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Achieving Levels of Project Management Maturity in Organization

1. Introduction

Today, the knowledge management in creating maturity in project management by the project team has a high degree of change, uncertainty and dynamics. Changes in the design environment is not fixed, which requires the project team dynamic, creative and flexible action. The increasing uncertainty due to rapid change and trends are forcing concerted action adapted to the business, organizational and design. Enterprises need to quickly respond to customer needs, respond quickly to market opportunities and eliminate that adds no value to work as quickly as possible.

The purpose of this article is demonstrate the application of a theoretical model of project management maturity on the example of the test company. This text presents the study results¹ one of the polish textile sector companies surveyed in the production, design and sale of women's clothing. Qualitative research conducted in the field of the creation project management maturity in the organization by the project team during the collection process. The article presents the problem of achieving levels

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of project management maturity to create product innovation by the project team. This was the level of maturity in the development of the knowledge areas of project in the design team, the maturity structure of common processes, building a methodology and scope of the types of benchmarking and continuous improvement of the idea of creating a new collection. This article discusses the question of the essence of project management maturity model taking into the different levels and overlapping some of levels. Then presents the results of diagnostic tests of project management maturity in the tested enterprise V.

2. The Concept of Project Management Maturity Model

Not all companies recognize that the time frame can be shortened by performing strategic planning for project management. The simple use of project management, even for an extended period of time, does not lead to excellence. Instead it can result in repetitive mistakes and what's worse, learning from your own mistakes rather than from the mistakes of others. The foundation for achieving excellence in project management can best be described as the project management maturity model, which is comprised of five levels (as shown Figure 1). Each of the five levels represents a different degree of maturity in project management (Kerzner, 2005, pp. 40-42):

- **Level 1: Common Language** - In this level of maturity the organization first recognizes the importance of project management. Level 1 of the assessment will evaluate your own knowledge of project management and the degree to which your organization understands the fundamental concepts of project management. Level 1 is based upon knowledge of the fundamental principles of project management and the associated terminology (figure 1). Level 1 can be fulfilled through a good understanding of the guide to the project management body of knowledge prepared by the Project Management Institute.
- **Level 2: Common Processes** - In this level, the organization recognizes that common processes need to be defined and developed such that successes on one project can be repeated on other projects. Also included in this level in the recognition that project management principles can be applied to and support other methodologies employed by the company. In this level of maturity the organization makes an effort to use project management and to develop processes and methodologies to support its effective use. Also in this Level is the fact that certain behavioral expectations of organizational personnel are necessary for the repetitive execution of

the methodology (figure 1). Level 2 of the assessment will evaluate how effectively your organization has achieved common processes for project management.

- **Level 3: Singular Methodology** - In this level of maturity the organization recognizes that synergistic effect of combining all corporate methodologies into a singular methodology, the center of which is project management. The synergistic effects also make process control easier with a singular methodology than with multiple methodologies. Companies that have reached Level 3 are totally committed to the concept of project management (figure 1). Level 3 of the assessment will evaluate how committed your organization is and whether you have adopted a singular project management methodology.
- **Level 4: Benchmarking** - This level contains the recognition that process improvement is necessary to maintain a competitive advantage. Benchmarking must be performed on a continuous basis. The company must decide whom to benchmark and what to benchmark. In this level of maturity the organization

