

The green projects as a source of proecological transformation

Grudziński A.¹

¹Wrocław University of Science and Technology; Faculty of Computer Science and Management; ul. Wybrzeże Wyspiańskiego 27, 50-370 Wrocław, Poland

*corresponding author: e-mail: adamgru95@gmail.com

Abstract

Green projects are unique, complex, one-time and intertwined activities that serve to preserve and protect the natural environment. The implementation of green projects may affect the greening of some enterprises. At the same time, so-called "brown" enterprises will have the chance to reduce their pressure on the natural environment. It is possible to make a cyclical implementation of some green projects. Therefore, they may become the beginning of new and green processes, and over time affect the main operational processes. The purpose of this article is to define a green project and to indicate its role in proecological transformation. In this article, the qualitative method was used.

Keywords: green and lean processes, green organization, green economy

1. Introduction

Many initiatives in contemporary enterprises that are projects concern environmental protection and are related to new technological solutions. A growing number of enterprises is guided by maintaining a balance between growth and environmental protection. Enterprises are aware of the problem of natural resources scarcity, then sustainable development is perceived by them in the long term (Grudziński and Sulich, 2018).. The implementation of this assumption requires each organization to open up to pioneering solutions and readiness to revise its current method of operation (Kasztelan, 2016).

The changes that are taking place in the world force enterprises to modify the way they operate. Companies are embedded in the natural environment, using its resources. Furthermore, a lot of waste is generated during production or service activities, which should be recycled. Their reduction, which will allow for smaller anthropopressure on the environment is also a key. Therefore, modern organizations can not develop unlimitedly at the expense of the environment (Machado et al., 2017). This paradigm is the foundation of the so-called brown economy that is based on fossil fuels consumption. Inequality in the society-economy-environment system has led to a situation in which none of the elements of the systems can develop without threatening to another (Kuik et al., 2019). So far, the socio-economic element has developed at the expense of the environment which led to a significant

deterioration of its quality. Therefore, one should look for ways to restore the balance in the society-economy-environment system. Organizations that operate and think ecologically can obtain a competitive advantage resulting from increased efficiency (Dyllick and Hockerts, 2002). What is more, products and services that are environmentally friendly (and created in a "clean way") are better perceived by stakeholders. Enterprises that undertake environmental initiatives should also manage change. To change the organizational culture, it is necessary to introduce changes through projects (Xing et al., 2019).

The purpose of the article is to propose a green project definition and to indicate its role in proecological transformation.

2. Green Project

The projects in the organization solve a business problem (Wysocki, 2009). In turn, green projects should solve a problem that is related to the environment (Al-Tekreeti and Beheiry, 2016). The term problem here should be understood as specific difficulties that must be overcome and these difficulties can be divided into three groups.

The first of them is a group of that aim to improve existing processes. Some of activities carried out in organizations can be considered as processes, defined as a set of interrelated activities that transform input elements into output. What is more, every process in the organization has a certain impact on the environment. This impact can be divided into two groups. First of all, specific resources are necessary at the entrance of each process (water, electricity, raw materials, etc.). The second group is connected with the exit of the process, which includes all kinds of emissions (noise, production waste, sewage, etc.) (Kalinowski, 2018). Therefore, the projects in this group are aimed at finding a way to improve some activities in the process that will reduce anthropopressure.

The second group of projects' effects is related to products or services. It includes projects that focus on creating products that have no negative impact on the environment. What is more, products that have a positive impact on the environment are desirable. This group is important because only innovative solutions can bring tangible results (Xing et al., 2019)

The third group of projects is related to the change in employees' awareness. This is a particularly important group because only a change in employee awareness can permanently change the organization (Kozar, 2019). It can include various types of training demonstrating the environment as an important element of the company's environment. When ecological values are the foundation of organizational culture, it is easier to implement projects included in the first and second group.

The scope of individual projects depends on organization specifics (Xu et al., 2007). Only the implementation of all three groups of projects will allow transformation into a green organization.

