

# Infrastructure and Personnel Provisioning for Innovation Activity of Hotel Facilities

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**Abstract**— Developing existing innovation infrastructure objects as well as creating new ones is a key aspect of expanding innovation activity of hotel facilities. This will allow the promising innovative concepts to complete the innovation cycle. It will also be beneficial for training of innovative human resources, capable of implementing new projects. Study proves that the demand for innovative infrastructure is constantly building up and that customers' expectations concerning hotel and tourism services are growing. In this regard investigated are the theoretical and practical points of infrastructure and personnel provisioning for innovation activity of hotel facilities in the domestic as well as in the world experience.

**Keywords**— *Hotel facilities, Hotels Industry, Innovation Activity, Innovation Infrastruc-ture, Innovations, Personnel Provisioning.*

## I. INTRODUCTION

Modern economy requires active use of innovations due to the everlasting need of constant product and services updates and quick technology and equipment obsolescence in the fierce technological race which demands the latest marketing tools, up-to-the-minute business processes as well as the corresponding financial support. J. Schumpeter as the founder of innovation studies considered technical and technological innovations as the main source of economic growth [1], [2]. Later on the similar findings were made by R. Solow [3] and M. Abramovitz [4], P. Samuelson [5], M. Kalecki [6], [7] I.R. Petrariu [8], B.H. Hall [9].

The exceptionally competitive environment of the hotel industry drives the search for new means of efficient performance boost as well. In this regard, developing various innovations and applying them gives a powerful impetus for the hotel facilities.

## II. METHODOLOGY

Hotels facilities are essential for hospitality industry, as they form a so-called "tourism superstructure" alongside with

the means of transportation [10]. This makes hotel industry an object of permanent research.

In the presence of broad range of factors of market environment, effectiveness of the development process for hotel industry's products and services is ensured by the formation of the certain organizational and economic model, which is based upon direct or indirect reflection of the performance of interrelated subsystems, including vacationists, operational staff, governing boards, tourist infrastructure as well as ecological, geographical and culture-historical potentials

In the meantime hotel industry is prone to the same major problems and consistent patterns as the entrepreneurial activity in general [11], [12], [13], [14].

Study on specific traits of innovations in hotel industry is based upon the traditional classification of innovations, specified by the international standards of Organization for Economic Co-operation and Development and signed into power in Oslo in 1992 in a so-called "Oslo Manual: Guidelines for Collecting and Interpreting Innovation Data" [15].

## III. RESULTS

Potential capacity for governance system's development in the hotel industry can be displayed as a diagram (see Fig. 1).

