# PRESENT STATUS OF PM IN DIFFERENT INDUSTRIES (RESULTS OF GLOBAL SURVEY)

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#### **Short Abstract**

Two studies explore the complex analysis field "project management in different industries" from several points of view with various methods in order to answer the questions which arise about the practical aspects of project management. The research proves that there is a relevant gap between project management in theory and the "daily" project management in companies. Project management is a discipline whose importance has grown significantly over recent decades. The understanding of project management varies noticeably among project personnel and among different companies and as assumption in and between national cultures. Companies that perform better in the areas are viewed to identify success factors for implementation and options for action.

# Keywords: state, trends, industries, pm

#### Introduction

Project managers have long expressed a need for greater knowledge of the reality of project work – for example, how project management is used to differing extents and organised in different ways in companies and industries. Harmonisation between academic theory and industrial practice is a necessary step in order to answer the questions which arise about the practical aspects of project management. Several empirical research projects carried out by IPMI over the last years cover these issues.



Slide 1: IPMI empirical research projects (selection)

#### Methodology

In co-operation with Volkswagen Coaching GmbH and PM-consultancy Orbitak the IPMI carried out 2 studies on the state and trends of project management in Germany (2002) and in a global context worldwide in selected countries (2005). In collaboration with over 700 project experts from industry and academia extensive information about the use of project management in practice has been provided.

The studies explore the very complex analysis field "project management in different industries" from several points of view. Various methods were used to obtain information for this purpose:

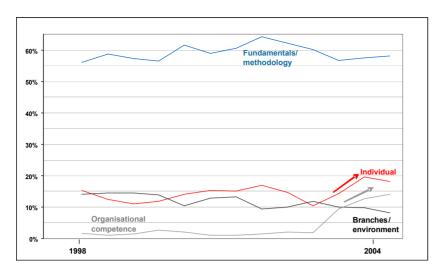
- **Secondary analysis** The aim was to obtain a detailed overview of "practically relevant" issues concerning project management.
- **Expert workshops** Hypothesis definition and to validate and determine in detail the main points of focus of the study.
- Qualitative survey 60 Experts in Germany and more than 100 Experts in 8 countries to gather opinions of project management experts in selected key industries (e.g. "traditional" project management users (defence, plant construction) and "new" project management users (IT, telecommunications).
- **Quantitative survey** 250 Experts in Germany and 329 worldwide to check the validity and meaningfulness of the results from the qualitative survey.
- Feedback evaluation and debrief to validate and discuss results.

#### Main Theses – State and Trends of project management

The research proves that there is a relevant gap between project management in theory and the "daily" project management in companies. Project management is a discipline whose importance has grown significantly over recent decades. Further strong growth is expected in the future in industry, administration and in academia. The idea of a brought based project management culture as a management style in companies seems to be a vision today. Project management in practice is use of methods to match deadlines.

The project management literature mainly concerns itself with methodology, tools and the implementation of projects. On the other hand, several authors have recognised that a number of aspects of current project management need to be developed further. Especially the role/importance of certification for project management is only dealt with in the literature as a lesser aspect (skills (incl. offers for development), role and standing in the company, project-related performance assessment, career opportunities, certification) need to be defined. The secondary literature analysis was intended to find a uniform direction on practice-relevant issues in the field of project management (see Slide 2).

The global study research approved these theses. Project management methods are mainly used worldwide as operational tools for day-to-day business in projects In most cases, project management is not yet viewed as a management philosophy. One did not find national differences in the sense of a provable project management culture typical for one country in terms of PM usage and PM perception. This states the understanding of project management varies noticeably among project personnel and among different companies and as assumption in and between national cultures.



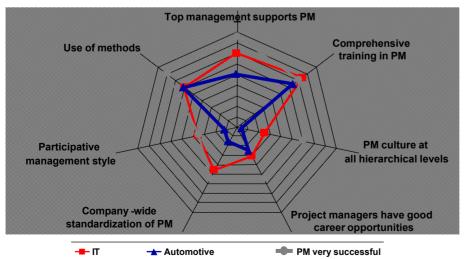
Slide 2: Evaluation of selected IPMA, GPM and PMI conference contributions from 1998 to 2004 – representation of the increase in importance of subjects in discussions on project management

Leading authors are increasingly concerning themselves with subjects such as managementby-projects, strategic project management and multi-project management.

#### **Project Management Success Factors**

Project management can only be successful if Top management supports it e.g. through project communication, education, processes and project marketing. Additional Success factors are an important acknowledgment: Use of methods and customized qualification are most important. Several success factors for project management were identified in the studies and provided a fundamental basis to define options for action on how to:

- achieve Participation across the complete organisation on introduction
- do proactive communication and project marketing
- get support from top management echelons
- define efficient and selective use of methods and standardization
- continuously maintain company-specific qualification



Slide 3: PM Success factors and options for action in different industries

#### Project management use and individuals in different industries

The study classifies 3 key types of individuals who use project management

#### **Project management experts:**

These individuals understand project management in depth. Many have formal training in project management and have worked for several years with these concepts and methods. The "visionaries", namely those people who can articulate and discuss new and interesting future uses for project management, are found in this group.

