

## THE IMPROVEMENT OF THE PROCESS OF PROVIDING GOVERNMENT SERVICES IN MULTIFUNCTIONAL CENTRES IN RUSSIA

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**Abstract:** *This paper solves the problem of the efficiency of multifunctional centers providing services (MFC) in Russia. It is used the method of process modeling and improvement to business-processes for solving this problem and for improvement of quality of service provision in MFC. It has been indicated key indicators influenced at the efficiency, identified risks and correlation of risks and indicators. The paper considers priority risks, which should be minimized and organizational measures for current risks minimization.*

**Keywords:** *business-process, efficiency, improvement, government services, multifunctional center*

**ACM Classification Keywords:** *G.2.2 Graph Theory, H.1 Models and Principles, K.4.3 Organizational Impacts*

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### Introduction

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Nowadays, the theory and practice of management includes wide specter of methods and instruments [Strikh, 2011] aimed at improvement of the business efficiency. In the same time, government structures have begun to adopt some business features. One of these structures is multifunctional center for providing government services to citizens (MFC).

There are some federal enactments aimed at progress and quality improvement of MFC institutes in Russia. According to the federal enactments, it is being informatization MFC by different automated systems, it is being personal training and improvement of interaction with adjacent departments and structures.

Besides interest of government, scientists of different fields also discuss the activity of government structures and particularly MFC. Therefore, L.A. Bershadskaya and A.V. Chugunov [Bershadskaya, 2013] have researched the existed methods of technologies monitoring in e-government. Than they have suggested the own methods of solving this problem. In addition, the problem of government services quality is researched in paper [Styrin, 2012]. Nevertheless, problem of the MFC efficiency and some questions [Ponomarev, 2014] about improvement of the processes of providing state services are highly relevant nowadays.

It is researched the problem of the MFC efficiency in Russia in this paper. The research is based on the processes of government services in MFC in Perm region.

### Approach

Improvement of the MFC efficiency will be achieved by the risks minimization of the providing government services process. It is necessary to analyze key indicators influenced on the business-processes of the efficiency evaluation. Therefore, authors [Repin, 2013] have suggested some types of business-process analysis:

- Qualitative analysis of the process based on subjective assessments.
- Visual qualitative analysis of graphical process diagrams.
- Evaluation and analysis of key indicators.

Thus, it should be used method of expert assessments and SWOT-analysis to develop the matrix of indicators of process efficiency. In the same time, it should be noted that group of indicators had to include economic, social and budget indicators of MFC [Gerba, 2013]. To solve this problem we should identify indicators influenced on result of state services categorized by type and activity field.

So, there are some key indicators influenced on the MFC efficiency, they are categorized at 2 types:

1. Indicators of MFC quality of federal evaluation (Table 1).
2. Indicators of MFC quality of regional evaluation (Table 2).

Table 1 Indicators of MFC quality of federal evaluation

Number	Description of the indicator
1	Free access of the applicants to the federal state system of "Single portal of public and municipal services (functions)"
2	Quantity of visits in the federal state system of "Single portal of public and municipal services (functions)"
3	Quantity of applications through a single portal of public and municipal services (functions)
4	Free access of the applicants to the regional portal of state and municipal services (functions)
5	Quantity of visits of the regional portal of public and municipal services (functions)
6	Quantity of applications by the regional portal of public and municipal services (functions)
	...
24	The average duration for acceptance and receiving the service result does not exceed 15 minutes
25	Social index of duration of providing government service
26	Social index of duration of waiting in queue of the applicant
27	Social index of the politeness and competence of operator MFC

Table 2 Indicators of MFC quality of regional evaluation

Number	Description of the indicator
1	The length of the queue
2	The average queue length
3	The quantity of applicants who has registered in system
4	The quantity of served applicants
5	The average quantity of served applicants
6	The quantity of services provided by the current operator
7	The quantity of provided services
8	The waiting time of the applicant in the queue
9	The average waiting time of the applicant in the queue
10	The average workload time of the operator
11	The average workload time of the current desk
12	The duration of filing of applicant's documents
13	The average time of filing of applicant's documents
14	The duration of providing government service
15	The average duration of providing government service
16	The duration of transaction of applicant's documents
17	The quantity of rejects to applicants
18	Social index of duration of providing government service
19	Social index of duration of waiting in queue of the applicant
20	Social index of the politeness and competence of operator MFC
21	Social index of the comfortable conditions in MFC
22	Social index of the availability of information
23	The quantity of positive reviews
24	The quantity of negative reviews
25	The quantity of applicants
26	The quantity of operator's mistakes
27	The quantity of applicants registered in the e-portal
28	The quantity of services provided to applicants through a single e-portal
29	The total amount of checks of payment of public service duties by the applicant

It is necessary to research methods of risks management for improvement processes. E.E. Kukina have suggested qualitative and quantitative methods of risk assessment in her paper

[Kukina, 2012]. Qualitative assessment aimed at:

- Identify the risks inherent in the proposed solutions implementation.
- Identify quantitative structure of risks.
- Identify the most risky fields.

