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Development of Project Management Culture for Russian Consulting Company: 10 years of Experience

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Abstract: Corporate University is an important tool for developing the sustainable project culture of the organization taking into account the interests of various internal and external stakeholders. Moreover, the Corporate University is a best place to organize a constructive dialogue between these stakeholders and ensure a balance of their interests. An innovative model of development of sustainable IBS project culture is based on the principles, corresponding to the main streams of company's replenishment of Project Manager's staff-by trainees, consultants, and professional Project Managers, coming from other companies. The paper presents main components of the IBS Corporate University Programme-from training of Master students on the position of a graduate employee (trainee), till coaching for the Project Directors; from the study of the Project Management methodology, till practical case studies, formed on the basis of real projects.

Key words: project culture; corporate university; competencies; master's program

1 Framework of competence development program

The question, where to get skilled project managers who understand the specifics of the business, is relevant for any large project-oriented company. Particularly acute this problem becomes in dynamic changes in the business environment and enhances the processes of labour migration between competing companies. We should not forget about the constant development of the discipline of project management, the emergence of new fields of knowledge, techniques, and professional standards.

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IBS Company has worked in consulting and IT services, where these factors are added also the high rate of renewal of implemented technologies, which often entails the need to change traditional approaches to project management. Thus, the development of sustainable company's project culture requires, on the one hand, to comprehend and to use own 20 years of experience in project business, and, on the other hand, to be completely open to new approaches, methods and technologies. IBS model of development sustainable project culture is based on three principles, corresponding to the main methods of project manager's replenishment (see Figure 1).

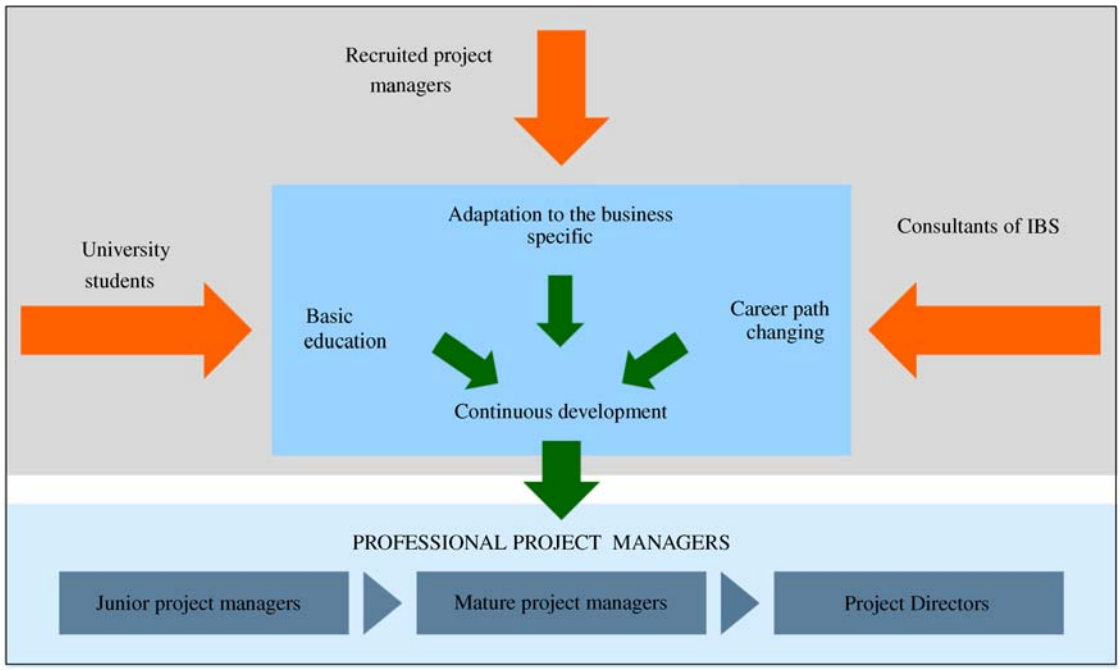

Figure 1 Principles of company's project culture continuous development

Firstly, for the trainees, who are directly coming into the company from a University bench, it is an organisation of fundamental training in the field of project management. Secondly, for the consultants, who showed themselves as a potentially successful project managers, it is the ability to change the trajectory of career growth. Finally, for professional project managers, coming from other companies it is their adaptation and further personal development based on the business specifics of IBS Company.

A complete implementation of these principles is possible only with the active collaboration of a number

of stakeholders, the most important of them are top-management of the company, HR-service, Project Management Office. Main partners in the implementation of the project culture development program are (see Figure 2).

