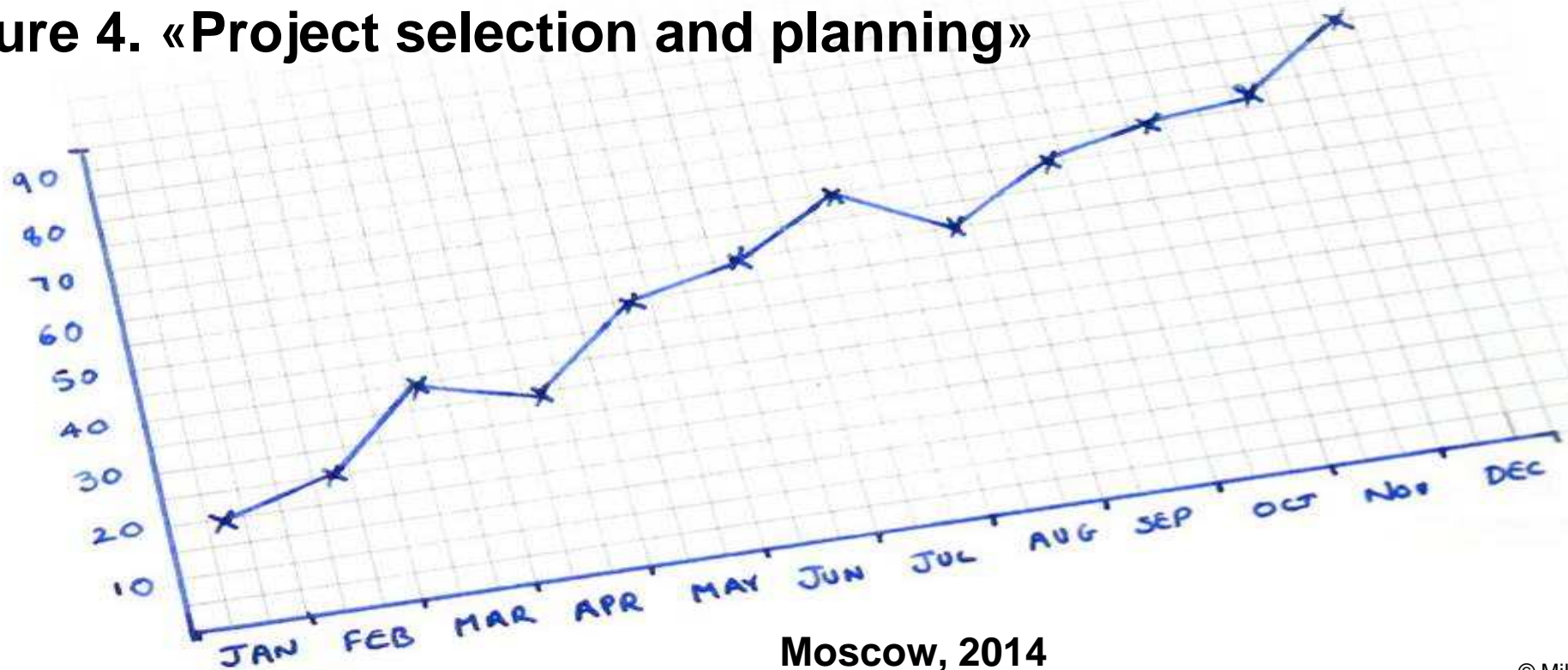


Investment Project Management

Lecture 4. «Project selection and planning»



