

A STRATEGIC SERVICE MANAGEMENT MODEL IN NATIONAL GAS DISTRIBUTION PROJECTS

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Abstract

The main purpose of this research was to develop a model regarding strategic service management in order to improve the performance of projects related to the oil and gas industry. To this end, this study was conducted in two steps. Firstly, the main practices of SSM were defined by a systematic review and completed by experts' interviews, and the data onto the expected and perceived about each practice were collected by using a questionnaire answered by the managers and direct experts of the Fars Gas Company, Iran, and its contractors in a five-year period. Finally, the SSM model was determined in a focus group. All participants were selected judgmentally and purposefully based on theoretical saturation. The findings show that the employer expects the contractor to improve the communication skills and the grooming and professional appearance of its staff and that they spend enough time processing the employer requests. As a result, the SSM model was developed based on four strategic cornerstones, including managerial attitude improvement, managing communications, improving business processes, and strengthening internal controls.

Keywords: construction projects; contractor; employer; gap analysis; public sector; Strategic Service Management (SSM)

1 INTRODUCTION

Construction projects generally play a vital role in developing the countries' infrastructure. Many organizations prefer to define their development tasks in the form of projects or to establish project-based institutions temporarily or even permanently [1]. The volume of construction projects in Iran, as a developing country, has allocated a significant part of financial, human and physical resources [2]. In this regard, the services of contracting companies have been developed as the axis of design services, engineering, implementation and supervision of these projects.

However, contracting companies need to perceive the higher levels of requirements in projects, in addition to the technical issues such as time and cost plans, in order to create value for the employer and to achieve the strategic goals of the business [3]. Despite the importance of projects in organizations, the research fulfilled in project management shows that contrary to the improvement of project management processes and systems, managers still face many challenges regarding the project success factors [4], and these challenges are evident for both the employer and the contractor.

To overcome this drawback, the employer must take into account all the necessary criteria in the process of contractor selection [5], and at the same time, the contractor must maximize the employer satisfaction at the various stages of project implementation by correct identification and management of the key success factors. Additionally, managers of contracting companies must be able to establish the closest relationship between their performance and their employer's expectations [6]. Therefore, they will be able to provide the most satisfaction to the employer with the proper management of key success factors in the sectors of design, consulting, implementation and supervision aspects of projects. One of the main steps of

success factors, and as a result of strategic planning, is the gap analysis performing. In other words, by identifying the factors that have the greatest gaps in the perceptions and expectations of managers (contractors) and customers (employers), senior management can allocate limited organizational resources to strategic priorities. Hence, the top managers of contracting companies could develop realistic and applicable strategic plans for project service management while defining the appropriate goals. This is especially important when the employer is in contact with several contractors and the criteria for evaluating the performance of a contractor is compared to its direct competitors.

Meanwhile, working for large governmental companies such as the Fars Province Gas Company, which has opened 128 projects in 2016 and started 85 projects [7], doubles the sensitivity of this issue. However, a lot of research in this area was focused on the issues such as contractor selection, and has paid less attention to the identification of the success factors of the service management of contracting companies. The contribution of this study can be considered from two perspectives. A look at the literature shows two major gaps in previous researches. The first gap is related to the general field of strategic service management (SSM), which, despite the development of its theoretical foundations, has been less explored in the applied studies. The second one related to the field of management of contracting companies so that despite the scope and importance of project activities and consequently the key factors of success in contracting companies, the concept of SSM in the contracting industry has not been developed as it should be. Accordingly, this study tries to provide an appropriate model for the nature of contracting activities by using all SSM levers with a strategic view on the issue of project management in contracting companies.

Therefore, the present study tried to present a model for improving the management of the activities of these companies with the aim of analysing the gaps in the SSM model in contracting companies. For this purpose, research has been performed in two main steps. In the first step, various practices that have to be carried out by a contracting company are extracted by reviewing studies and are completed and refined by interviewing experts. Then, by using the field data, the gap between the current and optimal status of these factors is determined. Finally, in the second stage, based on the existing gap and according to experts, a SSM model is presented.