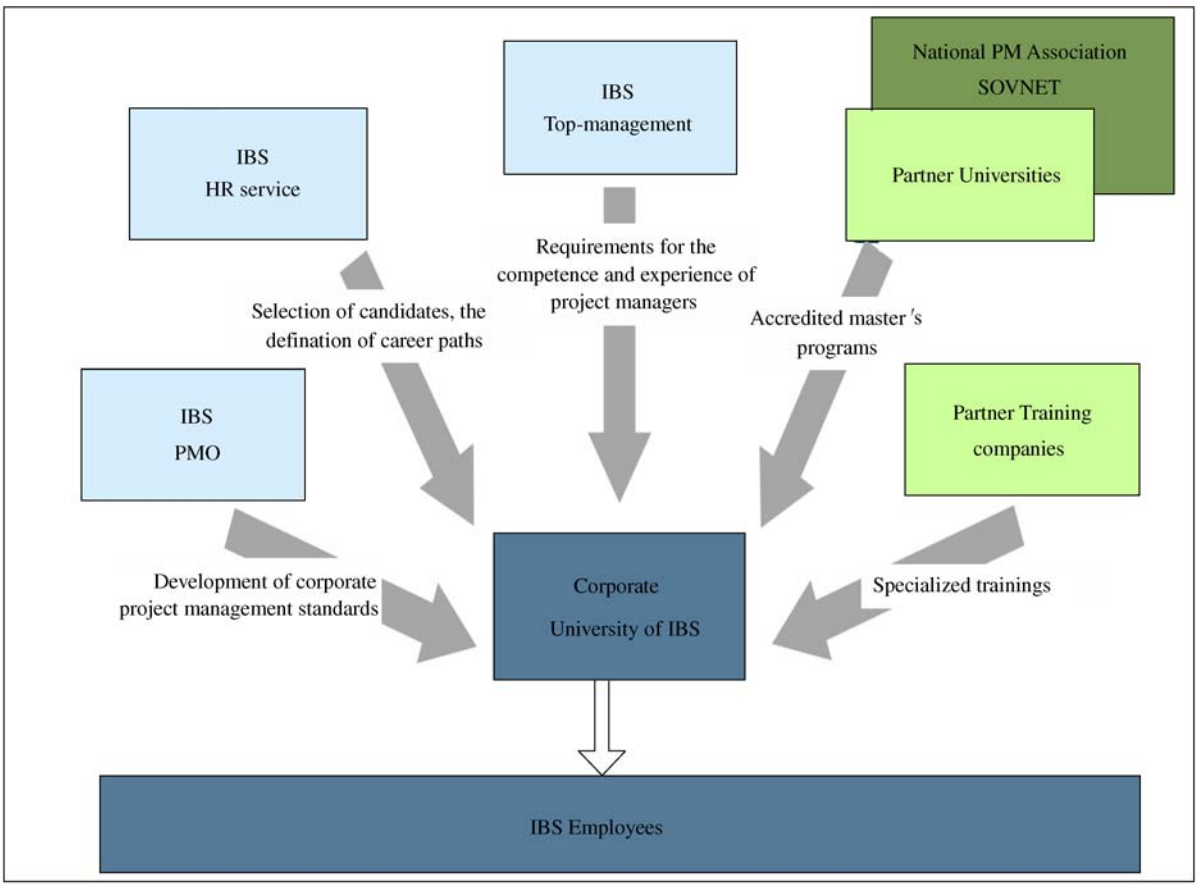

Figure 2 Stakeholders of the Programme of project culture continuous development

1) Universities implementing special Master's programs-NITU MISA, MIPT State University, Higher School of Economics;

2) Russian national project management association named 《SOVNET》 conducting accreditation of Project Management training programs in order to confirm their compliance with the requirements of IPMA ICB v.3.0 (2006);

3) Training companies which are providing specialized trainings for development for the project managers' competence.

4) IBS Corporate University summarizes the requirements and interests of the key stakeholders, forms training programs and organizes the learning process, involving internal and external partners.

2 Consultant & project manager-two-in-one

IBS as a project oriented consulting company requires a large amount of advanced specialists with high level of competences in all fields of IT, consulting and management, particularly in project management. The most important point is the necessity to combine competencies of consultant and project manager in one person. This demand is connected not only with desire for efficiency and effectiveness but with special product segment of the company-project management consulting. To provide such specialists IBS established its own Magistracy with Masters Education program in cooperation with worldwide known Moscow universities (Sadkov D., Tovb A., Tsipes G. (2010)).

To meet specific requirements of IBS project and product portfolios not only the master's course on project management, but also wider context of all Masters Education program was developed. Special topics of project management are included in various disciplines of the program on information, finance, strategic and operational management.

2.1 Business model of education used by IBS

Almost twenty-year history of IBS clearly showed the shortcomings of traditional education programs of Russia's universities for the specialists in the field of management and information technology. Almost every graduate who join the company showed incompetence to participate fully in the work process. It would take a long period of retraining and additional education, which negatively influenced the financial performance of the company and, last but not least, the morale of the young colleagues.

As the strategic initiative to solve this problem IBS established the system for targeted education and training of university graduates in key areas of information technology and consulting. This education and training system realised in the form of the Master's education programs organised on the base on the innovative model of public-private partnership of IBS and leading Russian state universities-Institute of Physics and Technology (MIPT-"Fizteh") and Moscow Institute of Steel and Alloys (MISA).

A key element of realised IBS model of business education, presented at Figure 3, are the production units (departments) IBS, which serves several important functions in the processes of recruitment and training of students.