Moscow, 2014

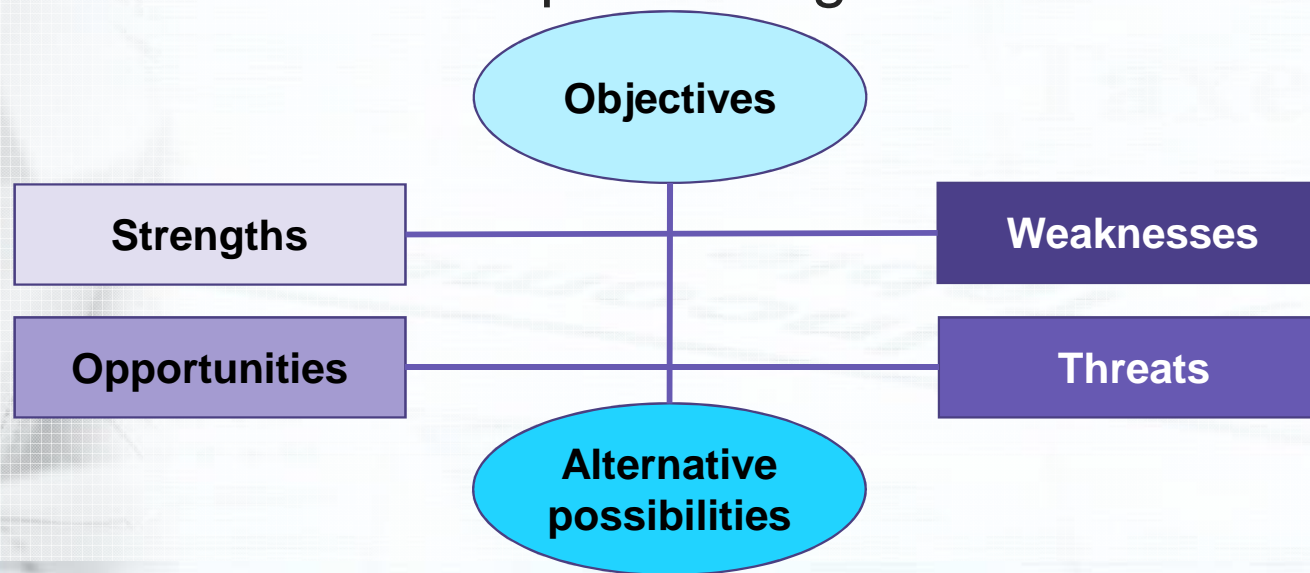
Project Life Cycle



Once the Project has been chosen, the plan has been approved, the capital has been collected - the decision can't be changed. That's a reason why the most important phases of the Project Life Cycle are: **“Identification”** and **“Selection/Appraisal”**. The result of these actions is materialized in the **Project Charter**.

Project Initiation

The Project starts from the search of **new ideas**. The sources of new ideas are: (*) marketing and sales departments advices, (**) own market analysis, (***) own and outsourcing R&D (research and development), (#) production department constraints, (##) emerging markets trends published by analysts (Big 4, Investment banks, specialized industry institutes), (###) Top management & Shareholders. All companies always have alternative objects for investments. The prior stage of identification – **SWOT analysis**.



Project Initiation

Strengths

- Experience and expertise;
- Financial position (you have exceeding funds or you're able to raise financing);
- Industrial contacts;
- Foreign collaborations;
- Technological opportunities.

Weaknesses

- Unfamiliar technologies;
- Inability to raise sufficient investments;
- Lack of experience;
- Inability to reliably forecast market trends.

Opportunities

- Emerging technologies;
- Appearing and emerging new segments of the market;
- New types of products;
- New processes with better features;
- Special financing schemes;
- Governmental incentives.

Threats

- Competitors;
- Poor state of economy in the country;
- Outdated technology;
- Unprofessional management skills;
- New products and services making your project obsolete.