2 RESEARCH BACKGROUND

Intensified competition has led many businesses to seek ways to differentiate themselves from their competitors. In this regard, one of the strategies that has been related to the success of these businesses is delivering qualified products and services as much or even beyond customer expectations [8]. With the growth of business models in manufacturing and services, the concern of managers and policy makers has become more dominant in terms of over-identifying priorities for improvement. Meanwhile, due to the challenge or opportunity of globalization on the one hand and the emergence of new concepts such as corporate social responsibilities (CSR) and international relations on the other hand has shifted the decision-making atmosphere to a new level [9].

One of the most important functions of an organization's management is service administration, which provides clarifying problems, optimized decision-making, and performing services based on the internal and external environment of the firms. Even though this area could be considered at the operational level, at the higher level, senior managers are always looking for identifying value-creating factors that can be explored and discussed in

the context of strategic service management (SSM).

The (SSM) approach emerged in the 1990s as a branch of the strategic management of production [10], which was named as the missing link in the connection between organizational strategies [11]. In this new topic, management uses five levers: quality, reliability, service, delivery, and cost to overcome competitors while creating value for the customer in a turbulent market environment and intense market competition [12]. Therefore, production and service strategies brought up interrelated structural and infrastructural decisions and actions that empower the agency's production and service system. Eventually, the SSM provides a manner to achieve a set of organizational objectives consistent with the organization's goals, which is classified in the aforementioned five areas [13].

A look at the carried out research shows that each of the levers of SSM or a combination of several levers has been noticed by researchers in some way. Considering the cost and time [14], cost, quality, and time [15], or reliability and cost

[16] in officious project management are some examples of these studies. However, apart from these five levers, there are other factors such as the risk addressed in the related studies [17], which originally somehow refers to the reliability of the main levers of SSM.

In their study, Yu and Liang [18] examined the role of corporate social responsibility in the strategic planning process. In this study, it was stated that in addition to reducing costs, integrating organizational resources and using the creativity and decision-making power of all employees at all levels, social responsibility was also perceived as strategic capability.

Another issue that can be seen as a research gap in this field is the lack of service providing strategies in contracting companies. In principle, there is a fundamental difference between the concept of strategic project management and classic project management in which the models require to help the project-oriented organizations to create competitive advantages. In other words, in order to gain competitive advantages after which an organization's success will follow, managers must focus on the strategic aspects of projects and their processes in the organization [19].

As a summary of the background review, two major gaps can be seen in the previous research. The first gap is connected to the general field of strategic service management, which has been less exploited in applied studies. The second gap is illustrated in the field of the management of contracting companies due to the scarcity of the concept development of strategic service management. Accordingly, this study tried to provide an appropriate model based on the nature of contracting activities by using all the strategic management of service levers with a strategic view on the issue of project management in contracting companies.

3 RESEARCH METHOD

This research has an applied purpose; it is inferential in terms of nature and method, a mixed method from the variable aspect, and cross-sectional time, which has been implemented in contracting companies active in gas distribution infrastructures projects in the Fars province, Iran. The subject context of this study is to use the model of strategic service management (SSM) and the gap analysis of strategic leverage in construction projects. The gathered data time zone is the period of March 2016 to September 2018. This research was carried out in two main steps. The first step included identifying the gap between the areas of SSM and the second one referred to the development of the SSM plan based on the outcomes of the gap analysis.

The statistical population of the first step of this research was all 47 managers and direct

experts involved in the infrastructure projects of the Gas Company and in the contracting section, including 120 contractors in a recent five-year period (2012-2016). In the same way, the statistical population of the second step included the experts in service management, project management and strategic management. Due to the nature of the research, sample selection was done judgmentally and purposefully, in which the statistical sample of the gap analysis step included 21 employers and 34 contractors, and in the SSM model development step included 7 experts as shown in Tab. 1.

Table 1 Demographic Characteristics of Participants in the Research

Demographic characteristics	Levels	Participants as a statistical sample			
		1 st step			2 nd Step
		Contractor	Employer	Sum.	
	Total	34	21	55	7
Gender	Male	32	15	47	6
	Female	2	6	8	1
Education	With diploma	6	4	10	-
	Technician	8	2	10	-
	Bachelor	18	10	28	-
	Masters and higher	2	5	7	7
Related work experience	<10	4	9	13	2
	10 < x < 20	19	5	24	3
	>20	11	7	18	2

Source: Created by the authors

In the first stage, service practices were extracted by using a systematic review of the studies as a conceptual model. These practices were then evaluated and refined by the experts' opinion considering the nature of the contracting entity in the case study. Meaning that these indicators were reviewed by seven experts before being surveyed in the form of a questionnaire, and based on their judgment, content validity ratio (CVR) was computed and the irrelevant indicators were removed. Therefore, in addition to determining valid indicators, the credibility of the conceptual model was also confirmed by the experts. On the other hand, the reliability of the questionnaire was confirmed by calculating the Cronbach's alpha coefficient ($\alpha = 0.73$).