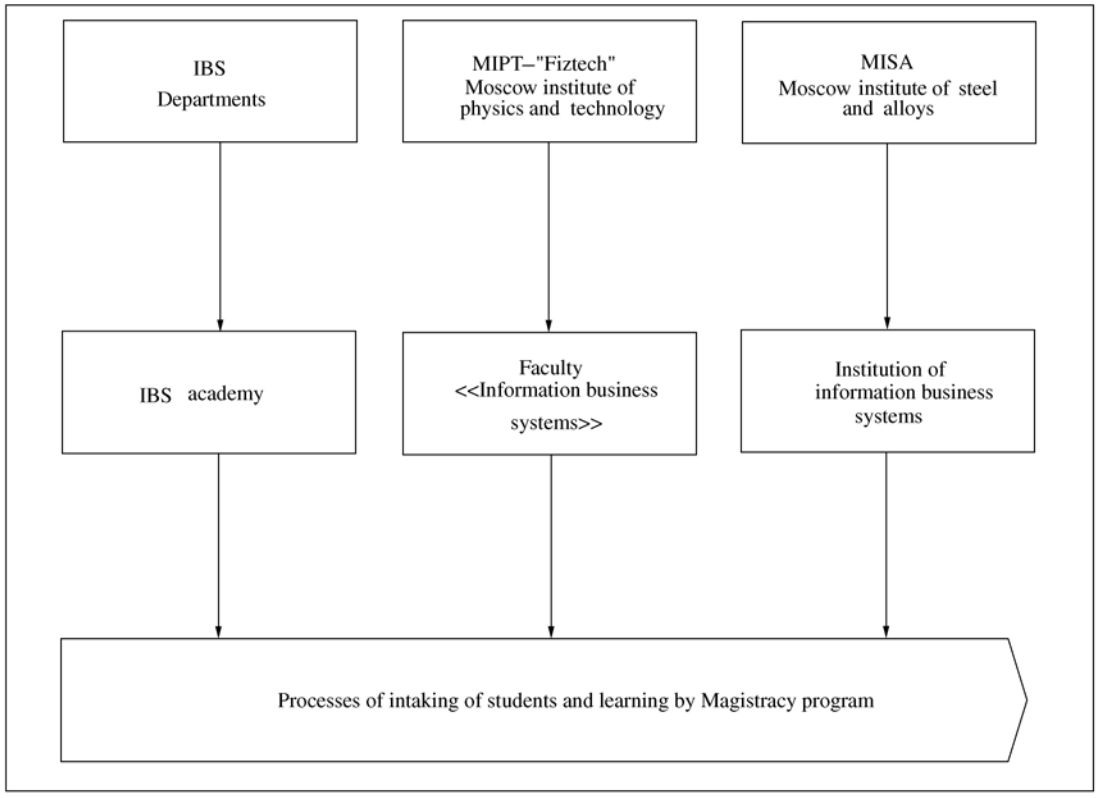

Figure 3 IBS Business education stakeholders

Schematically, these processes are as follows:

1) IBS departments are forming the requirements for necessary competencies and make an order for the required number of Masters Education programs graduates.

2) Specialised department of the company (IBS Academy) consolidates the requirements and orders and, together with the 2 leading Russian universities (MIPT and MISA) creates curricula and programs.

3) Corporate faculties (departments or institutions) of business information systems, created with IBS in the MIPT and MISA (leading universities in Russia), are organising and providing education and training process according with the Masters Education programs.

4) IBS business departments are actively involved in the education and training process in various forms: by providing a full-time teachers and trainers, by establishing and staffing departments (sub-faculties) of faculties. For example, the department of management consulting almost entirely staffed by experts from IBS Management Consulting Department.

5) IBS departments ensure student participation in research and commercial projects, provide materials

necessary for preparing of Master′s theses. Upon completion of part of education and training, students enrolled in staff of IBS departments.

Thus, IBS Business departments being customers of education and training are fully involved in the education and training process and able to promptly effect on this process, which is especially important during the formation of Master′s education programs.

2.2 Project management as a key competence of any IBS employee

Project management was recognized as one of the disciplines fundamentally important for the consulting business specialties. There are three main reasons for project management is given in IBS as so important (see Figure 4).

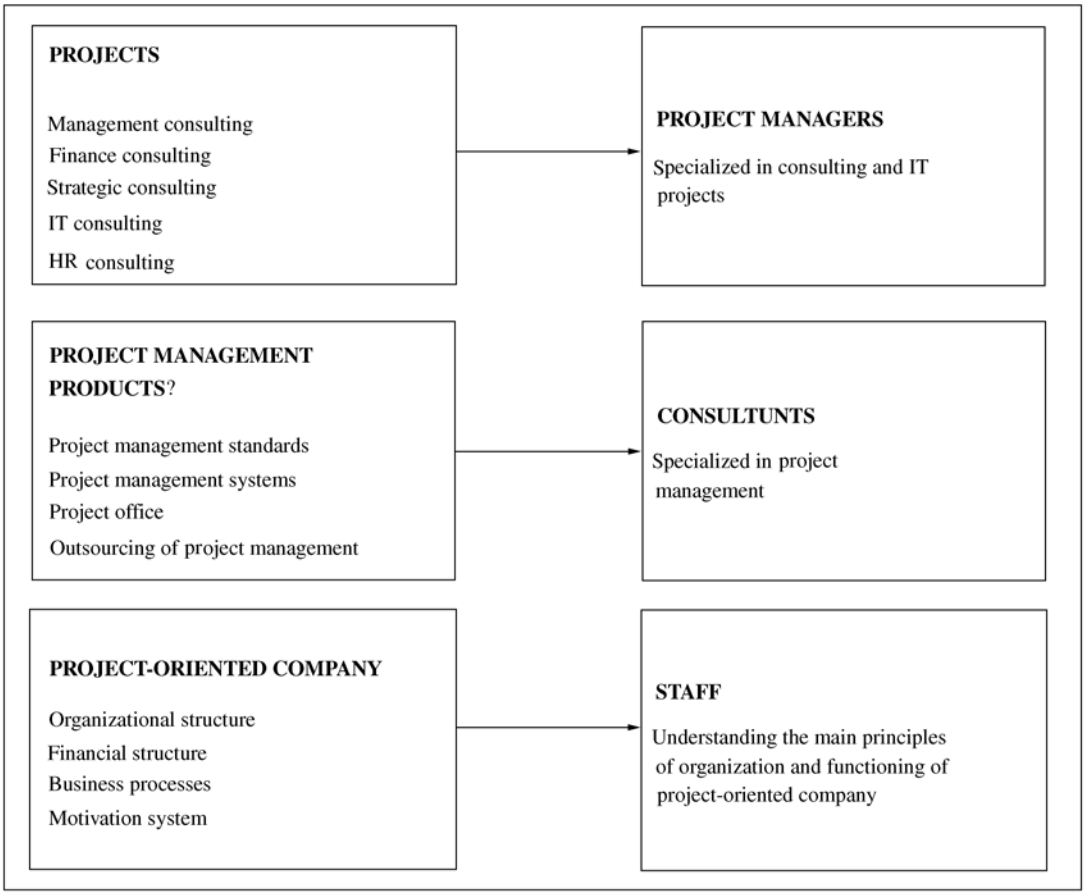

Figure 4 Competences in project management required for consulting company

First of all, IBS offers services in various areas of consulting-IT consulting, management consulting, financial consulting, strategic consulting, HR-consulting-realising annually several hundred projects

of various scale and complexity. This means that one of the most in-demand positions in the company is professional project managers. However, taking into account the specificity of business, except those general knowledge and skills they have to have more and more specialisation in the field of consulting and information technology.

