checklist chart.

Basically, the mind map method in project management will technically divide the project size into smaller sections, which will help us to divide the sections or entities in the project, and this aspect will help us to achieve outstanding results.

Therefore, as a project manager, we need to be prepared for a possible collapse. Therefore there must always be room for mistakes. Figure 15 shows a template of a mind map for project management.



**Fig 15:** A mind map template for project management<sup>[3]</sup>.

**G. Sample mind map for daily food intake.** Food is one and probably the most crucial necessity for mankind. In this new era, there are a lot of foods on the market that are not at all beneficial for the human body. These include: cakes, french fries, burgers, sodas, which give us comfort but do not provide the nutrients we really need. Instead, they gradually damage our health, something that everyone obviously knows but would not give up because of temptation.

knows, but would not give up because of temptation. Making a mental food map will help us to maintain our health while being able to enjoy consistent and healthy eating.

Therefore, let's see and try to follow the example of the food eating.

mind map that we presents in Figure 16.



**Fig 16:** Food mind map template for personal nutrition [3].

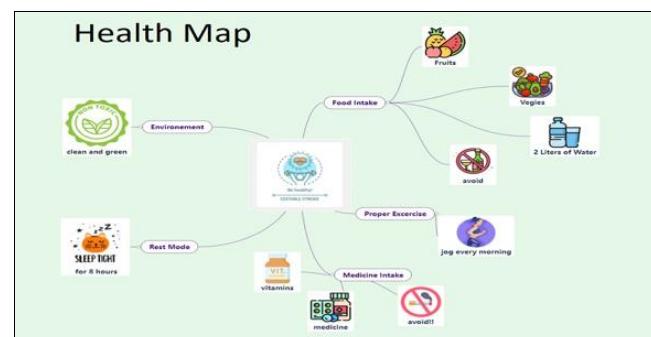
#### *H. Mental map model of your own time management.*

Time management can never be more comprehensive without a mind map. In addition, a specific calendar for daily tasks will certainly allow us to succeed in reaching and accomplishing the set goals each day. Even for our simple daily task, it is important that we make it a habit of making create a proper graphic plan and we will see how well we will do our daily task. Furthermore, this kind of strategy can be a great way to know how well we are spending our time, getting organized and prioritizing our daily schedule. Therefore, it is important to start managing our time according to the mind map we presents in Figure 17.



**Fig 17:** Time management mind map template [3].

**I. Personal health mind map template.** On the one hand, we can make a personal health mind map to determine how we can help our body get rid of habits, things, food, weather or medicines that can make our health worse. Figure 18 shows a model personal health mind map.

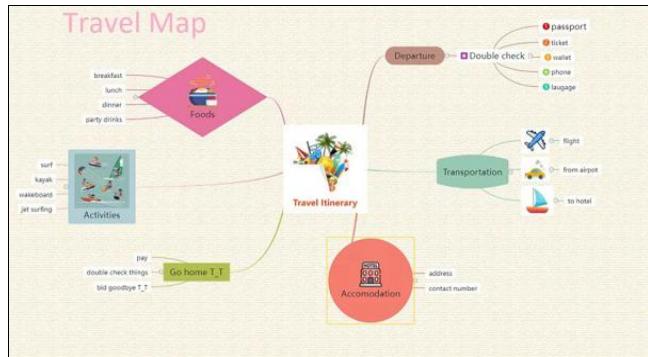


**Fig 18:** Personal health mind map template [3].

On the other hand, through this chart, we can also choose the things that could help us maintain a robust body by following specific charts based on our food and drug intake. The good part is that we could share our health map with our loved ones for them to follow, in line with getting a

graceful and strong and healthy body. Therefore, people can still get their doctor's opinion about health, more important aspect for comorbidities

**J. Travel plan mind map template.** A perfect and successful travel, be it on foot, by car, bicycle, or motorcycle can be planned using mind maps. An example of a simple mental map travel plan is shown in Figure 19.



**Fig 19:** Travel plan mind map template<sup>[3]</sup>.

Probably many of us have traveled without a mental map, and later realized that we were unable to have an enjoyable trip due to not following the desired travel itinerary. Therefore, before such mishaps happen to us, it is important to make a mind map of the places, and sights we want to visit. After all, traveling is a privilege that we allow ourselves to enjoy and explore landscapes of nature that we have never seen before. Therefore, in creating our travel plan, we need to include everything travel related, from accommodation, activities, food tours, transportation, destinations and even repatriation if we are traveling abroad.

## 8. Conclusions

Mind maps are an excellent exercise for stimulating creativity. They encourage creative thinking and outside the box ideas for finding inspired solutions to problems, organizing or motivating yourself and your co-workers.

Mind maps give us:

- ✚ higher speed of thinking;
- ✚ unlimited flexibility;
- ✚ exploring the limits of your own imagination.