A closed questionnaire was then designed based on the SERVQUAL approach that the expected importance of each practice was measured by an employer and contractor. Similarly, another questionnaire was designed to determine the gap of the current situation of each of the factors of the conceptual model from the point of view of the employer and the contractor as a perceptual gap. After the questionnaires were completed by the participants, by using inferential statistics, the significance of the gap in the importance of the factors of the conceptual model was examined, as well as the significance of the perceptual gap. At this step, the non-parametric Mann-Whitney and Wilcoxon tests were utilized in the SPSS 22 statistical software since the data were not normally distributed.

Finally, the SSM was designed and finalized based on the significant gaps determined by the panel of experts as a focus group.

4 FINDINGS

Based on the research method described in the previous section, 36 indicators were identified and then categorized by the researcher into four dimensions of the SSM, including quality, services, reliability, and delivery. It is noteworthy that according to the experts, the cost dimension was excluded from the conceptual model due to the inability to determine the appropriate indicators, as well as the restricted access to required data. In this case, the experts' reasoning was that in the public sector, cost estimation, budgeting, and the financial conditions of contracts such as payment terms, minus, or plus are subject to the upstream laws, and as a result, the cost factor is less flexible in management than the other dimensions of the model. Thus, its effects can be merged in other dimensions. Eventually, 27 indicators were finalized in four dimensions by the CVR calculation based on the seven experts' judgement as shown in Tab. 2.

In the following part, three main statistical hypotheses were expressed and tested to define the significant gap in the SSM leverages (dimensions) as well as the practices of each dimension:

Hypothesis 1 (H1): There is a significant difference between the employer's and contractor's expectations in the importance of each dimension (and practice) of SSM in construction projects.

Hypothesis 2 (H2): There is a significant difference between the perceptions and expectations of the employer in the dimensions (and practices) of SSM in construction projects.

Hypothesis 3 (H3): There is a significant difference between the perceptions and expectations of the contractor in the dimensions (and practices) of SSM in construction projects.

Table 2 Dimensions and Indicators of the Strategic Management Model of Contracting Services*

Dimensions (Abbreviation)	Practices	Abbreviation
Delivery (DLV)	Completeness and clarity of information before project delivery	DLV-1
	On time project delivery	DLV-2
Service (SRV)	Spending enough time on the process as per the employer's requests	SRV-1
	Access to the contractor at the project site when needed	SRV-2
	Good will and polite behavior of the contractor staff	SRV-3
	Communication skills of the contractor staff	SRV-4
	Interest in responding to employer's requests	SRV-5
	Not wasting the employer's town	SRV-6
	Provide regular, timely and integrated reports	SRV-7
	Observation of moral rules and regulations	SRV-8
	Groomed and professional appearance of the staff	SRV-9
	Respect for the position of the employer	SRV-10
Reliability (REL)	Immediate action when a problem arises	REL-1
	Adequate technical knowledge of the contractor	REL-2
	Handling employer complaints	REL-3

	Provide sufficient information to the employer about the status of the project	REL-4
	A sense of responsibility and work conscience	REL-5
	Compensation for losses	REL-6
	Fulfillment of obligations (based on contract terms)	REL-7
	Observation of safety	REL-8
	Flexibility in specific conditions	REL-9
	Providing a suitable solution to solve problems	REL-10
Quality(QLT)	Flawless project delivery (FPD)	QLT-1
	Minimal deviation of the project from the pre-set expectations	QLT-2
	Having the necessary modern equipment	QLT-3
	Quality control of the material and consumables	QLT-4
	Workplace housekeeping	QLT-5

Source: Created by the authors

The conceptual model of research based on the defined hypotheses is shown in Fig. 1. Afterwards, the importance and perception of each dimension and practices were defined based on the data collected through the questionnaires from the employer’s and contractor’s sample.