Project Initiation



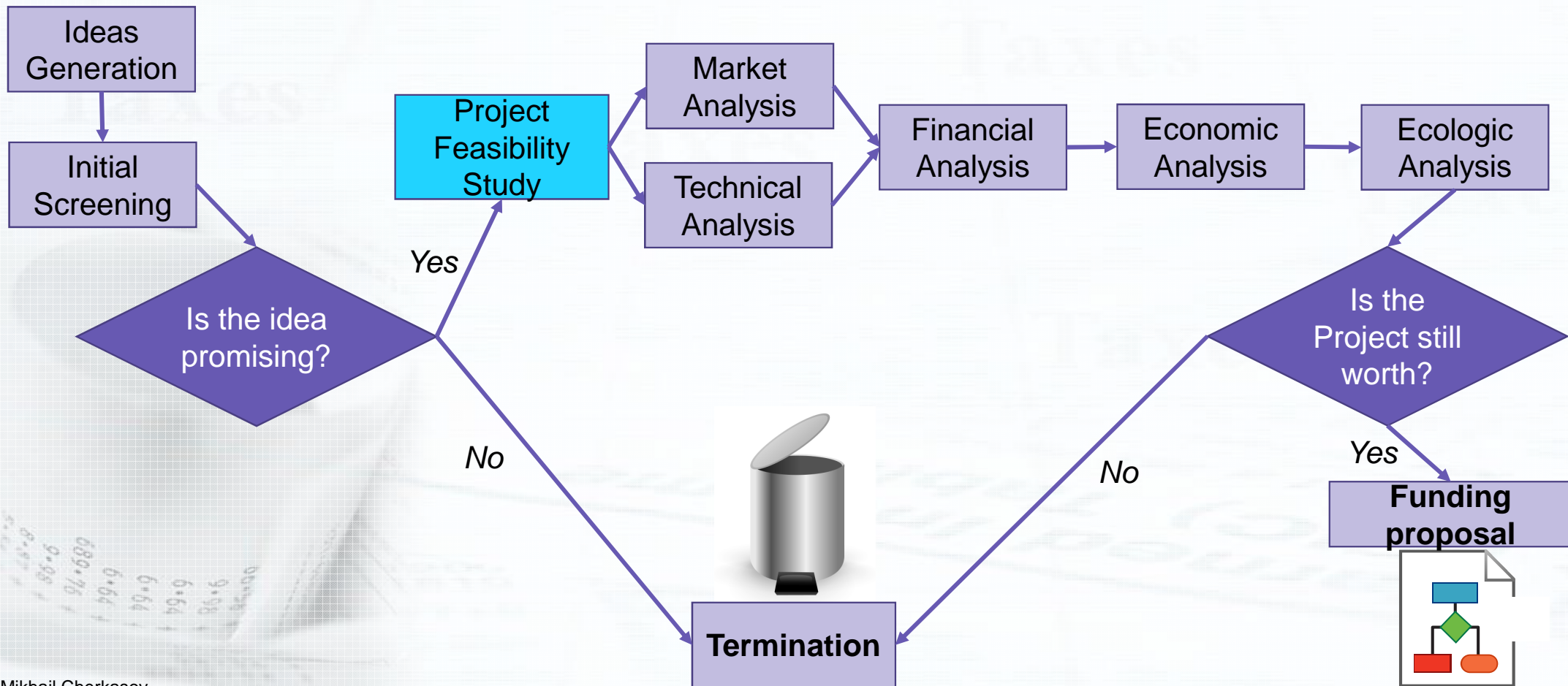
PIDChecklist.pdf

The process of Project initiation (especially in project-driven organizations who have their own templates for Project Initiation Documents) starts from formalization of all ideas related to the proposed Project. Initially formalized potential projects are coming to **Screening** procedure. At Screening stage the inefficient and unfeasible projects are swept out. The assessment is based on weighted criterion application (**Scoring**).

Factors	Weight	Offered projects			Integrated valuation		
		A	B	C	A	B	C
Demand for produced goods	0,3	50	65	80	15	19,5	24
Competitiveness of the produced goods	0,25	70	80	90	17,5	20	22,5
Goods price stability	0,2	80	70	50	16	14	10
Availability of alternative technical solutions	0,15	75	70	50	11,25	10,5	7,5
Project complexity	0,1	80	70	10	8	7	1
Total grade					67,75	71,00	65,00