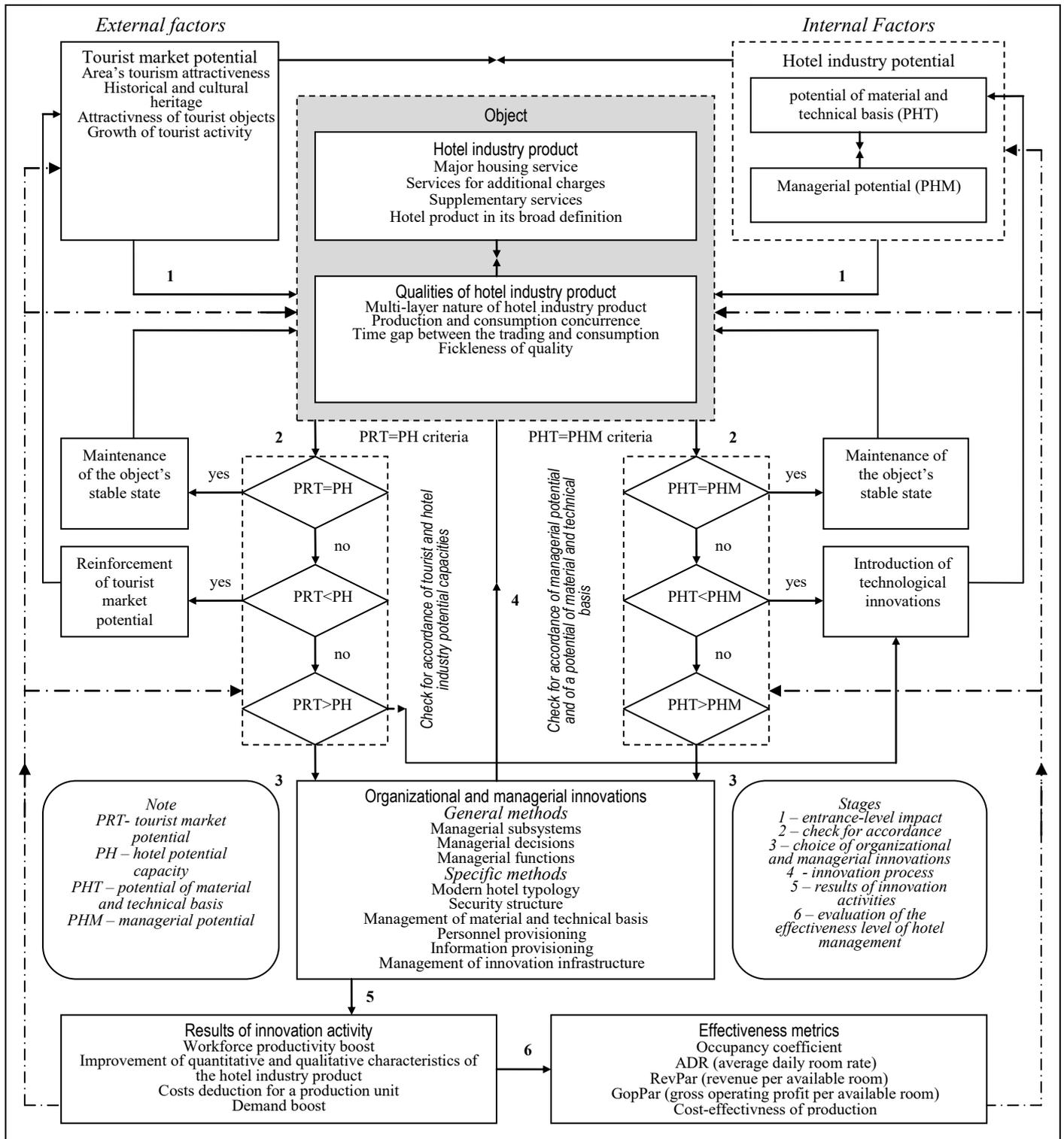


Fig. 1 Framework of effectiveness of governance in the hotel industry

Proposed model reveals basic conditions to maximize the effect of changes:

- parity of tourism market potential and of hotel industry potential;

- parity of physical facilities and of managerial system.

This means that innovation activity in hotel industry should be based upon the principles of strategic planning.

It should be noted that Russia is in the early phase of creation of national innovation system. Main problems include administrative burdens as well as the lack of consistency, lack of coordination of efforts between innovative entities and national authorities. State of legislation in science and technology is defined by inconsistency, fragmentation, detachment of different regulatory acts and by the lack of backbone standards covering questions related with intellectual property. Under such conditions the main goal is to create and to maintain innovation infrastructure, capable of generating innovations in society and in industry environment.

Essential if not the main role is then attributed to the national innovation policy [16].

In relation to the hotel industry innovation boost could be achieved with the widespread use of concession as a form of project financing of innovation activity. When creating hotel (tourist) industry concession, the main question is overall regional tourist development, which requires active government involvement in the process of tourist infrastructure modernization, including hotel facilities. Figure 1 outlines the model of public-private partnership through concession in the hotel industry.