In addition, project management is not only a way of doing IBS business, but it is strictly IBS business-in the company's portfolio there are a number of products in the field of project management. This requires appropriate knowledge, skills and experience of the consultants associated with the development and implementation of corporate standards and project management systems.

Finally, knowledge of and ability to use to certain extent of project management methodology, approaches and tools, understanding of the basic principles of organization and functioning of project-oriented company is important for all IBS staff, since all the company's activities are implemented in the form projects.

Unfortunately, much of the criticism for the incompetence of university graduates is regarding their poor education in project management. This, in particular, is due to the fact that the curricula of most universities in this field in its infancy, and the specialty itself " Project management" is still not recognized by the Russian Ministry of Education and State Higher Attestation Commission.

Due to this situation and based on the requirements for the competence of the IBS staff in project management, not only the course of project management was formed, but also the general context of the entire Master's program. Special issues of project management are included in the various disciplines in information technology, economics and finance, strategic and operational management, etc.

2.3 Project management course for masters education program

The aim of the course " Project management in modern company" is the formation of students' holistic comprehensive understanding of methodology, instruments, tools and techniques of modern professional project management, international and national standards and on the basic principles of their use in the project-oriented companies, as well as on approaches to implementing project management systems on the basis of the enterprise project management standard.

The overall logic of the course, presented on Figure 5 in the form of " roadmap" is constructed in such a way as to consistently provide answers to the most

important questions raised by many experts, involved in project oriented business activities.

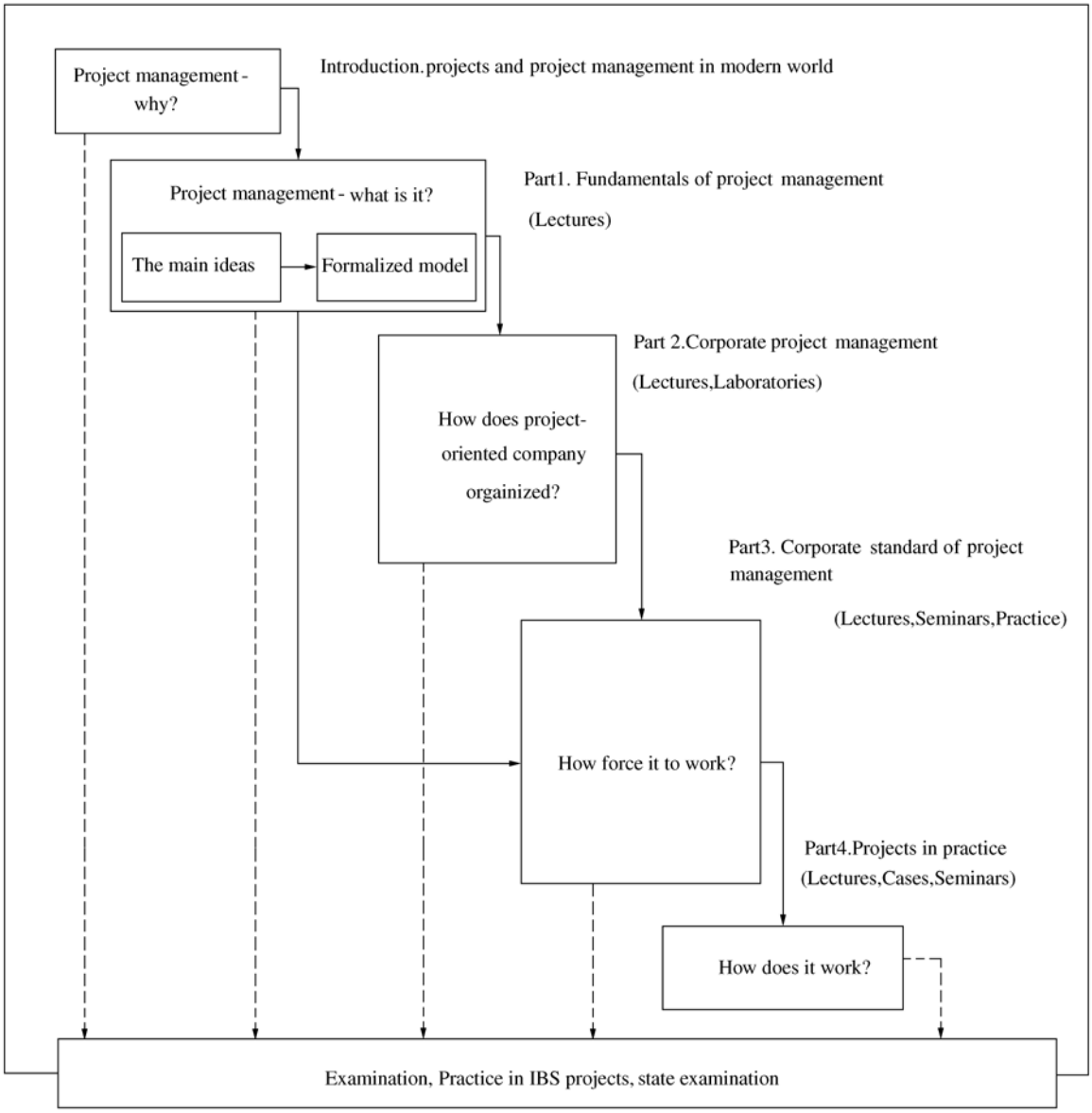

Figure 5 Roadmap of educational course "Project management in modern company"

First of all, this is the question " Why-project management?" Answers are described in the introduction part of the course. There are analyses of the main advantages, reasons and factors of success of professional project management, its current state as a professional discipline in the world and in Russia.

Then we try to give a sufficiently short answer to the question " What project management is?" This is dedicated to the first part of the course, which

highlighted two sections. The first section describes the main provisions of the methodology of project management, international and national standards in this area, as well as a glossary of project management. The second section provides a brief overview of the development of project management models.