For testing the H1 hypothesis, the mean importance of the dimensions of the SSM model was calculated and the significance of the difference between the contractor and the employer were evaluated by the Mann-Whitney test. The results are shown in Tab. 3.

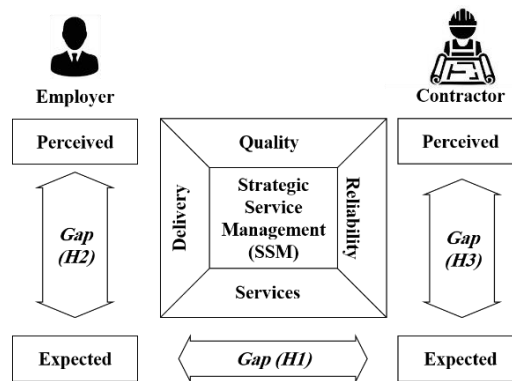


Figure 1 Conceptual model of the gap analysis

Source: Created by the authors

Table 3 The gap between the expectations of the employer and contractor in SSM Dimensions (Mann-Whitney test)

SSM dimensions	Mean of Expectations		Gap	p-value	Significance
	Contractor	Employer			
Quality	8.6	8.4	0.2	0.052	RE
Service	8.3	7.7	0.6	0.801	RE
Reliability	8.5	8.4	0.1	0.116	RE

Delivery	7.6	7.8	-0.2	0.022*	AC
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* Significant at the 95% confidence level. AC: Accepted, RE: Rejected Source: Created by the authors

The results of Tab. 3 show that the expectation of the employer and the contractor from the "delivery" dimension has a significant gap at the 95% confidence (p -value < 0.05), but in other cases, no significant gap is observed. In other words, what the employer expects in the importance of the delivery dimension is significantly more important than what the contractor is feeling in this dimension.

Table 4 The gap between the expectations of the employer and contractor in SSM indicators (Mann-Whitney test)

No.	Indicator	Mean of Expectations		Gap	p-value	Significance
		Expectations				
		Contractor	Employer			
1	DLV-1	5.7	6.9	-1.2	0.01*	AC
2	DLV-2	8.5	8.6	-0.1	0.88	RE
3	SRV-1	6.0	7.5	1.5	0.01*	AC
4	SRV-2	7.4	8.8	1.4	0.01*	AC
5	SRV-3	6.9	7.0	-0.1	0.71	RE
6	SRV-4	8.0	6.1	1.9	0.00*	AC
7	SRV-5	7.7	7.0	0.7	0.08	RE
8	SRV-6	8.4	9.0	-0.6	0.08	RE
9	SRV-7	8.6	8.0	0.6	0.05	RE
10	SRV-8	7.7	8.0	-0.3	0.55	RE
11	SRV-9	8.3	6.6	1.7	0.01*	AC
12	SRV-10	8.1	8.9	-0.8	0.10	RE
13	REL-1	6.6	7.7	-1.1	0.04*	AC
14	REL-2	8.5	9.0	-0.5	0.20	RE
15	REL-3	8.4	8.2	0.2	0.58	RE
16	REL-4	9.3	8.8	0.5	0.14	RE
17	REL-5	8.5	9.1	-0.6	0.06	RE
18	REL-6	9.2	9.1	0.1	0.83	RE
19	REL-7	8.6	8.8	-0.2	0.62	RE
20	REL-8	7.2	8.2	-1.0	0.12	RE
21	REL-9	8.2	8.0	0.2	0.61	RE
22	REL-10	7.0	6.6	0.4	0.37	RE
23	QLT-1	9.1	7.8	1.3	0.00*	AC
24	QLT-2	7.9	8.7	-0.8	0.05	RE
25	QLT-3	9.2	9.0	0.2	0.41	RE
26	QLT-4	8.6	8.9	-0.3	0.67	RE
27	QLT-5	8.4	7.6	0.8	0.01*	AC

* Significant at the 95% confidence level. AC: Accepted, RE: Rejected Source: Created by the authors

Similarly, to determine the significant gap in the practices' importance of the conceptual model, the Mann-Whitney test was performed at this level, and the results can be seen in Tab. 4. Based on these findings, the employer's and contractor's expectations have a significant gap in the DVL-1: completeness and clarity of information before project delivery, SRV-1: spending enough time to process the employer's requests, SRV-2: access to contractor at the project site, SRV-4: communication skills of the contractor staff, SRV-9: the groomed and

professional appearance of the staff, REL-1: immediate action when a problem arises, QLT-1: flawless project delivery (FPD), and QLT-5: workplace housekeeping . Conversely, there is no gap in other practices, and the results are shown in Tab. 4.