The Project Management Maturity Model H. Kerzner – levels of maturity

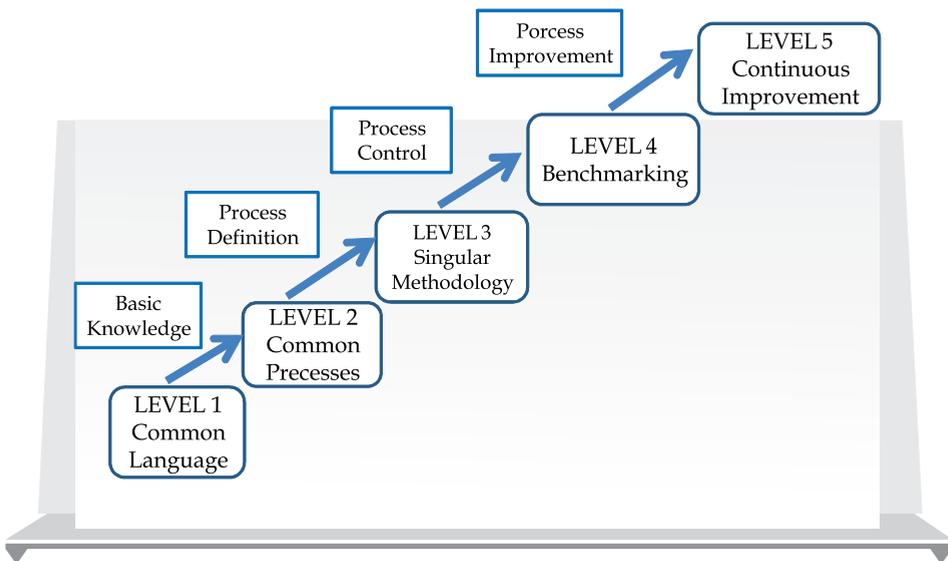


Figure 1. The five levels of maturity

Source: Kerzner H., (2005), p. 42

uses benchmarking to continuously compare project management practices to recognized leaders to gain information to help them improve their performance. Benchmarking is a continuous effort of analysis and evaluation. For project management benchmarking, the critical success factors are usually the key business processes and how they are integrated. If these key success factors do not exist, then the organization's efforts are hindered (figure 1). Level 4 of the assessment will determine to what degree your organization is using a structured approach to benchmarking.

- **Level 5: Continuous Improvement** - In this level the organization evaluates the information obtained through benchmarking and must then decide whether or not this information will enhance the singular methodology. In this level of maturity, the organization evaluates the information learned during benchmarking and implements the changes necessary to improve the project management process. The organization realizes that excellence in project management is a never-ending journey. Level 5 of the assessment will determine if your organization has embraced continuous improvement and has reached an advanced state of project management maturity (figure 1).

There exists a common misbelieve that all work must be accomplished sequentially. This not necessarily true. Certain levels can and do overlap. The magnitude of the overlap is based upon the amount of risk the organization is willing to tolerate.

Overlapping of several of the levels can take place, as shown in figure 2. Level 1 must still be completed before Level 2 can be completed. Overlapping of several of the levels can take place (Kerzner 2005, pp. 43-44):

- Overlap of Level 1 and Level 2: This overlap will occur because the organization can begin the development of project management processes either while refinements are being made to the common language or during training,
- Overlap of Level 3 and Level 4: This overlap occurs because, while the organization is developing a singular methodology, plans are being made as to the process for improving the methodology,
- Overlap of Level 4 and Level 5: As the organization becomes more and more committed to benchmarking and continuous improvement, the speed by which the organization wants changes to be made can cause these two levels to have significant overlap. The feedback from Level 5 back to Level 4 and Level 3, as shown in figure 2, implies that these three levels form a continuous improvement cycle and it may even be possible for all three of these levels to overlap.

Overlapping levels

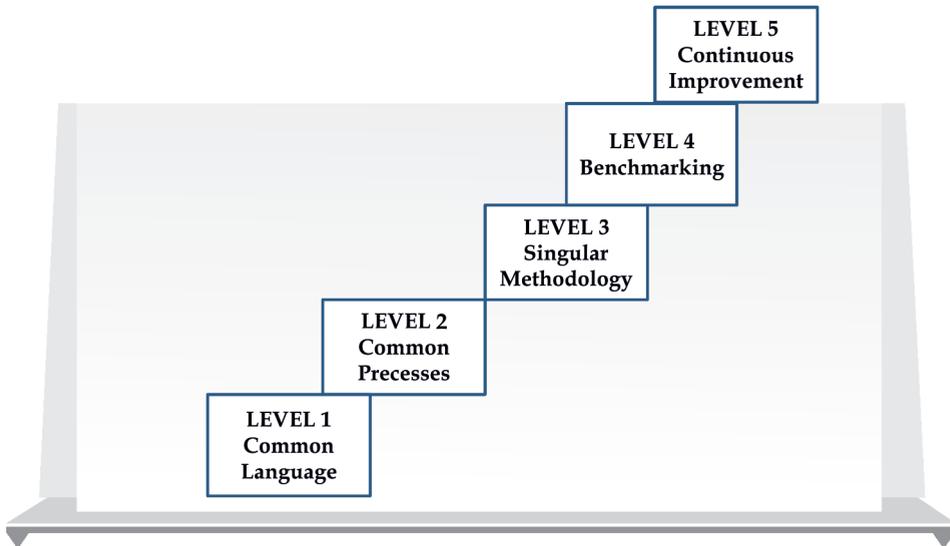


Figure 2. Overlapping levels

Source: Kerzner H., (2005), p. 44

3. The study results of the enterprise V

The study results on knowledge management in the creation of project management maturity into tested enterprise V, consisted of 5 different surveys correspond to the five levels of project management maturity of the organization. A total of 183 questions were asked one respondent (company employee), the employees directly involved in the basic process that is subjected to the test of the product innovation process (collection).