# Managers with project management responsibilities:

These individuals have the power to authorise the use of project management in the organisation. However they do not always have formal project management training nor the in-depth knowledge of project management experts.

#### **Project management users:**

These individuals use project management, often because this is demanded 'from above'. Project management is seen and used at this level as purely a 'method'.

In addition, 3 types of companies were categorised:

#### Traditional efficient large pm orientated companies (ca. 35% of the survey)

These are mostly involved in plant construction, the building trade, public administration and defence. In general these companies have "strict" and hierarchical structures as well as very formally delineated responsibilities (often also project-related). For these companies, project management is an indispensable method for reaching goals and has been used for decades. In general, project managers in these companies have good career opportunities.

#### Modern market driven pm orientated companies (ca. 25% of the survey)

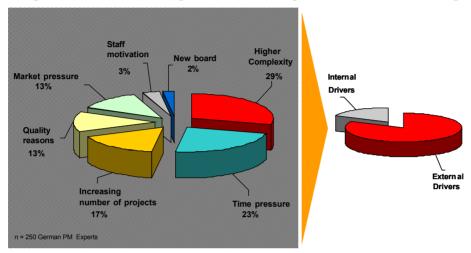
These are mostly in areas such as IT services, software development and telecommunications. In general these companies have flatter hierarchies and a participative management style. For these companies, project management is a new means and way of working – a part of the company culture, which is understood and used by most employees right up to top management level. Usually there is a company-wide, standardised approach to project management (via descriptions in the project management handbook). Project managers in these companies generally have good career opportunities.

## Companies with pm island solutions (ca. 40% of the survey)

This type appears to be the most common type of company as far as its style of project management is concerned. Such companies can be found in all sectors of industry. These companies normally have excellent examples of project management in some areas of their work (functioning as "organisational islands") but there is however no company wide standardised use of project management. Project managers in these companies often have relatively poor career opportunities.

# Further examples of results from the quantitative research work Reasons for project management implementation

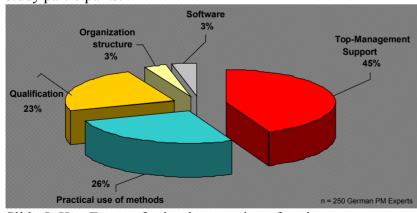
The reasons for implementing project management are strictly externally driven and result from increasing complexity, time to market-issues and increasing number of projects. Project management is not a fancy tool used short-term for staff motivation by a new board but well positioned throughout the survey participating industries. In addition it could also be seen that the main factors for the introduction of project management were more strongly present among the "successful" companies than among the "unsuccessful" companies.



Slide 4: Reasons for introducing project management

#### **Key Factors for project management implementation**

The general question on key elements of (successful) project management shows the importance of a series of factors in the introduction of project management as judged by the study participants.

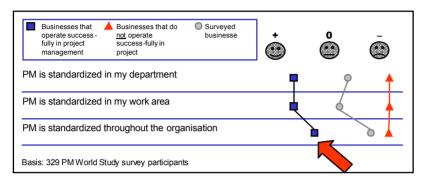


Slide 5: Key Factors for implementation of project management

### Project management standardization

The survey shows that the standardisation of project management contributes to the success of PM systems and depends on the procedure for an official introduction of project management. The introduction of project management does not necessarily imply a standardisation on the company level, but can also be implemented at department or branch level (island solutions).

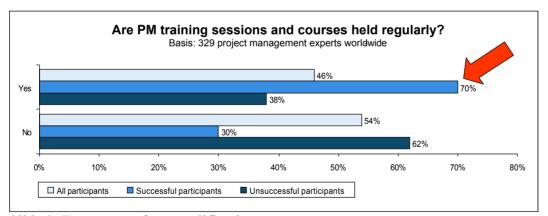
The survey results from "successful" participants show that official introduction and standardisation of project management tended to be implemented on department and sector level. This resulted in successful project management. Among the "unsuccessful" survey participants, it can be clearly seen that if project management has no methodical and organisational support, if must be executed on an individual basis. This was the factor that led to this group expressing the greatest need for training.



Slide 7: Standardization in project management

# **Qualification in project management**

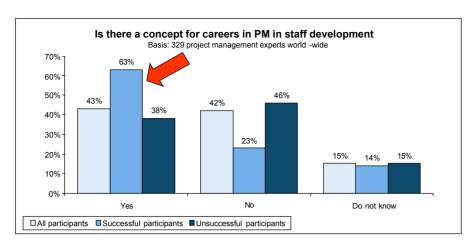
Regularity of training measures was seen by "successful" participants as a factor for success (70%). This was backed up by the training programmes which were only conducted at irregular intervals by "unsuccessful" participants (62%). Therefore PM knowledge must be continually stimulated, expanded and refreshed with qualification and training. It is prerequisite for the sustainable success of the PM system.