Moreover, in the hypotheses 2 and 3 of the research, it was determined that the perceptions and expectations of the employer have a significant gap in all dimensions based on the data collected and the Wilcoxon test, (Tab. 5). In fact, contractors expect the level of performance to be present in all dimensions of SSM, which in practice is significantly lower, with the maximum and minimum gaps being "delivery" and "quality", respectively.

Table 5 The gap between the dimensions of SSM in the second hypothesis (Wilcoxon Test)

SSM Dimension	Employer (mean)		Gap	p-value	Significance
	Expectations	Perceived			
Quality	7.7	5.0	2.70	0.001*	AC
Service	8.4	4.1	4.30	0.001*	AC
Reliability	7.8	5.0	2.80	0.001*	AC
delivery	7.7	4.1	3.61	0.001*	AC

* Significant at the 95% confidence level. AC: Accepted Source: Created by the authors
Additionally, the employer has expectations from contractors in all dimensions of the SSM that significantly underestimate their actual performance, in which "delivery" and "service" show the highest and lowest gaps, respectively(Tab. 6).

Table 6 The gap between the dimensions of SSM in the third hypothesis (Wilcoxon Test)

SSM Dimension	Contractor (mean)		Gap	p-value	Significance
	Expectations	Perceived			
Quality	8.7	6.9	1.8	0.001*	AC
Service	8.3	6.9	1.4	0.001*	AC
Reliability	8.5	7.0	0.5	0.001*	AC
delivery	7.6	5.9	1.7	0.001*	AC

* Significant at the 95% confidence level. AC: accepted Source: Created by the authors

Similarly, in order to obtain the practices that have a significant difference in this hypothesis, the Wilcoxon test was performed at this level and the results are presented in Tabs. 7 and 8. Based on the findings of this stage, it was determined that the perceptions and expectations of the employer had a remarkable gap in all indicators except the SRV-3 and SRV-4; which means that the employer's perception of the contractor's performance in these indicators hides a significant difference from his/her expectations. Furthermore, this is more noticeable in the indicators of the DLV-2: On time project delivery, SERV-6: Not wasting the employer's time, and REL-4: Provide sufficient information to the employer about the status of the projects shown in Tab.7.

Table 7 The gap between the indicators of SSM in the second hypothesis (Wilcoxon Test)

Indicator	Employer (avg.)	Expectation	Perceived	Gap	p-value	Significance

2	DLV-2	8.7	2.8	5.9	0.01*	AC
3	SRV-1	7.5	3.8	3.7	0.01*	AC
4	SRV-2	8.8	5.9	2.9	0.01*	AC
5	SRV-3	7.0	5.7	1.2	0.05	RE
6	SRV-4	6.1	4.7	1.5	0.08	RE
7	SRV-5	6.9	4.2	2.7	0.01*	AC
8	SRV-6	8.9	3.5	5.4	0.01*	AC
9	SRV-7	8.0	4.9	3.1	0.01*	AC
10	SRV-8	8.0	5.7	2.3	0.01*	AC
11	SRV-9	6.6	3.5	3.1	0.01*	AC
12	SRV-10	8.9	6.8	2.1	0.01*	AC
13	REL-1	8.7	4.4	3.4	0.01*	AC
14	REL-2	8.9	5.0	3.9	0.01*	AC
15	REL-3	8.2	6.3	1.9	0.01*	AC
16	REL-4	8.8	3.5	5.3	0.01*	AC
17	REL-5	9.1	4.8	4.3	0.01*	AC
18	REL-6	9.1	5.1	4.0	0.01*	AC
19	REL-7	8.8	5.4	3.4	0.01*	AC
20	REL-8	8.2	5.7	2.5	0.01*	AC
21	REL-9	7.9	5.6	2.3	0.01*	AC
22	REL-10	6.6	4.1	2.5	0.01*	AC
23	QLT-1	7.8	5.7	2.1	0.01*	AC
24	QLT-2	8.7	6.1	2.6	0.01*	AC
25	QLT-3	9.0	5.2	3.8	0.01*	AC
26	QLT-4	8.9	6.9	2.0	0.01*	AC
27	QLT-5	7.6	5.1	2.5	0.01*	AC