Examined company V has fewer than 250 employees and more than 50 employees on average, which means that it belongs to the category of medium-sized companies. A total of 7 employees directly involved in the main innovation of the product (the collection) that is product manager, designers, developers and managers of marketing and sales. Each of the seven employees responded to the questionnaire research and they were employees of both the strategic level and the tactical and operational. First level project management maturity of examined company V - the level of a common language - presented in table 1.

Table 1. Knowledge areas of the level of a common language in the company V

Knowledge areas	Grading
Project Scope Management	40
Project Time Management	40
Project Cost Management	30
Project Quality Management	80
Project Human Resource Management	30
Project Risk Management	40
Project Communications Management	60
Project Procurement Management	40
Sum total:	360

Source: A.A. Szpitter own study based on the research

Gaining points in the range of 30-60 points indicates that there are areas of knowledge at different levels such as cost management, human resource management, scope management, time management, risk management requires complete knowledge of individual and organizational project management. Sphere-oriented design project have more project knowledge than the area not targeted for the project. A big plus is the fact that in any area of knowledge is not achieved by less than 30 points. The level of knowledge of the surveyed areas of expertise in the enterprise V is at a good level but needs to be supplemented in some areas have not achieved 60 points (Szpitter 2012).

Second level project management maturity of examined company V – the level of common processes – presented table 2.

Based on the resulting profile in the project management maturity level 2 process tested product innovation company V can be stated that the common processes maturity achieved in three phases: the embryonic phase, phase acceptance of chief executives and line management approval phase (score above +6 points). However, there are still two phases of action to improve them is a phase of growth and maturity phase.

Table 2. Life cycle phases of the level of a common processes in company V

Life Cycle Phases	-12 point	-10 point	-8 point	-6 point	-4 point	-2 point	0 point	+2 point	+4 point	+6 point	+8 point	+10 point	+12 point
Maturity Phase								◇					
Growth Phase									◇				
Line Management Phase										◇			
Executive Phase											◇		
Embryonic Phase												◇	

Source: A.A. Szpitter own study based on the research

Legend: ◇ means the company V profile

In company V management strategic and tactical level and operational project management considers it necessary, besides the implementation of project management is beneficial in many areas of business. Chief executives supported by project management also understand the role of the project sponsor and effectively carry out this function. Line managers are trained in project management and staff visibly support the project management process, also keep their promises made project managers in connection with the partial products. Company software is used to monitor the progress of the projects. However, line managers do not support allowing workers to improve operations and training of project management. Also missing from the chief executives demonstrate a willingness to modify the methods of operation in order to achieve the project management maturity. Also, there are problems with taking effective measures to minimize the growth of the project scope. There are problems with the integration of both control costs and deadlines for project management and project status reporting system. Although in the company V is a training program of project management and staff have been trained in project management but lack of continuity and sequencing the implementation of training in this area. A project management is not seen as a separate profession just like regular job to do the duties. (Szpitter 2012).

Third level – project management maturity – the level of singular methodology – presented in table 3.

Table 3. Areas of singular methodology of enterprise V

Areas of singular methodology	Grading
Integrated Processes	26
Culture	24
Management Support	21
Training and Education	15
Informal Project Management	23
Behavioral Excellence	22
Sum total:	131

Source: A.A. Szpitter own study based on the research

The integration of business process uses only company actively managing risk, but the risk management process is applied only to the extent of financial risks, technical and scheduler range may change depending on the project. Risk management methodology is structured by rules, procedures and forms of documents, about 50% of the projects implemented in accordance with the principles of risk management. Project teams have empowerment. In the company there are 3 methodology of project management. Corporate culture allows to change the scope of the project at any point in the project life cycle and is used formal change control process. Corporate culture is based on the vast extent on rules, procedures and guidelines. The organizational structure is traditional, essentially vertical. The project manager is seeking resources for the project by negotiating with line managers to allocate the best available project resources. Line manager in the company is trying to share the responsibility of the project manager, the project team is responsible for the integrity of the technical aspects of projects with final results. Project manager obtains its power through formal descriptions of positions.

The company conducted a 10 internal training courses associated with the project, up to 25% of courses focused more on behavioral skills (quality) than quantitative (techniques, methods in projects). The company is convinced that project management is a part-time job, and training should be made to apply to

the current and long-term needs. The training program should be an expression of consensus between the expectations of employees and managers rank. In the study, there was no training related to project management, which includes in its content of specific, documented business experience in implementing projects in the past. Less than a quarter of senior management of the audited entity organization participated in training programs or meetings, during which they were shown the benefits of maturity in project management. Approximately 10-20% of the project managers working week is devoted to the preparation of reports. It is believed that most of the activities in the project can be scheduled through the procedures and less competent employees may well be checked if they are assigned to appropriate teams. The staff assigned to the project team will be assessed by the line manager and project manager. Persons appointed to the project managers are usually managers at any level of management. Project managers are encouraged to avoid risk, to some extent, have been trained to study the feasibility and cost-benefit analysis. No one in the audited company could not provide the cost of developing one hand, a typical report.