Next question -" How does the project-oriented company organized?" -is devoted to the second part of the course. It examined the role and capability of project management in the practice of modern companies. Material of this part of the course is based on experience and research of the IBS. Various models of project-oriented companies are considered-organizational, process, economic (Sadkov and Tsipes (2008)). The key themes of this part are also are issues of harmonization of project and process approaches (Tsipes and Tovb (2005, 2009-2)), the role of projects in the strategic management of the company (Tsipes and Tsiperman (2006, 2008)), assessment of project-oriented activities (Tsipes (2004)), Project Management Office.

If project management is not seen as speculative doctrine, but as a practical tool, it is very important to find the answer to the question "How force it to work?" In the third part of the course the principles of development and implementation of a corporate standard for project management are discussed, covering all major levels of management-from policy to operational standard. As the through prevailing case, here we consider the project management standard of IBS company, the actual which evolving since 2000 (Tovb and Tsipes (2005)).

And finally, last question-"How does it work?" -is devoted to the fourth section of the course. Here, the general principles and practical examples of the development and implementation of project management systems in the Russian and foreign companies. Majority of the examples drawn from the IBS practice on development and implementation of project management standards and systems at various companies (Tsipes and Tovb (2007)).

Working program of the course includes 32 hours of lectures and 46 hours of workshops, case studies and master classes. Especially for this course is designed textbook (Tsipes and Tovb (2009)) and a set of instructional materials totalling over 500 pages.

2.4 Project management course in the general context of masters education program

Project management course is in the first semester. Throughout the first year of study, students also receive additional education and training on the project management methodology and tools in related courses. The overall structure of master's training program consists of six blocks of disciplines, which

are closely related and strongly linked to the course " Project management in the modern company" (see Figure 6). Consider some of these links.

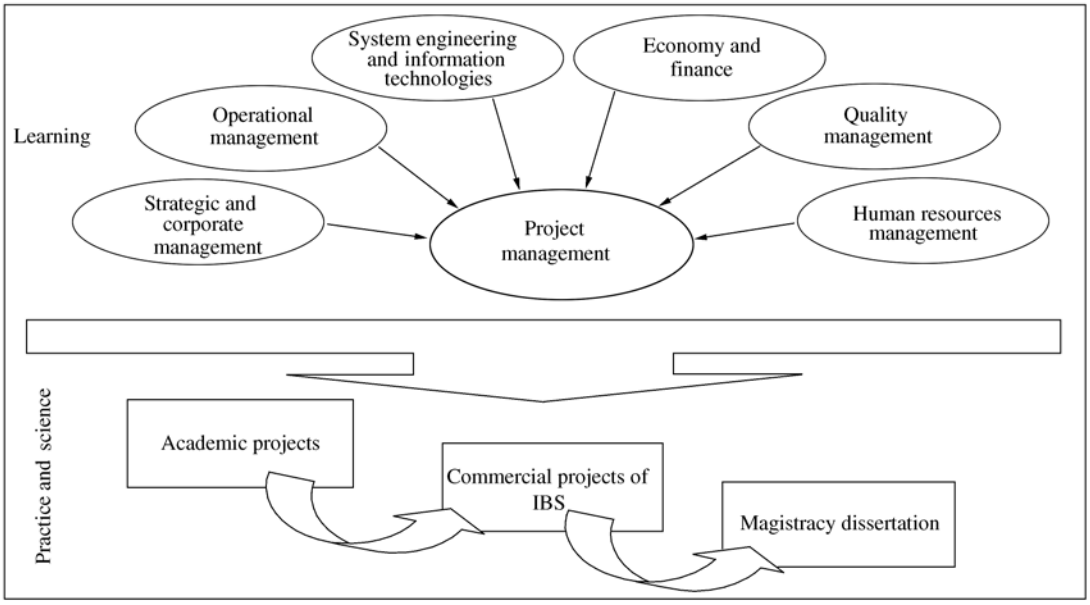

Figure 6 General structure of IBS Master's education program

Course of the strategic management and corporate governance allows more deeply immerse in issues of strategic project management. In particular, this course considers in details modern technology of strategic management based on Balanced Scorecard methodology, possibilities and ways of its application to governance of branch of industry and corporate programs and portfolios of development projects.

Operations Management Course focuses on situations where it is necessary to combine various organizational, methodological and software tools of the project and process management in a single system in accordance with unified corporate rules and regulations.

Students are receiving a plenty of information on project management in the course unit " Information technology". It details the specific IT industry standards for project management, especially for organization and life cycle of IT projects, the principles of activities of IT service unit in modern organisation as a unit that combines project and operational activities, etc.

Other blocks of disciplines that are shown in Figure 6 can better address the project cost management,

project human resource and personnel management, project quality management, encompassing a wider context of corporate governance and management.

2.5. Master's program scenario: from students to consultants

Much attention in the program is paid for the establishment and development of students' practical skills in project management and for work in project teams (see Figure 7). The first practical skills acquired in the scientific research projects carried out by students during the first year of training. In the second year students as IBS interns are already working in commercial projects of the IBS company. The results of these projects are the basis for preparations of master's theses, including theses on topics of project management. Typically, the dissertation research directly related to the needs of IBS in the development and improvement of product portfolio.

