

## ESSENTIAL PROJECT MANAGEMENT SKILLS FOR SUCCESSFUL ENTREPRENEURIAL LEADERSHIP

Aleksandra Simić<sup>1</sup> [0009-0008-3642-7360], Angela Fajsi<sup>2</sup> [0000-0002-5706-4932],  
Slobodan Morača<sup>3</sup> [0000-0001-6174-1038], Jelena Borocki<sup>4</sup> [0000-0003-2146-7008],  
Aleksandar Vekić<sup>4</sup> [0000-0002-0165-786X]

### Abstract

*In today's business environment, which offers great opportunities for innovation, more individuals are looking to develop new business ideas and become entrepreneurs. The constant emergence of new trends, continuous monitoring, and adaptation to these trends are integral parts of conducting business. Managing those projects generally requires adherence to certain rules and guidelines. This is a complex whole, and it is important to start with understanding the basic concepts. This paper aims to highlight the importance of key project management skills and to examine whether they can be applied to leading an entrepreneurial venture. The study was conducted based on a sample of 46 entrepreneurs engaged in various activities. Based on the obtained and analyzed results, a significant correlation was established with the basic skills applied in both fields. The insights gained can contribute to the further education of entrepreneurs, enabling them to plan and conduct their business systematically to achieve better results.*

**Key words:** Entrepreneurship, Project management, Business

### 1. Introduction

While not all project managers embody the characteristics of entrepreneurs, successful entrepreneurship inherently demands effective project management skills. Entrepreneurs must navigate complex processes, whether focused on product development, securing investment, or expanding market reach. Each process involves a structured sequence of activities that must be managed with the precision and methodology typical of formal project management practices. Managing entrepreneurial endeavours in a project-based framework becomes essential for

<sup>1</sup> University of Novi Sad, Faculty of Technical Sciences, Serbia, [siimic.aleksandra@gmail.com](mailto:siimic.aleksandra@gmail.com)

<sup>2</sup> University of Novi Sad, Faculty of Technical Sciences, Serbia, [angela.fajsi@uns.ac.rs](mailto:angela.fajsi@uns.ac.rs)

<sup>3</sup> University of Novi Sad, Faculty of Technical Sciences, Serbia, [moraca@uns.ac.rs](mailto:moraca@uns.ac.rs)

<sup>3</sup> University of Novi Sad, Faculty of Technical Sciences, Serbia, [borocki@uns.ac.rs](mailto:borocki@uns.ac.rs)

<sup>3</sup> University of Novi Sad, Faculty of Technical Sciences, Serbia, [vekic@uns.ac.rs](mailto:vekic@uns.ac.rs)

business success, ensuring that objectives are met efficiently, optimised resources, and mitigated risks (Akhmetshin et al., 2019). This paper discusses the necessity for entrepreneurs to adopt project management principles in their operations to achieve sustainable growth and long-term viability in competitive markets

The examination involved a sample of 46 entrepreneurs operating in diverse business sectors. The results revealed a strong correlation between the foundational skills utilized in entrepreneurship and project management. However, a notable distinction emerged regarding applying fundamental project management tools and techniques.

## **2. Theoretical background: Project management and entrepreneurship**

### **2.1. Comprehensive project management in modern business**

Projects have been an integral part of human civilization since ancient times, dating back to several centuries before the Common Era. The construction of monumental achievements such as the Egyptian pyramids, ancient Greek temples, and the Great Wall of China exemplifies early project-based endeavors. These structures were not only feats of engineering but also required sophisticated project management knowledge in planning, organizing, and controlling resources and labor. While these early projects focused on monumental construction, the essence of project management remains crucial in the contemporary environment.

Today, projects range from large-scale initiatives impacting the global population to those tailored for specific user groups or internal organizational needs. Over the past few decades, the need for projects have surged, largely due to their pivotal role in achieving business objectives (Radaković & Morača, 2017). Despite variations in size and complexity, all projects follow a structured life cycle. According to the PMBOK Guide (2008), projects progress through four distinct phases, each contributing incremental value from initiation to completion. Each phase has its own defined start, end, and specific objectives and may be considered a project (Trish, 2007).

Key factors such as active participation, minimal interpersonal conflicts, and effective communication play a vital role in shaping the quality of an organization's project environment. These elements are crucial to fostering a productive atmosphere and ensuring project success (Dinsmore & Cabanis-Brewin, 2011). As project management continues to evolve, its principles remain as essential in modern business operations as they were in past projects.