Fourth level - project management maturity - the level of benchmarking - in presented in table 4.

Table 4. Quantitative and qualitative benchmarking company V

Type of benchmarking	Grading
Quantitative benchmarking	+18
Qualitative benchmarking	+11
Sum total:	+29

Source: A.A. Szpitter own study based on the research

Score between 11 and 24 points in quantitative benchmarking means that the company is not heavily used benchmarking to improve a methodology and product innovation processes (collection). The result between 6 and 11 points of quality benchmarking shows that the company paid marginal attention to building adequate support to build a culture of project management methodologies. Total score benchmarking quantitative and qualitative benchmarking below 37 points indicates that the company does not achieve satisfactory results from the use of benchmarking in your organization.

The use of benchmarking in the company is limited to only a few areas. Benchmarking allowed to find companies that deal with relationships with clients in the management of project activities. Benchmarking efforts made it possible to find other companies that carry out the analysis of limited resources, and focused the attention on the way in which consumers manage other companies in the scope of the change management process. Benchmarking efforts are directed only to observe the undertakings in the same business area.

Fifth level - project management maturity - the level of continuous improvement - is presented in table 5.

Table 5. The level of continuous improvement of the enterprise V

Name	Grading
Continuous improvement	+8

Source: A.A. Szpitter own study based on the research

The company achieved score eight points in the project management maturity level 5 on the continuous improvement of the company. A score below 10 points to 48 points may be obtained indicates that the organization is committed to supporting the idea of continuous improvement. The company does not have in this regard, management support and demonstrated that there was a strong resistance to change. There shall be no reduction in the number of checkpoints in the project management methodology. Does not develop a culture focused on informal project management and is as focused on work attitudes. It does not change the ways of communicating with consumers, does not make improvements to speed up the process to allow the integration of activities, does not make changes in behavior resulting in changes in organizational project management methodology. Only the software was acquired to improve project management and software that allows you to reduce the number of reports and documentation.

4. Conclusion

This article presents the results of one company for the five test subjects: the issue of exploring project management maturity of the organization in the area project knowledge, structure of common processes, build a single methodology, the types of benchmarking and the use of the idea of continuous

improvement. From the perspective of product innovation process tested was diagnosed with major problems and obstacles in company V to achieve the level of project management maturity in terms of project knowledge, performance construction of common processes and methodologies to build one of the organizations using benchmarking and continuous improvement mechanisms within the organization. The results provide impetus for deeper and broader research on knowledge management in building design project management maturity. Diagnosis of maturity of project organization provided guidance and recommendations for companies seeking to test and improve the growing maturity in project management. Reaching maturity in project management will enable the respondent company to support the creation of knowledge management and knowledge flows in the test of the product innovation process (collection). This is a necessary basis for gathering and transfer of knowledge in order to achieve a level of maturity and organizational improvement projects.

Summary

Achieving levels of project management maturity in organization

The article demonstrates achieving levels of project management maturity and presents research company V on construction levels of project management maturity by the project team organization while creating a new collection of women's clothing. The results relate to five areas: knowledge areas of design, build structures common processes, build a single methodology, the types of benchmarking and the use of the idea of continuous improvement within the company. Identify research gaps in the maturity of design and knowledge gaps in the test design company, which provides guidance and recommendations for the future.

Key words: *knowledge management, project management maturity.*

Streszczenie

Poziomy osiągnięcia dojrzałości projektowej organizacji

Artykuł przedstawia osiągnięcia poziomów dojrzałości projektowej i prezentuje badania przedsiębiorstwa V dotyczące budowania dojrzałości projektowej organizacji przez zespół projektowy podczas tworzenia nowej kolekcji odzieży damskiej. Wyniki badań odnoszą się do pięciu zagadnień: obszarów wiedzy projektowej, budowania struktury wspólnych procesów, budowania jednej

metodyki, rodzajów benchmarkingu i stosowania idei ciągłego doskonalenia w przedsiębiorstwie. Badania identyfikują luki w osiągnięciu dojrzałości projektowej i luki w wiedzy projektowej w badanym przedsiębiorstwie, co dostarcza wskazówek i rekomendacji na przyszłość.

Słowa

kluczowe: *dojrzałość projektowa organizacji, poziomy dojrzałości projektowej.*

References

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