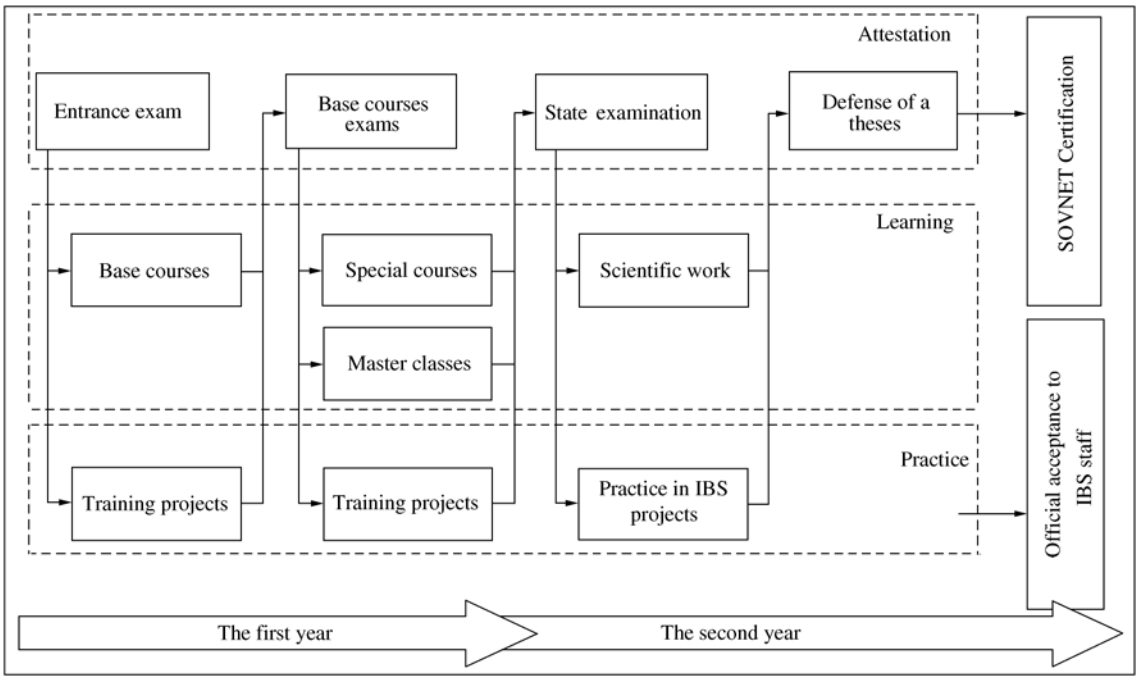

Figure 7 Master's program scenario

Control of education and training is carried out in various forms, and the final is certification for entry level of knowledge and skills in project management as part of the Master's degree state controlled examination.

IBS Master's education and training program was

accredited by Russian Management Association SOVNET and received its official confirmation of compliance to IPMA ICB version 3 and SOVNET NCB requirements. All students who successfully passed the Master's degree state controlled examination and defended his master's thesis, and receive an appropriate SOVNET certificate.

Master's program is regularly updated on compliance with national and international requirements for knowledge and skills of project management specialists. Years of experience showed that the knowledge obtained by undergraduates, enough for their successful certification for level D IPMA 4-L-C. And the most successful students in 2 ~ 3 years are becoming self-dependent project managers.

3 Steps to professionalism in project management

3.1 From consultants to project managers

Despite the attractiveness of the idea of combining the two roles–the project manager and technical specialist–by one person, to achieve the optimum balance of competences is quite difficult. Obviously, for projects of all sizes and complexity, this balance has to be different.

The company released three levels of project's complexity-low, medium or high complexity. To evaluate the complexity of projects using the model based on GAPPS (2006). The model includes nine factors that give a comprehensive picture of the project-general conditions, technical and organisational complexity, legal terms, financial terms, significance of the project, unanimity of stakeholders, the number and diversity of relationships, customer' maturity in project management.

Accordingly to the levels of project' complexity are identified three levels of project managers skills – a beginner Project Manager (Junior PM), an experienced Project Manager (Mature PM) and Project Director (Master PM). Each level provided with its own model of competencies and behavioural profile that formed the logical basis for professional development scenarios.

Scenario of technical expert' transition to the role of project manager (see Figure 8) is connected to give answers to some traditional questions: Does he (or she) know it? Can he (or she) do it? Does he (or she) doing it? The first part of this phase includes distance learning and testing on the general methodology and corporate project management standards. The course is based on PMBOK (2013) and adapts its main provisions to IBS specific.

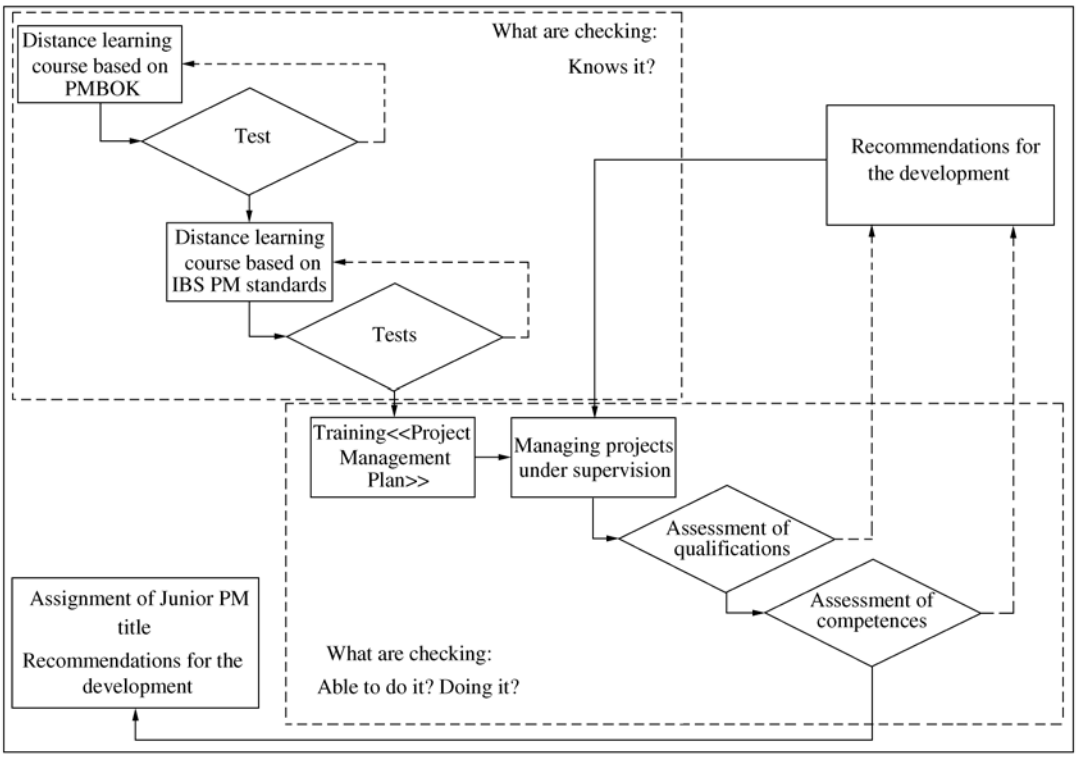

Figure 8 The first stage of the Development Program scenario

To obtain the primary practical skills of project management applicants go through a specialized training " Project Management Plan". Training is organized in the format of a series of workshops, during which participants form a key parts of the project management plan-project scope, work breakdown structure, milestones plan, initial project risks, budget, organizational structure and project procedures.