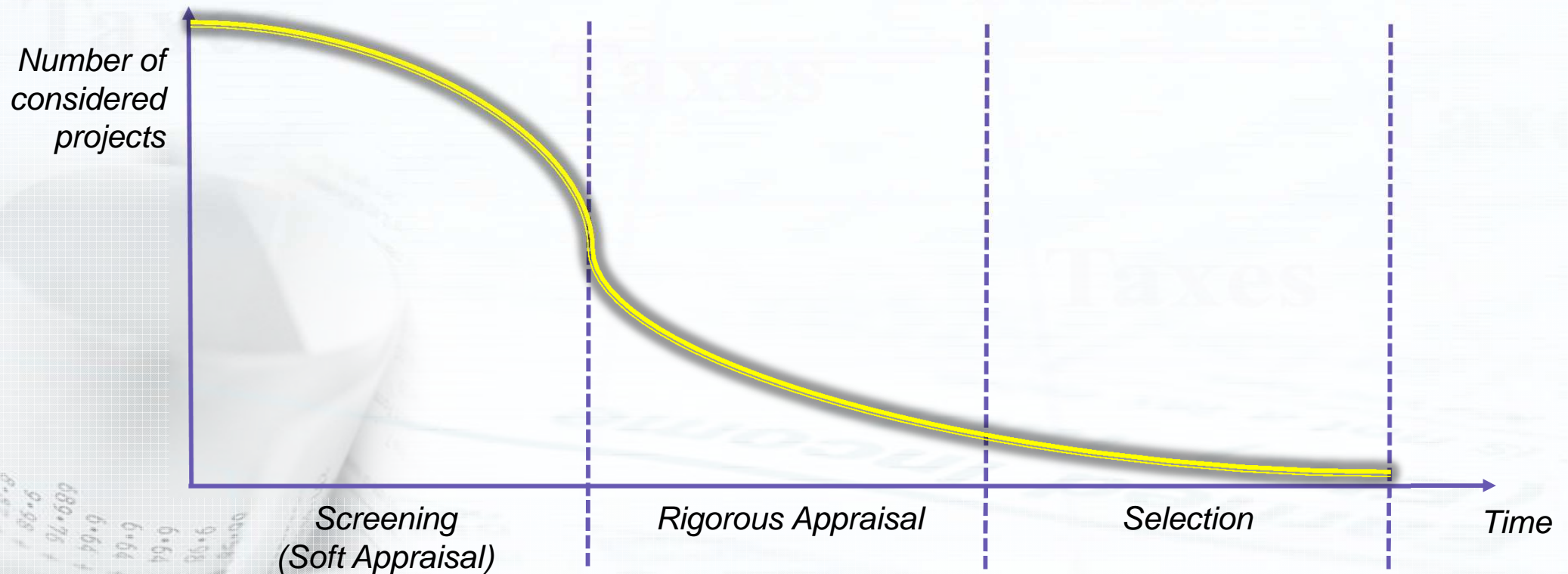
Project Selection

After the process of Project **Screening** the remaining potential projects are entering to further stages of analysis: **Rigorous Appraisal** and **Project Selection**.



Project Selection

The number of potential projects is descending since the **Screening** stage till the finish of **Selection** stage. Finally, only 1 project (or 1 set of mutually non-exclusive projects) remains.



Project Selection

The (Rigorous) **Appraisal** stage includes the comparison of proposed projects on **key financial ratios** (NPV, IRR, PP, DPP, ARR, DPI, EAA, WACC, DCR), all types **Rates of Return** (ROI, ROA, ROE, ROS, etc.), several **special ratios** if typical for the sponsor Company (MNPV, MIRR, EVA, APV, CFROI, FIRR, etc.), **risk** and **sensitivity** analysis, DCF and other methods **valuation** of the terminal value (NTV and valuations based on various models). The comparison of mutually-exclusive projects is given in Scoring tables (**Capital Rationing**).

Capital Rationing						
<i>Normalized to the comparable terms</i>	Investment Outlay	NPV	IRR	DPI	DPP	...
Project 1	300	250	83,33%	0,83	1,45	
Project 2	500	400	80,00%	0,80	1,44	
Project 3	200	50	25,00%	0,25	1,20	
Project 4	400	200	50,00%	0,50	1,33	
Project 5	700	650	92,86%	0,93	1,48	
Project 6	900	700	77,78%	0,78	1,44	
...						