It is said that in order to stimulate our memory, it is recommended that we actively use our imagination and association skills. To become "creative geniuses", we need to let our minds run wild and encourage them to make associations between ideas, images, colors, symbols or drawings. In addition, improving creative skills will implicitly lead to improved memory, because creativity and memory are virtually identical mental processes, both working best when we use our imagination and make associations. That's why mind maps are a great alternative to linear writing, and can be used in the classroom, in presentations, when summarizing and recapping, reading a text or preparing for an exam.

On the mind map you can easily see and distinguish the hierarchy and connections between information.

On the mind map you can very well see the summary of a topic, because all the notes and information about that topic are on one page.

Mind maps encourage us to take fewer but more important notes. As we are making the map, instead of just writing,

without understanding anything, our brain automatically starts to retain information (visual memory).

A number of memory triggers can be used to create mind maps, such as images, symbols, colors, and thanks to its two dimensional structure, it helps us to memorize the content more easily.

When making mind maps one can always add additional information on a topic quite quickly and easily, especially if the teacher/trainer does not dictate or speak in a structured way, but rather jumps from one piece of information to another when explaining something. This is due to the schematic graphic form of mind maps and not in the form of written text.

Taking notes in mind map form is fun and seems more like play than work.

It seems illogical, but it is very important when drawing a mind map to start at the end. If one starts with the end, it means that we are clear about the purpose for which that mind map is being made. Having clarified the purpose, we only take the steps necessary to achieve it. Visualizing the goal will help us to focus on the essentials, the key words, the images to make the map as memorable as possible, the clarification of what we understood and what we didn't understand.

In order to achieve the goal we need to establish from the beginning the time we allocate to study and to make the mind map. For this reason we need time and space to think deeply and to draw the map that will allow us to retain the information in the long term.

Using a predefined format (template) saves us a lot of time. If we have this template we can already start with a basis for organizing our ideas, which helps us to reach our goal. A mind mapping (computer software) program like MindMeister has many predefined formats that make it easier to get started.

VISIO is a modern and easy to use mind mapping software. In this software the author made the mind maps for the research done in his PhD thesis. The software has all the necessary tools to easily create a mind map.

We can realize our own formats (templates), to call on them when we want to realize another mind map. We can thus establish our own formats on A3 or A4 sheets for drawing mind maps by hand.

The combination of mind mapping and brainstorming allows a much more structured and organized approach to idea generation. This combination provides a visual record of the brainstorming session, which makes it easier to review and prioritize ideas.

Drawing a mind map in a dedicated computer software is hard, especially at the beginning, but the more mind maps we draw, the sooner we master the art of mind maps.

Starting from the general objective and going through the requirements of the specific objectives, the doctoral research project, the four research reports and the dissertation were schematically structured in the dissertation using mind maps.

Figures 2, 3, 4, 5, 6, 7, and 8 schematically represent the methodology for developing doctoral research. They can be used as a model by doctoral students in scientific research to complete a doctoral thesis and obtain a doctoral degree in science according to the profile of the field of research.

Usually, the biggest barrier to using mind maps in learning and memorization is not the lack of time, but ourselves. We fall into the trap of perfectionism, but it is good to remind

ourselves that a rudimentarily drawn mind map is better than all the notes taken in a lecture or a lecture. For this reason, in my capacity as the author of this scientific research, I can say that *"a picture, a sketch, a drawing (in this case, mind maps) are much 1,000 words written or spoken verbally!"*

## 9. References

1. Irimia D. Mind map - what are mind maps?, 17 September 2014. [Interactiv]. Available: <https://www.gandestepozitiv.ro/mind-map-ce-sunt-hartile-mentale/>. [Accessed November 4, 2024].
2. Hopper CH, Mapping PCL. Strategies, Ed., Boston: Houghton Mifflin, USA: Practicing College Learning Strategies, 2007, 139-143.
3. Morales J. Mind On Map - Ten ideas and examples for mind maps for beginners and young professionals, 18 November 2022. [Interactiv]. Available: <https://www.mindonmap.com/ro/blog/mind-map-examples/>. [Accessed November 4, 2024].
4. Tague RN. Quality tools, vol. Second edition, Q. P. American Society for Quality, Ed., Sibiu, USA, 2010, p719.
5. Lanzing J. Concept mapping: tools for echoing the minds eye, Journal of Visual Literacy. 1998; 18(1):1-14.
6. Romance NR, Vitale MR. Concept mapping as a tool for learning: broadening the framework for student-centered instruction, College Teaching. 1999; 47(2):74-79.
7. Serig D. Research review: Beyond brain: The mind map as artstorming, Teaching Artist Journal. 2011; 9(4):249-257.
8. Ionescu și A N. Vișan, Inventive Problem Solving Theory, P. Ed., Ed., Bucharest, 2016.
9. Neamțu G. Contributions on the integration of knowledge management in the sustainable development of road transport - PhD. thesis, N. U. o. S. a. T. P. Bucharest, Ed., Bucharest, Romania, 2023, p500.