After successful completion of this steps the employee are admitted to manage of low complexity projects under the supervision of the Project Director. The final result of this stage is getting the employee of the status of Junior PM and defining the future path of his professional development. However, to obtain this status, it is necessary to pass a qualification test performed in two steps-assessment of qualifications and assessment of competences.

3.2 Assessment of qualifications and assessment of competences

Qualifying criteria used to assess the project managers are developed using the recommendations of (GAPPS, 2006), but not copy them exactly. Assessment model consists of 6 areas of management,

20 elements of competence, 49 qualification criteria. Defined also signs of the eligibility rules (the entire model includes 133 signs). It is important to note that all assessed knowledge and skills are described and commented in the manuals of corporate project management standard.

The assessment of knowledge is conducted in the format of the test. The test includes 60 multi-choice questions to test knowledge in three areas:

1) The general project management methodology,

2) The corporate standards for project management,

3) The ethical and behavioral norms, accepted in the company projects.

The assessment of skills is conducted by a method 360°, covers all of the qualification standards and includes a self-evaluation Project Manager (in a several projects) and the evaluation given by the Project Directors. The score is given on a 5-point scale on the basis of the analysis of the quality and completeness of the business rules defined by the standards of the company (see Table 1).

Table 1 Scale for assessment result evaluation

Quality of business rules and regulations execution	Completeness of business rules and regulations execution		
	Performs some items	Performs many of the items	Performs all items
Allows for systematic violations of regulations	1	2	3
Allows for isolated violations of regulations	2	3	4
Prevent violations of regulations	3	4	5

Employees who have successfully passed qualification tests and assessment, directed to the assessment of competence that allows to determine their behavioral profile (Junior PM, Mature PM or Master PM). During assessment checked more than 20 competencies, including:

1) Systems Thinking-analysis, planning, modeling;

2) Creativity and openness to new ideas;

3) Communication-oral communication and negotiation, business written communication, presentation skills;

4) Managerial competence-management of the project team, understanding the client′s, commercial

approach and others.

The next steps after completing the assessments are interpretation of the results and defining the path of further employee professional development, including recommendations to improve the skills and competence development.

3.3 From juniors to masters

IBS principles of project managers' development-based on the ideas of Japanese standard P2M (2008), the closest to our projects of which are:

1) Focus on solving complex problems. To meet the challenges of the complex project no narrow specialist-manager or engineer - is required, you need a professional who can understand the nature of the difficulties, find and implement a solution.

2) Focus on value for the customer and for the company. Project Manager, using the expertise and experience (his and his team), solving complex problems, creates new values and generates new knowledge.

Particularly in projects of medium and high complexity these qualities are critically important for the success of the project and for the company as a whole. And yet when going to projects of medium and high complexity project managers are faced with problems, many of which are completely unexpected for them. Therefore, the search for a solution takes too much time, and the solutions themselves are not always optimal.

Analysis of problematic projects has shown that difficulties often arise in several areas-stakeholders, risks and project team management. That is, the most vulnerable are the areas of project management, in which the high importance of the so-called soft skills-social skills and personal behaviour. If the project manager does not have these skills, the effect of the use of formal methods and tools (hard skills) in these areas is reduced dramatically. And this in turn leads to the idea that there is no sense to do it and spend time on it.

Another problem is arising in the ordinary projects stereotypes the use of traditional instruments such as: scope, time and cost management. When transferring to more complex projects, these stereotypes often lead to inadequate decisions. And project managers are forgetting or just do not know about more "advanced" methods. The second stage of professional development focused on these "pain" points projects (see Figure 9). However, at this stage it is important not only to the content of teaching, but also its form. We choose the form of case study with simulating of real problem situations.