### **2.2. Entrepreneurship in economic development**

Peter Drucker (1985) emphasized that entrepreneurship is neither a science nor an art, but a practice. He posited that knowledge in entrepreneurship serves as a tool to achieve specific goals, implying that entrepreneurship is not an inherent personality trait. Rather, anyone capable of facing decision-making processes has the potential to act entrepreneurially. According to Drucker, entrepreneurship is

fundamentally the function of acquiring and utilizing resources. In a managerial role, resources are allocated to solve problems, while in an entrepreneurial role, resources are directed towards opportunities. Entrepreneurship, thus, becomes a process of seeking and responding to change, transforming it into an opportunity by applying innovation and creativity to identify or create resources and assign them economic value (Sharma, 2021).

Entrepreneurial activity plays a critical role in economic development, often regarded as one of the most significant contributors to the growth of a country or region. The number and competence of entrepreneurs are essential in determining the pace and direction of economic progress. Successful entrepreneurial ventures are largely determined by the quality of the entrepreneurial idea and the ability of the entrepreneur to effectively execute it.

In modern societies, entrepreneurship is actively promoted through various programs and initiatives led by both governmental and private institutions. However, fostering an environment that encourages entrepreneurial behavior and ensures the successful transfer of knowledge and technology to the market remains a significant challenge for organizations, especially those operating in dynamic and highly competitive business environments (Sharma, 2021).

### **2.3. Relationship between entrepreneurship and project management**

In the context of entrepreneurial success, mastery of project management stands out as a key trait. Effective entrepreneurs must not only possess the ability to make swift decisions and multitask, but also manage projects and time efficiently. Central to this is a deep understanding of project management, which is structured around five fundamental phases: initiation, planning, execution, control, and closure. These phases provide a systematic framework that enables entrepreneurs to rapidly respond to competitive pressures and enhance their performance (Jovičić, 2017).

As businesses evolve, adherence to core project management principles becomes increasingly essential. By integrating these principles into the entrepreneurial process, individuals can exert greater control over their ventures, build confidence in achieving project milestones, and ultimately guide their businesses toward profitability and sustainability (Mehr, 1989). The structured approach offered by project management fosters not only strategic decision-making but also the agility needed to navigate the dynamic landscape of business development.

During the initiation and development of a business, the following similarities with project management arise: (Kemp, 2006):

- Market research and analysis;
- Careful planning, as success depends on it;
- Defining what makes the product or service unique and emphasizing it;
- Excellent customer service/providing high-quality products;
- Finding the right location;
- The entrepreneur's attention and time are required for what they do.

- Make clear and consistent hiring decisions;
- Find good people who want to advance and grow alongside the business;
- Training and retaining staff;
- The customer always comes first;
- Constant improvement and keeping up with trends.

One study was conducted on South African entrepreneurs with the main goal of determining the categories and subgroups of skills that entrepreneurs apply. The study identifies nine groups of skills: entrepreneurial spirit, business management skills, financial management skills, human resource management, marketing skills, technical skills, personal skills, leadership skills, and social and interpersonal skills.

It has been established that all these skills are in line with the existing literature, but they have been elaborated in more detail in this way, and new skills that were not identified in previous literature have been included (Kerrin et al., 2017). In the labor market, the most required skill is general knowledge of project management theory. This includes the ability to plan work, organize processes, set goals, and determine priorities (Akhmetshin et al., 2019).

### **3. Research methodology and results**

The topic of this paper is to examine key project management skills applicable to entrepreneurship. A quantitative questionnaire was employed for the research. The study commenced in early September 2023 and the response collection phase took one month, during which 46 responses were gathered.

The questionnaires were distributed electronically via Google Forms. Before filling out the questionnaire, respondents were informed about the research objectives, and by completing the survey, they provided their contribution and consent to participate.

The target population for this study consisted of entrepreneurs from the territory of the Republic of Serbia to assess their knowledge and application of specific tools and techniques in their business operations. There were no restrictions on industry inclusion for this research, with all industries represented.

#### **3.1. Respondent structure**

Out of the total number of respondents, the majority were women (73.9%), with the largest age group being between 26 and 35 years old (43.5%), while only 4.3% were over 55 years old. Regarding education, half of the respondents had completed undergraduate studies (50%), and all had at least a secondary vocational education or higher. In terms of job positions, most respondents were in top management positions (65.2%).