3. Identification of the role of green projects in organizations

For many years, an economic growth of the organizations was very often associated with increased pressure on the natural environment. Nowadays, proecological innovations are created in green projects and can lead to change of enterprises. These innovations can reduce pressure on the environment. Therefore, project results should be solutions that solve problems from the first and second group. The implementation of projects contained in three groups will allow to transform the organization from brown to green.

Thus, a green organization is an organization that creates green products or services in green processes. These three interpenetrating elements make it possible to talk about an ecological enterprise. Therefore, green projects are a tool in the gradual transition of brown enterprises into green ones and establishing green processes.

4. Conclusions

The article indicates that green projects are a tool for gradual proecological transformation. What is more, the proposed three groups of green prospects enable a holistic change of brown enterprises into a green one. Green enterprises have three common features. First of all, it is a green organizational culture whose fundamental value is care for the environment. Secondly, these are green processes that are characterized by high efficiency, which measures input resources and emissions at the output. The third feature is green products that have a neutral or positive impact on the environment. The continuation of this article may be the study of enterprises that have implemented green projects.

References

- Al-Tekreeti, M.S. and Beheiry, S.M. (2016), "A decision matrix approach to green project management processes", *World Journal of Science, Technology and Sustainable Development*, Vol. 13 No. 3, pp. 174–189.
- Dyllick, T. and Hockerts, K. (2002), "Beyond the business case for corporate sustainability", *Business Strategy and the Environment*, Vol. 11 No. 2, pp. 130–141.
- Grudziński, A. and Sulich, A. (2018), "Zielone miejsca pracy – element przewagi konkurencyjnej przedsiębiorstw sektora odnawialnych źródeł energii", *Marketing i Rynek*, Vol. 11, pp. 170–180.
- Kalinowski, B. (2018), "The concept of green business process management in the strategy of organisation", *Scientific Papers of Silesian University of Technology. Organization and Management Series*, Vol. 2017 No. 113, pp. 161–174.
- Kasztelan, A. (2016), "Green Competitiveness of the EU Countries", in Kovářová, E., Melecký, L. and Staníčková, M. (Eds.), *Proceedings of the 3rd International Conference on European Integration 2016*, VŠB - Technical University of Ostrava, Ostrava, pp. 415–424.
- Kozar, Ł. (2019), "Sektor energetyczny, a wyzwania zrównoważonego rozwoju – analiza przestrzennego zróżnicowania sytuacji w UE w oparciu o wybrane wskaźniki", *Zeszyty Naukowe SGGW w Warszawie - Problemy Rolnictwa Światowego*, available at: <https://doi.org/10.22630/prs.2018.18.3.76>.
- Kuik, O., Branger, F. and Quirion, P. (2019), "Competitive advantage in the renewable energy industry: Evidence from a gravity model", *Renewable Energy*, Vol. 131, pp. 472–481.
- Machado, C., Bezerra, A. and Oliveira, F. (2017), "Corporate Social Responsibility Role in SMEs: A Critical Way of Thinking in Green and Lean Management Arena", in Machado, C. and Davim, J.P. (Eds.), *Green and Lean Management*, Springer, pp. 207–220.
- Wysocki, R.K. (2009), *Effective Project Management: Traditional, Agile, Extreme, Industry Week*, Wiley Publishing.
- Xing, X., Wang, J. and Tou, L. (2019), "The Relationship between Green Organization Identity and Corporate Environmental Performance: The Mediating Role of Sustainability Exploration and Exploitation Innovation", *International Journal of Environmental Research and Public Health*, Vol. 16 No. 6, available at: <https://doi.org/10.3390/ijerph16060921>.
- Xu, J.Y., Chen, L.D., Lu, Y.H. and Fu, B.J. (2007), "Sustainability evaluation of the grain for green project: From local people's responses to ecological effectiveness in Wolong nature reserve", *Environmental Management*, Vol. 40 No. 1, pp. 113–122.