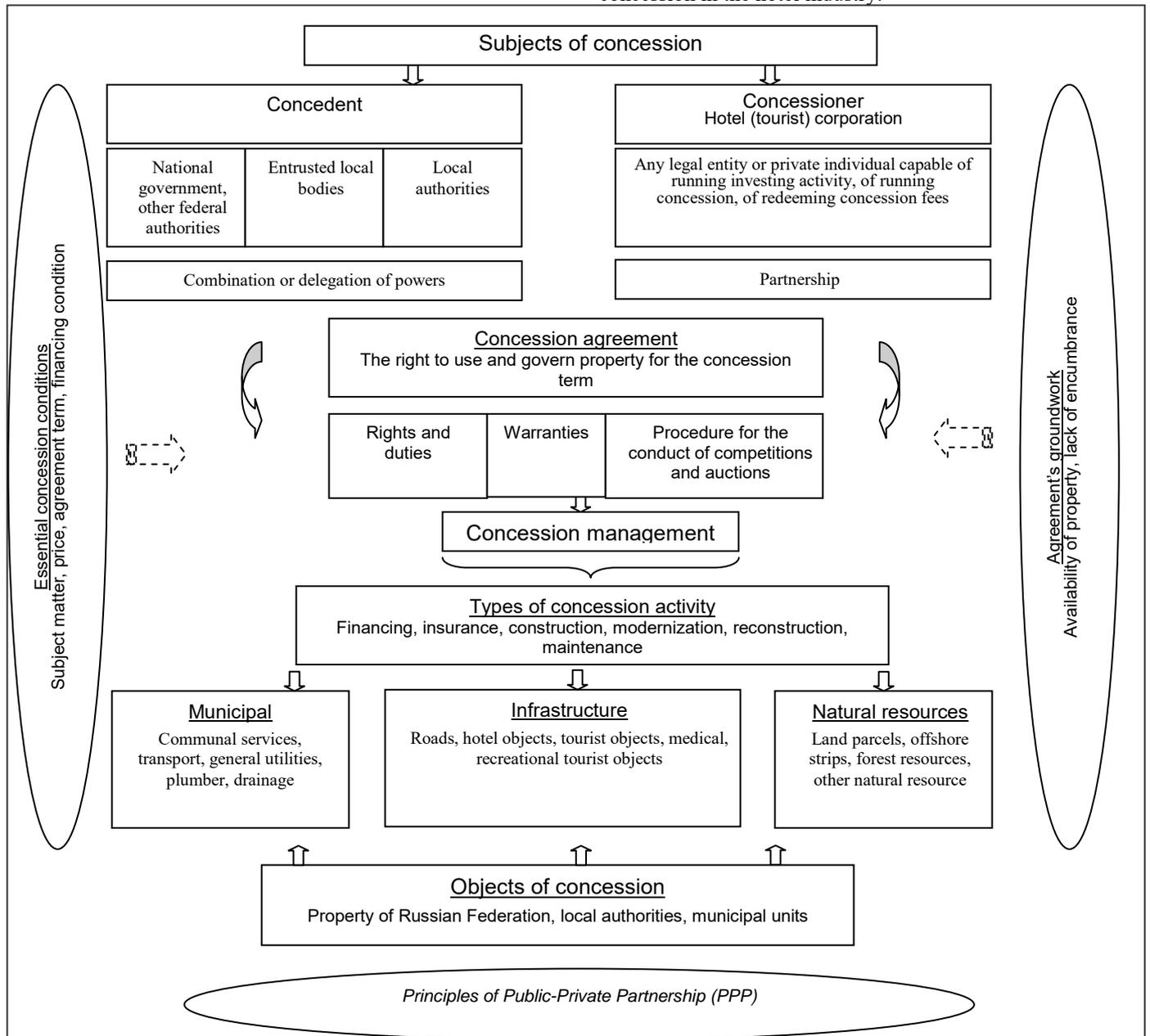


Fig. 2. Model of public-private partnership through concession in the hotel industry.

As the world practice of public-private project financing suggests, this type of framework is usually suitable for large investment programs with extended period of repayment.

It also attracts wide range of financial institutes and uses flexible risk-management and financial structures [17], [18].

Concession agreement mainly aims at effective financial management of different objects of the state property. This goal is crucial for the tourist complex's setup and development. It is worth mentioning, that unlike debt and equity financing, that rely on business value and financial burden to attract funding, tourist concession uses the framework of project financing covered by expected revenue, so the project's value is detached from their founding parties' balance sheets [19].