Table 1. Organization size and industry type

Variable	Category	Number	(%)
Size	Micro	30	65,2
	Small	12	26,1
	Medium	2	4,3
	Large	2	4,3
Industry type	Production	22	47,8
	Sale	10	21,7
	Education	2	4,3
	Media/entertainment/marketing	2	4,3
	Consulting services	5	10,9
	Health services	1	2,2
	Technology/software/IT	1	2,2
	Other	3	6,5

In terms of organization size, the majority were micro-organizations (65.2%), followed by small organizations (26.1%), with medium and large organizations each accounting for 4.3%. Regarding the industry in which the organizations operate, the largest percentage was in manufacturing (47.8%), followed by sales (21.7%), while technology/software/IT and healthcare services had the smallest percentage (2.2%).

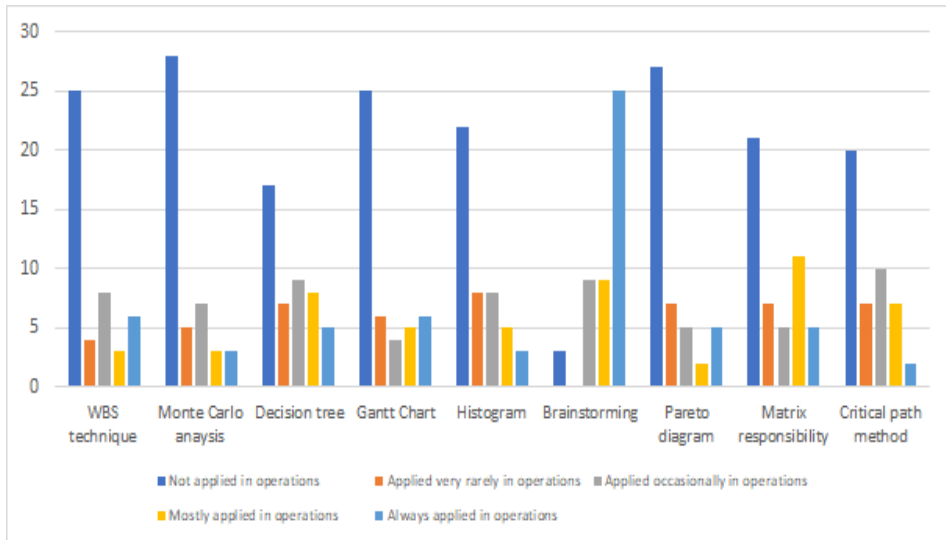
In response to the question of whether the organization is involved in projects, the highest percentage was for the answer 'often' (32.6%), while 23.9% answered that they are not involved in projects. Most organizations responded that they are involved in projects for new product development (34.8%).

### 3.2. Research results and discussion

The application of project management skills in entrepreneurship was examined and it was concluded that it is essential to have the ability to gather necessary information, work in a team, i.e., organize people, define problems, having negotiation skills, managing time, costs, quality, and dealing with uncertainty and risks. In the literature, all these skills are defined as important for increasing business growth and development, improving the business environment, and providing opportunities for the progress and development of employees themselves.

The second part of research included project management tools and techniques and to what extent they can be applied in entrepreneurship. For the purposes of the research, project management tools and techniques that were identified through a literature review as the most commonly used in this field were selected, such as WBS, Monte Carlo, Gantt Chart, Histogram, etc.

The participants evaluated the level of use of these tools in the development of their businesses, and the results are presented in Figure 1



*Figure 1. Project management tools and techniques applied in entrepreneurship*

Unlike the set of questions related to project management skills, where respondents mostly gave high ratings (4 and 5) and were aware of their importance, when it came to project management techniques and tools, they predominantly gave low ratings (1 and 2). The least known terms identified were: Monte Carlo analysis (60%), Pareto diagram (59%), WBS, and Gantt chart (54% each). Among all the listed tools and techniques, only the brainstorming received a high rating, with 25 out of a total of 46 participants stating that they apply it in their business.

In the following part of the research, a matrix was provided consisting of basic functions in business and project management tools and techniques. The task for the participants was to mark all the tools and techniques they apply within the various functions (e.g. production, sales, research, etc.). The obtained results are presented in Figure 2.