Slide 8: Frequency of pm qualification

#### Career opportunities

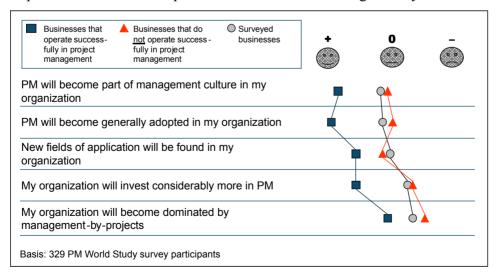
As well as project management status, the opportunity for a career in project management is another criterion for successful project management. The hypothesis that a career in project management is not yet possible in all companies was reinforced here, but mastery of project management can still aid career prospects. Around 85% of the "successful" participants have already recognised that career opportunities and a system of rewards are essential for a PM system. 65% of the survey participants offer a concrete career model for project managers in their personnel development programmes.



Slide 9: Career opportunities in project management

#### Conclusion and trends in project management

All of those surveyed were of the opinion that the main reasons for project management described (increasing complexity, internationalisation, etc.) will become increasingly more relevant in the future. The expectation is that project management will be effectively implemented in companies. Project management is basically quite simple and can be used for many applications; therefore its spread to new areas is vital and necessary. In general, the future expectations are formulated more positively among "successful" survey participants than among others. This group has already experienced the advantages and successes of an officially introduced and standardised PM system. The "successful" participants also see a spread to new fields or sectors of application in the company as positive, whereas this was treated with more caution among the entire group of survey participants. The study of the discipline sees the future development of project management as having a high strategic significance, whereas the survey results show that the advance of company practice is more pragmatic. Project management is used in practice as a solution and a management tool with technical origins and usage in the technical sector. If a company has experienced success with project management it has spread to other areas. The speed of this implementation will take place in the medium-term or gradually.



Slide 10: Future expectations in project management

#### REFERENCES

- 1. Caupin, Knöpfel, Morris, Motzel, Pannenbäcker [Eds..] (1999): ICB IPMA Competence Baseline, International Project Management Association, Bremen
- 2. Dworatschek, S., Gutsch, R.W. (1987): Evolution of topics in papers of INTERNET and PMI, in: Proceedings of PMI Annual Symposium in Milwaukee, Drexel Hill 10/1987; pp.401-407
- 3. Dworatschek, S. (1994): Die Entwicklung des Projektmanagement. In: Werners, B./Gabriel, R. (Hrsg.): Operations Research (Festschrift für J. Zimmermann). Berlin
- 4. Dworatschek, S./ Kruse, A./ Preuschoff, A. et al (2002): Stand und Trend des Projektmanagements in Deutschland. State and Trends of Project Management in Germany. Eine Studie von: Volkswagen Coaching GmbH ProjektManagement, IPMI (Univ. Bremen), EMS, Wolfsburg
- 5. Dworatschek, Sebastian/ Wiebusch, Jenny: Discontinuities in projects and organizations morphology, risks and chances. In: Semolic / Dworatschek (Editors): Slovenia 2004, pp.21-33
- 6. Dworatschek, Sebastian / Meyer, Helga (1999): Competence and Qualification Requirements of Project Personnel. Proceedings of 4th Conference dmmi Design to Manufacture in Modern Industry 9/1999, University of Maribor, Slovenia, pp.297-309
- 7. Griesche, D./Meyer, H./Dörrenberg, F. (Hrsg.) (2001): Innovative Managementaufgaben in der nationalen und internationalen Praxis. Anforderungen, Methoden, Lösungen, Transfer. (Festschrift für S. Dworatschek), ISBN 3-8244-0608-X, DUV, Wiesbaden
- 8. Pannenbäcker, Olaf / Dworatschek, Sebastian (1999): Qualification of Successful Project Managers. Do Qualification and Certification Programmes match the Requirements? In: Artto/ Kähkönen/ Koskinen (eds.): Managing Business by Projects., IPMA-Conf.-Proc., Helsinki 1999, Vol.2, pp.755-770
- 9. Preuschoff, A./Schmidt, K. (2005): Stand und Trend des Projektmanagements im globalen Zusammenhang. Wolfsburg; (Editors: Bell/Dworatschek/Kruse)
- 10. Preuschoff, A./Schmidt, K. (2006): State and Trends of Project Management in a global context. Wolfsburg; (Editors: Bell/Dworatschek/Kruse)
- 11. Semolic, B./ Dworatschek, S. (Eds.): Project Management in the New Geo-Economy and the power of project organization. IPMA Expert Seminar Series 9/2003. ISBN 88-535-0650-8, Slovenia 2004