Innovation infrastructure in hotel industry has close ties with education and training. These ties are mainly defined by the qualitative characteristics of the new professionals in the developing economy. Analysis of the educational field of Primorsky Territory in terms of training and reskilling workers in the hospitality area generally reveals a well-formed and rather solid industry-specific education system. Primorsky Territory offers relevant programs for higher and specialized secondary education, enrollment is constantly building up. There is also a Coordinating Council for the development of tourism education. In the meantime survey for managers of HR departments of 30 hotels in Vladivostok revealed that the majority of them (83%) are not satisfied with the level of professionalism of their staff. The most problematic positions according to the survey are vice directors, administrators, front office. As a result 93% of the respondents rely on different sorts of additional education, 71% - on a regular basis. When evaluating currently available options for additional education, respondents pointed out following shortfalls:

- shortage of information on newest trends in hotel industry (33%);
- lack of practical exercises under real-life conditions (23%);
- limited usage of modern tools and equipment in hotel industry (23%);

- lack of practical knowledge of teaching staff (14%).

Given the aforementioned shortfalls, managers see the need of onsite training abroad or in the leading Russian hotel chains, but they face financial constraints and avoid this as an opportunity altogether.

So generally speaking focus-group displayed considerable interest for the project of regional training hotel.

In this regard the goal of the training hotel is to create a qualitatively new system of staff training and reskilling in the hotel industry. This system should satisfy modern educational standards and should be tailored to the ever-raising consumer requirements.

It is also worth noting, that hotel should also function as a commercial entity and should satisfy needs of local residents and Primorsky territory's guests in hotel services. Potential customers should include business tourists, visitors of different events, participants of corporate meetings, sportsmen, students, their parents.

Therefore according to the plan the hotel is going to have 82 rooms, café and a business center. It is also expected to offer additional services. Altogether it will comply with the standards for mini hotels in accordance with the project of Government resolution "On approval of hotel classification's provision" (prepared by Ministry of Culture on 12/03/2018) [20].

In the course of research, the business plan was developed, covering the evaluation of sales volumes, costs, pricing strategies. Based on the resulted data the need of investment and conditions for the investment returns were calculated with the help of the professional software ("Project Expert").

Table I and Table II present changes in revenues and net profit. Data suggest, that during 3-18 years of project's operation training hotel's revenues will grow from 49.7 million rubles to 208.2 million rubles.

TABLE I. FORECAST OF PROFITS AND LOSSES, YEAR 1-8 (THOUSAND RUBLES).

Exponent	1 year	2 year	3 year	4 year	5 year	6 year	7 year	8 year
Gross sales volume		49 704,02	65 041,07	82 686,21	89 301,11	96 445,20	104 160,81	112 493,68
Material supplies	2419,49	4349,66	5811,11	8352,48	9147,41	10519,53	13488,74	14235,12
Gross profit		49 704,02	65 041,07	82 686,21	89 301,11	96 445,20	104 160,81	112 493,68
Property tax	288,55	3 367,43	3 201,59	3 049,01	2 908,49	2 778,97	2 659,48	2 549,13
Administrative costs	247,29	839,15	1 201,42	1 338,25	1 662,45	1 769,83	2 198,59	2 340,61
Manufacturing costs	139,15	1702,37	3015,30	3639,14	4165,10	4789,86	5568,43	6348,63
Marketing costs	131,02	1 929,32	3 084,41	3 547,07	4 079,13	5 267,13	6 057,19	6 965,77
Staff wages	170,48	12 456,26	15 368,78	16 905,66	18 596,23	20 455,85	22 501,43	24 751,58
Total fixed costs	3 107,43	21 276,77	28 481,02	33 782,59	37 650,31	42 802,19	49 814,39	54 641,71
Amortization		7 886,38	7 252,71	6 675,74	6 150,18	5 671,28	5 234,71	4 836,57
Total nonmanufacturing costs		7 886,38	7 252,71	6 675,74	6 150,18	5 671,28	5 234,71	4 836,57
Losses of prior periods		3 395,98						
Taxable income	-3 395,98	13 777,46	26 105,75	39 178,88	42 592,13	45 192,75	46 452,23	50 466,27
Profit tax		3 306,59	6 265,38	9 402,93	10 222,11	10 846,26	11 148,54	12 111,90
Net income	-3 395,98	10 470,87	19 840,37	29 775,95	32 370,02	34 346,49	35 303,70	38 354,36
Rate of return, %		20,9	30,4	35,9	36,3	35,6	33,9	34,1