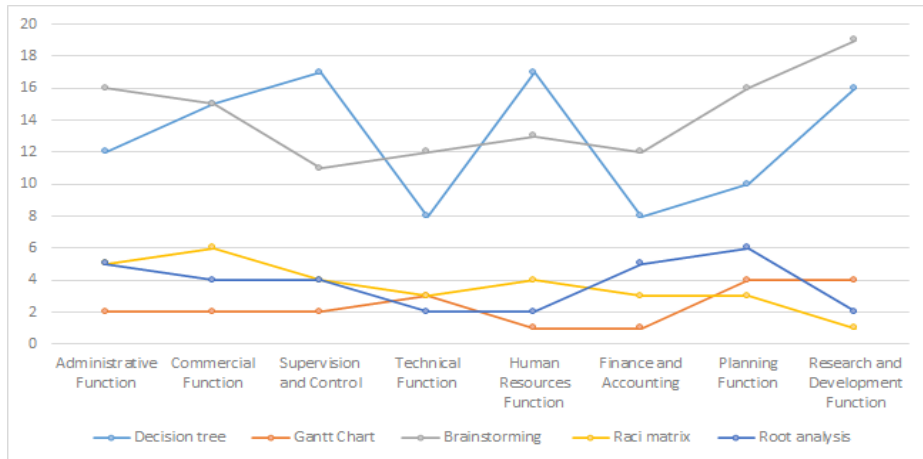


Figure 2. The most commonly used project management tools and techniques represented by functions

Decision trees and brainstorming are most commonly used for management and organization of work across various functions, particularly in research and development, control, and administrative functions. Other tools are used to a lesser extent but are equally applied across all functions of the organization.

Based on the overall results obtained, it can be observed that the entrepreneurs in Serbia do not have a high level of knowledge regarding these tools and techniques and small percentage of them is familiar with the significance of their application. This can be linked to the level of the position they currently hold, the type and level of education, as well as the involvement of their company in projects

## 5. Conclusion

This paper can contribute to further research on key project management skills that apply to leading entrepreneurial ventures. The frameworks and hypotheses presented can later be used for studies involving more respondents, through interviews or case studies. These findings could pave the way for new opportunities, fostering programs and additional training for entrepreneurs to grow their businesses and encourage potential collaborations between universities and the business sector.

At the start of their careers, entrepreneurs could benefit from guidance in choosing the most effective tools and techniques for their business by evaluating which ones are best suited to their industry, identifying the essential skills they need to acquire, and more

## Acknowledgments

This research has been supported by the Ministry of Science, Technological Development and Innovation (Contract No. 451-03-65/2024-03/200156) and the

Faculty of Technical Sciences, University of Novi Sad through project "Scientific and Artistic Research Work of Researchers in Teaching and Associate Positions at the Faculty of Technical Sciences, University of Novi Sad" (No. 01-3394/1).

## REFERENCES

- [1] Akhmetshin, E. M., Romanov, P. Y., Zakieva, R. R., Zhminko, A. E., Aleshko, R. A., & Makarov, A. L. (2019). Modern approaches to innovative project management in entrepreneurship education: a review of methods and applications in education. *Journal of entrepreneurship education*, 22 (1S), 1–15.
- [2] Morača, S., & Radaković, N. (2017). *Fundamentals of project management*. Faculty of Technical Sciences.
- [3] Melton, T. (2011). *Project Management Toolkit: The Basics for Project Success: Expert Skills for Success in Engineering, Technical Process Industry and Corporate Projects*. Elsevier.
- [4] Dinsmore, P. C., & Cabanis-Brewin, J. (2011). *The AMA handbook of Project Management*. American Management Association
- [5] Drucker, P. (1985). *Innovation and Entrepreneurship*. Harper & Row.
- [6] Sharma, S. (2021). *Entrepreneurship development*. PHI Learning Pvt. Ltd.
- [7] Jovičić, J. (2017). *Project Management – An essential skill for the modern entrepreneur*. <http://www.novaenergija.net/upravljanja-projektima-neophodna-vestina-savremenog-preduzetnika/>
- [8] Mehr, H.H. (1989). *Project management and the entrepreneur*. PM Network.
- [9] Kemp, S., & Press, E. (2006). *Project management: made easy*. Entrepreneur Press.
- [10] Kerrin, M., Mamabolo, M. A., & Kele, T. (2017). Entrepreneurship management skills requirements in an emerging economy: A South African outlook. *The Southern African Journal of Entrepreneurship and Small Business Management*, 9(1), 1-10. <https://hdl.handle.net/10520/EJC-9bea7314e>



© 2024 Authors. Published by the University of Novi Sad, Faculty of Technical Sciences, Department of Industrial Engineering and Management. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>).