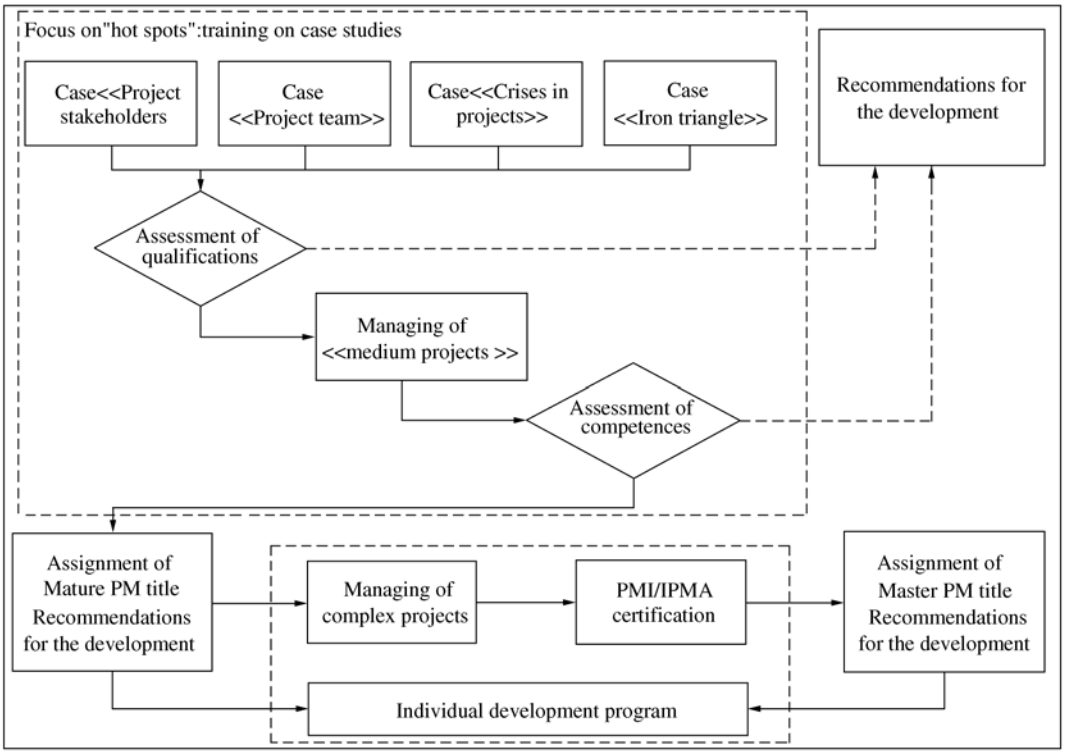

Figure 9 The second stage of the development program scenario

3.4 Learning case studies

Cases content was defined taking into account the need for balanced development of technical and social management skills. Therefore, the cases design and conduct involved "tandem" of internal and external coach. "Tandem" allow us to combine in-depth knowledge of the expert in project management with modern methods of interaction with people with regard to their personal features. As for skills with dominated by formal aspects, training is organized somewhat differently. These topics also are discussed using problems of real projects, but the discussions are held in the roundtable. Participants are looking for answers to the traditional questions: Why did this happen? What could be done to prevent this situation? How can I reduce the negative consequences? It is interesting that the created ideas are often much more interesting than the "right answers" found in real projects.

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knowledge of the expert in project management with modern methods of interaction with people with regard to their personal features. Brief description of the contents of cases is shown in Table 2.

Table 2 Content of the cases

Case	Methods and standards	Soft skills
Stakeholder management	Stakeholders in the project management standards Typical models of stakeholders classification of stakeholders Stakeholder analysis model Stakeholder engagement strategies	Why we are wrong in estimates of stakeholders? How to manage expectations? How to prepare a relationship? How to detect ulterior motives? How to deny stakeholders and not to spoil relations? What to do if the confidence level drops?
Project crisis management	"Road map" exception management-risks, issues, changes Methods of risk identification and analysis Strategy of behaviour in times of crisis Contract as a way to reduce project risks	How to tell about the risks so that you heard? Why information about the crisis does not reach the decision-makers? How to report bad news? What not to do in a crisis project?
Project team management	Humane resource and team management in project management standards The life cycle of the project team Methodology "Struktogramma-The genetic code of the person" of IBSA Institut für Biostruktur-Analysen AG	How to choose the optimum configuration of the team? How to get the right person in the project? How to pronounce the rousing speeches? How to set the task and monitor compliance? How to prevent conflict in the team? How to deal with objections and manipulation? How to motivate and give feedback?

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roundtable. Participants are looking for answers to the traditional questions: Why did this happen? What could be done to prevent this situation? How can I reduce the negative consequences? It is interesting that the created ideas are often much more interesting than the "right answers" found in real projects.

To confirm the readiness of the project manager to carry out "medium" projects, after going through all the cases re-assessment of qualification is held. The transition to complex projects is possible only after gaining experience of successful medium-sized projects and positive results re-assessment of competencies. Further professional and career project manager development involves international project management certification and participation in personal development programs.

4 Conclusion

The Program has been operating for more than two years and it is possible to bring the first results. One of important outcome of the program is the possibility of combining in simple projects roles of project manager and technical leader without losing control. At this position appointed consultants who have received the status of Junior PM. In this case more important for the project are their technical competence. Complex management problems in such projects, as a rule, do not arise, but in any case responsible management decisions agreed upon a more experienced manager.

For projects of high complexity such a combination is not possible because of the diversity and complexity both the technical and manager problems. Here, the main program of benefits is a higher level of understanding and trust managers and consultants. In this case it is equally important both consulting "past" of project managers and project management education of consultants.

As for the medium-sized projects decision must be taken individually. As a rule, the project manager takes some meaningful tasks. But full combining of roles in such projects is rather an exception. It is important that these projects and the employee, and the company get a fairly complete picture of its capabilities and preferences. This in turn allows to correctly determining the direction of further development of career employees.

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Brief Biographies

Alexandr Tovb is project manager with over 40 years' experience in a variety of organizations and industries, primarily associated with IT projects. In 2010 ~ 2012 he was Chief Project, Program and Portfolio Management Methodologist of IT Block of Sberbank of Russia. In 2005 ~ 2007 Alexandr was Deputy Team Leader on the Project for the Land and Property Policy Reform II of the EU-Russia Cooperation Program (TACIS).

He is Chairman of the Board of the Russian Project Management Association SOVNET. Alexandr Tovb is a CSPM (IPMA Level B) and actual assessor for IPMA 4-L-C, first foreign assessor for CPMC and IPMA Delta first assessor in Russia. He is Deputy Chief Editor of SOVNET Journal "Project and Program Management". He has published numerous articles on project management and presented papers at PM professional conferences, seminars and events in Europe, India, China, Japan, Australia, and Russia. He is the co-author of 3 books and about 60 articles.

Mr. Tovb is associated professor of the National University of Science and Technology MISiS and Lomonosov State University.

Alexander was Chairman of the Organizing Committee for the SOVNET international project management symposiums in Saint Petersburg, Russia in May 2005 and in Nizhnyi Novgorod, Russia in February 2007.

Mr. Alexandr Tovb served as IPMA officer: in 2007 ~ 2008 as AMBo Member, in 2009 ~ 2010 as IPMA Vice President Certification, in 2011 ~ 2012 as IPMA Vice President Administration and Finance, in 2013 ~ 2014 as CVMB Member and in 2014 ~ 2015 as Core Team member in IPMA Individual Competence Baseline (ICB) version 4 Project.