**TABLE II. FORECAST OF PROFITS AND LOSSES, YEAR 9-16 (THOUSAND RUBLES).**

Exponent	9 year	10 year	11 year	12 year	13 year	14 year	15 year	16 year
Gross sales volume	121 493,17	131 212,63	141 709,64	153 046,41	165 290,12	178 513,33	192 794,40	208 217,95
Material supplies	16799,83	19319,80	21158,53	24332,31	29382,99	34724,47	39696,42	44687,87
Gross profit	121 493,17	131 212,63	141 709,64	153 046,41	165 290,12	178 513,33	192 794,40	208 217,95
Property tax	2 447,11	2 352,71	2 315,54	2 809,80	3 310,36	3 822,40	4 277,75	3 986,60
Administrative costs	2 907,63	3 095,45	3 845,35	4 093,73	5 085,47	5 413,96	6 725,54	7 159,97
Manufacturing costs	7319,59	8417,53	7696,66	8851,16	10238,11	11814,43	16967,08	19470,27
Marketing costs	8 010,64	9 212,23	10 594,07	12 183,18	14 010,66	16 112,26	18 529,09	21 308,46
Staff wages	27 226,73	29 949,41	32 944,35	36 238,78	39 862,66	43 848,93	48 233,82	53 057,20
Total fixed costs	62 264,43	69 994,43	76 238,96	85 699,17	98 579,89	111 914,04	130 151,95	145 683,77
Amortization	4 473,33	4 141,79	3 839,04	6 305,95	8 796,66	11 336,04	13 950,41	12 648,52
Total nonmanufacturing costs	4 473,33	4 141,79	3 839,04	6 305,95	8 796,66	11 336,04	13 950,41	12 648,52
Taxable income	52 308,30	54 723,71	59 316,10	58 231,49	54 603,22	51 440,85	44 414,29	45 899,06
Profit tax	12 553,99	13 133,69	14 235,86	13 975,56	13 104,77	12 345,80	10 659,43	11 015,78
Net income	39 754,31	41 590,02	45 080,24	44 255,93	41 498,45	39 095,05	33 754,86	34 883,29
Rate of return, %	32,6	31,7	31,7	28,9	25,1	21,9	17,5	16,7

In terms of educational characteristics the central core of the training hotel is a production package of educational services, including facilities for academic, production and predegree practices, additional educational programs, area-specific trainings, consultations, seminars, researches. Practice-oriented education requires utilization of dedicated laboratory equipment and software for solving different real-world use-cases, like automation of services, marketing researches, development of business plans. For master-classes, seminars, trainings and conferences the hotel provides conference rooms with the necessary digital equipment (computers, projectors, screens, sound reinforcement system, microphones). In the future the possibility of adding software and hardware for simultaneous image display and text processing is viable. So innovation activity in hospitality is closely related to personnel provisioning. Viable solution on the regional level in this regard is the development of the innovative infrastructure in the form of a training hotel, which offers modern innovative educational concepts and uses synergetic approach in providing modern facilities for education of students and professionals. Effective operation of the training hotel requires the creation of the favorable investment climate, which implies the usage of systematic approach to the process of setting the prioritized ways of development. Innovation activity in hotel industry should be based upon the principles of strategic planning with large separate innovation blocks. For innovation activity's boost, the set of measures is ought to be proposed in terms of shaping precise state innovation policy on federal and regional levels. For hotel industry it could be triggered by the active usage of tourist concession.

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