* Significant at the 95% confidence level. AC: Accepted, RE: Rejected Source: Created by the authors

Table 8 The gap between the indicators of SSM in the third hypotheses (Wilcoxon Test)

	Indicator	Contractor		Gap	p-value	Significance
		Expectation	Perceived			
1	DLV-1	5.7	6.2	-0.5	0.26	RE
2	DLV-2	8.6	5.5	3.1	0.01*	AC
3	SRV-1	6.0	6.4	-0.4	0.36	RE
4	SRV-2	7.4	7.4	0.0	0.91	RE
5	SRV-3	6.9	6.6	0.3	0.85	RE
6	SRV-4	8.0	7.1	0.9	0.03*	AC
7	SRV-5	7.7	7.4	0.3	0.55	RE
8	SRV-6	8.4	6.4	2.0	0.01*	AC
9	SRV-7	8.6	5.3	3.3	0.01*	AC
10	SRV-8	7.7	7.9	0.1	0.75	RE
11	SRV-9	8.3	6.6	1.7	0.01*	AC
12	SRV-10	8.1	8.3	-0.2	0.69	RE
13	REL-1	7.6	6.0	1.6	0.01*	AC
14	REL-2	8.5	7.8	0.7	0.11	RE
15	REL-3	8.4	6.2	2.2	0.01*	AC
16	REL-4	9.3	6.6	2.7	0.01*	AC
17	REL-5	8.5	6.9	1.6	0.01*	AC
18	REL-6	9.2	6.7	2.5	0.01*	AC
19	REL-7	8.6	7.6	1.0	0.01*	AC
20	REL-8	7.2	7.4	-0.2	0.82	RE

21	REL-9	8.2	8.3	-0.1	0.51	RE
22	REL-10	7.0	6.6	0.4	0.49	RE
23	QLT-1	9.1	6.0	3.1	0.01*	AC
24	QLT-2	7.9	8.8	-0.9	0.01*	AC
25	QLT-3	9.2	5.7	3.5	0.01*	AC
26	QLT-4	8.6	7.3	1.3	0.01*	AC
27	QLT-5	8.4	6.9	1.5	0.01*	AC

* Significant at the 95% confidence level. AC: Accepted, RE: Rejected Source: Created by the authors

It was also determined that contractor perceptions and expectations have a significant gap in the practices of DLV- 2: On time project delivery, SRV-4: Communication skills of the contractor staff, SRV-6: Not wasting the employer’s time, SRV-7: Provide regular, timely and integrated reports, SRV- 9: The groomed and professional appearance of staff, REL- 1: Immediate action when a problem arises, REL-3: Handling employer complaints, REL-4: Provide sufficient information to the employer about the status of the project, REL-5: A sense of responsibility and work conscience, REL-6: Compensation for losses, REL-7: Fulfillment of obligations (based on contract terms), QLT-1: Flawless project delivery (FPD), QLT-2: Minimal deviation of the project from the pre-set expectations, QLT-3: Having the necessary modern equipment, QLT-4: Quality control of the material and consumables, and QLT-5: Workplace housekeeping.

Finally, after the determination of the dimensions and indicators with a significant gap, the findings were presented in a focus group including seven experts, and the SSM model was finalized by reaching a collective agreement.

To do so, the results of the hypothesis tests were classified in four managerial fields as critical practices. Hence, in this classification, those practices that have a significant gap in the expectation and perception of the employer (H2) were defined as strategic communicative functions of the contractors.

Moreover, based on the findings of the hypothesis 1 testing, in order to bridge the gap between the contractor’s expectations and the employer's expectations, as a critical goal, those practices that have a significant gap were placed in this strategic aspect. Furthermore, there are some practices that showed a significant gap in the expectation and perception of contractors (H3), while significantly affecting optimal service providing. These factors need to improve as internal factors, and they were therefore categorized into two groups as internal controls and business processes. A scheme of this classification is shown in Fig. 2.