Project Selection

The **Selection** stage includes following types of project appraisal for each presented project:

- **Market** Appraisal
- **Technical** Appraisal
- **Financial** Appraisal
- **Economic** Appraisal (wider than financial, includes: social analysis, capital structure, risk analysis, cooperation with authorities, industry development analysis, country risks application, etc.)
- **Ecological.**

For each type of analysis the special Feasibility report is prepared.

Financial report provides a detailed information about:

- ▣ **Project costs** (based on retrospective cost analysis, inflation considerations, contingencies, financial charges during construction, etc.);
- ▣ **Financing plan** (including capital structure analysis, schedule of trances, project financial viability based on comparison of FIRR and WACC, etc.);
- ▣ **Sensitivity** analysis, currency and price **risk analysis**;
- ▣ **Financial and operating** (crucial for financial viability) **covenants**.

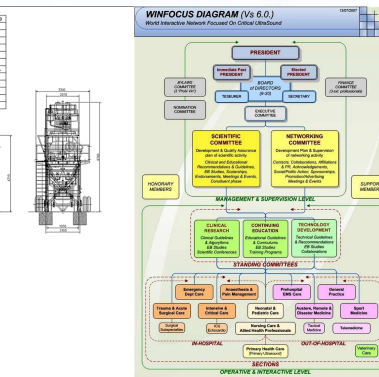
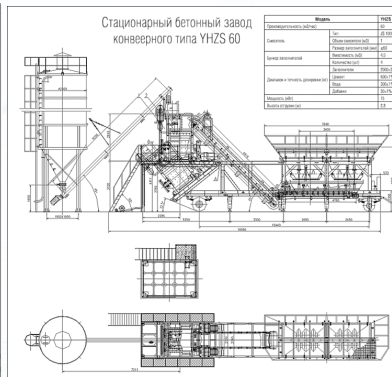
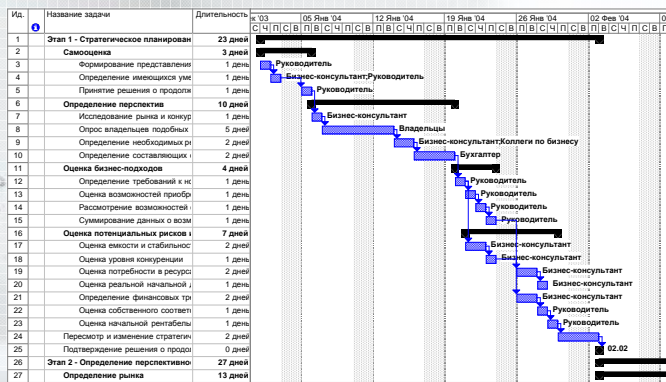
Project Planning

The result of Selection stage is a chosen Project which has gone through all preliminary analyses but hasn't been planned in details. The next stage "**Project Planning**" is dedicated to specification of all project components and creating of Project team, schedule, capital structure, time cost tradeoffs and resource considerations. The result of Planning stage is reflected in:

Project Charter (legal document entitling the Project team for its actions, allocation of roles and responsibilities),

Business plan (financial, marketing, production and economic considerations for financing institution),

Project consolidated plan (detailed description of components with time schedules: technical, organization, budgeting, sales, marketing, human resources, etc.).



Заказчик	Эксперт	Срок	Турнир	Оценка	Метод
Легенда в отчете	1	56,7	45,4	Прогноз: +1 +1 +1	
Сборная в отчете	2	56,7	50,1	Прогноз: +1 +1 +1	
Легенда в отчете	2	21	4	Прогноз: +1 +1 +1	
Сборная в отчете	2	11	25,2	Прогноз: +1 +1 +1	
Сборная в отчете	2	0,2	1,6	Прогноз: +1 +1 +1	
Сборная в отчете	2	2	40,4	Прогноз: +1 +1 +1	
Сборная в отчете	2	1	7,2	Прогноз: +1 +1 +1	
Сборная в отчете	2			Прогноз: +1 +1 +1	
Итого			27,4		
Всего			27,0		