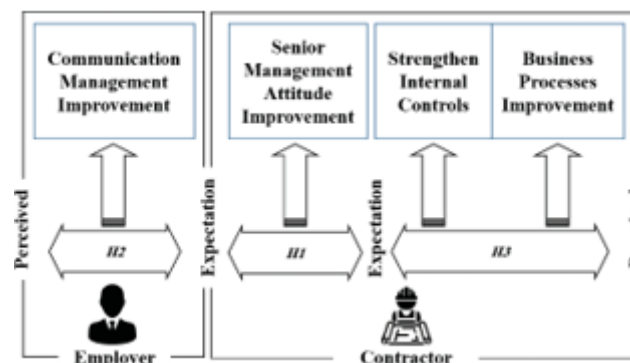


Figure 2 Strategic Management Model (SSM) extraction framework

Source: Created by the authors

Finally, based on the output of the focus group, critical practices were categorized as

priorities for improvement in the management areas mentioned in Fig. 2, and they were sorted according to the observed gap ratings in the SSM model and presented as Fig. 3.



Figure 3 Contractor Strategic Service Management (SSM) Model in the public sector

Source: Created by the authors

5 DISCUSSION AND CONCLUSIONS

The purpose of this study was to present a service strategic management (SSM) model in contracting companies. Given that there has been limited research in the levers of SSM, the results of this study disclose that a notable gap between the employer's and contractor's expectations is related to the dimensions of the delivery of sufficient information about the project, as well as their completeness within a planned framework. The findings of the research are in line with what has been mentioned in other studies such as the one by Liu et al. [20], which puts emphasis on the effective relationship between contractor and employer.

Based on analysing the gap between the employer's perceptions and expectations, the biggest gap is related to the modernity of contractor equipment, which is related to the quality dimension of SSM. These factors should be important to contractors as key factors of success. In this regard, Alzahrani and Emsley [21] classified the key factors of success into nine groups: safety and quality, past performance, environment, technical and managerial aspects, resources, organization, experience, size of previous projects and financial capability, in which the indicators such as quality policies, workforce adequacy, and company image were shown to be the most important success factors for contracting companies. A closer look at research findings also shows that contractor accountability, on time project delivery, and having modern equipment play a considerable role in creating a good image in the construction project market which is why contractors must pay more attention to these practices.

Furthermore, based on research findings, in order to manage services strategically, it is suggested that contracting companies should focus on four areas of improving their managerial attitude, communication management, business processes, and internal controls.

More precisely, contractors must develop the mechanisms of communication management to ensure providing sufficient information to the employer about the status of the project, the groomed and professional appearance of the staff, access to the contractor and its agents at the

project site when needed, flexibility in specific conditions, and observance of moral rules and regulations.

Moreover, it is essential that managers strengthen internal control mechanisms, especially in the timely delivery of projects, regular and timely reporting, establishing actionable key performance indexes (KPI's) of project steps, workplace housekeeping, moving toward zero defect in a project at delivery, and handling employer compliances.

Another part of the SSM model is the business process management (BPM) in contracting companies.

Despite the importance of all business processes, according to the findings of this study, contractors should focus more specifically on the processes of modernization and even more on total preventive maintenance (TPM) of the equipment, compensation for losses, quality control of the material and consumables, and the fulfillment of obligations based on contract terms. However, all of the mentioned points can be achieved in the light of an oriented attitude of the senior management of the contracting companies to handle and take care of the employer's requests.

Comparing the findings of this study with other studies reported in the literature shows the concordance of these findings in this study. Hamaria et al. [22] considered service persistence as a different quality dimension of assurance, empathy, reliability, and accountability. Similarly, Lucianetti et al. [23] listed the competitive advantages of production as quality, cost, productivity, delivery, innovation, and reliability. Moreover, as it has been noted earlier, the managers of contracting companies must see employer requirements with half an eye in designing the work of an organization, as Mashwama et al. [24] emphasized in their study on contracting companies.

Although in this study the SSM model is presented based on service management levers, suggestions for the development and continuation of this research are mentioned, including the consideration of complementary factors such as cost, innovation [25], the risk management effect on the model [26], or the social responsibility of the contracting companies [27]. Finally, qualitative approaches such as phenomenology, grounded theory, or cognitive mapping could be used for determining the success factors and strategies, and therefore could also help develop the SSM model.

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