Quantitative assessment proposes audits, particularly evaluation of risks at the "check-points". The author [Antipova, 2014] describes this method, so, it looks good to use this risks localization method to research processes of state services providing. In addition to, authors [Antipova, 2014] suggest some group of risks:

- Risks, associated with the peculiarities of the work.
- Organizational risks.

As a method of risk management, it is advisable to apply the approach proposed by the author [Lapusta, 1997]:

- Indicate of the alleged risk.
- Evaluate this risk.
- Use methods of risk management.
- Result assessment.

Thus, there are methods and steps, which should be used to improve processes of providing of government services:

- Risks localization method.
- Qualitative analysis based on key indicators of the MFC efficiency.
- Minimization of the indicated risks, influenced on key indicators.

### **Business-processes of providing of government services improvement**

Processes of providing of state services improvement is based on the method suggested by author [Andersen, 2003]. This method consists of points:

- Process documentation.
- Measurement of the indicators.
- Indicators assessment.
- Planning for improvement.
- Improvement.

*Process documentation.* Process documentation is based on modeling methodology in this paper. The models of the processes of providing government services has been built in BPMN 2.0 notation [Kovalev, 2016]. After analyze of these models we have common structure of business-process with indication of risks presented in the table 3.

**Table 3 Common structure of business-processes with risks**

<b>The process of providing of government services in MFC</b>					
<b>The segments</b>	Reception and registration of the applicant's documents		Check/Inspection of documents	Result	
<b>Roles</b>	MFC operator	Applicant	Related departments	MFC operator	Applicant

<b>Business-conditions</b>	The waiting time in the queue of the applicant should not exceed the established regulations	Thorough inspection of the applicant documents	MFC operator must notify the applicant of the result of readiness for state services
	Duration of getting applicant's documents by the operator should not exceed the established regulations	Interdepartmental requests	The applicant must appear in the MFC for the result of the public service not later than the deadline set by the regulations
	MFC provides the primary checks of the applicant's documents set by the operator	Inspection, interdepartmental requests shall not exceed the established regulations	
	Compliance established standards and requirements		
<b>Risks</b>	Exceeding the established regulations of duration of waiting in queue	Return of documents to the applicant	The failure of the applicant for the result in due date
	Exceeding the established regulations of duration acceptance of documents	Suspension of providing of public services	
	Reject to acceptance of applicant documents by operator	Exceeding duration of inspection of documents	

*Measurement of the indicators.* According to results of qualitative analysis based on expert assessments, it was indicated indicators of MFC quality of regional and federal evaluation (table 4 and table 5). These indicators are influenced by risks.

**Table 4 Indicators of MFC quality of regional evaluation**

Number	Number in table 2	Symbol	Description
1	5	r1	The average quantity of served applicants
2	7	r2	The quantity of provided services
3	10	r3	The average workload time of the operator
4	11	r4	The average workload time of the current desk
5	19	r5	Social index of duration of waiting in queue of the applicant
6	24	r6	The quantity of negative reviews
7	25	r7	The quantity of applicants
8	1	r8	The length of the queue
9	2	r9	The average queue length
10	8	r10	The waiting time of the applicant in the queue
11	9	r11	The average waiting time of the applicant in the queue
12	20	r12	Social index of the politeness and competence of operator MFC

13	17	r13	The quantity of rejects to applicants
14	29	r14	The total amount of checks of payment of public service duties by the applicant
15	26	r15	The quantity of operator's mistakes
16	14	r16	The duration of providing government service
17	15	r17	The average duration of providing government service
18	18	r18	Social index of duration of providing government service

Table 5 Indicators of MFC quality of federal evaluation

Number	Number in table 1	Symbol	Description
1	24	f1	The average duration for acceptance and receiving the service result does not exceed 15 minutes
2	25	f2	Social index of duration of providing government service
3	26	f3	Social index of duration of waiting in queue of the applicant
4	27	f4	Social index of the politeness and competence of operator MFC

The correlation between risks and indicators on a segment "Reception and registration of the applicant's documents" is presented as a graph in Figure 1.



R1 – risk "Exceeding the established regulations of duration of waiting in queue".

R2 – risk "Exceeding the established regulations of duration acceptance of documents".

R3 – risk "Reject to acceptance of applicant documents by operator".

The symbols of graph elements are given in Table 6.

Table 6 Symbols of graph elements

Graphical symbol	Description
	Risk
	Indicator of regional or federal evaluation

The correlation between risks and indicators at the segment "Check/Inspection of documents " is presented as a graph in Figure 2.

R4 – risk "Return of documents to the applicant".

R5 – risk "Suspension of providing of public services".

R6 – risk "Exceeding duration of inspection of documents".

The correlation between risks and indicators on a segment "Result" is presented as a graph in Figure 3.

R7 – risk "The failure of the applicant for the result in due date".

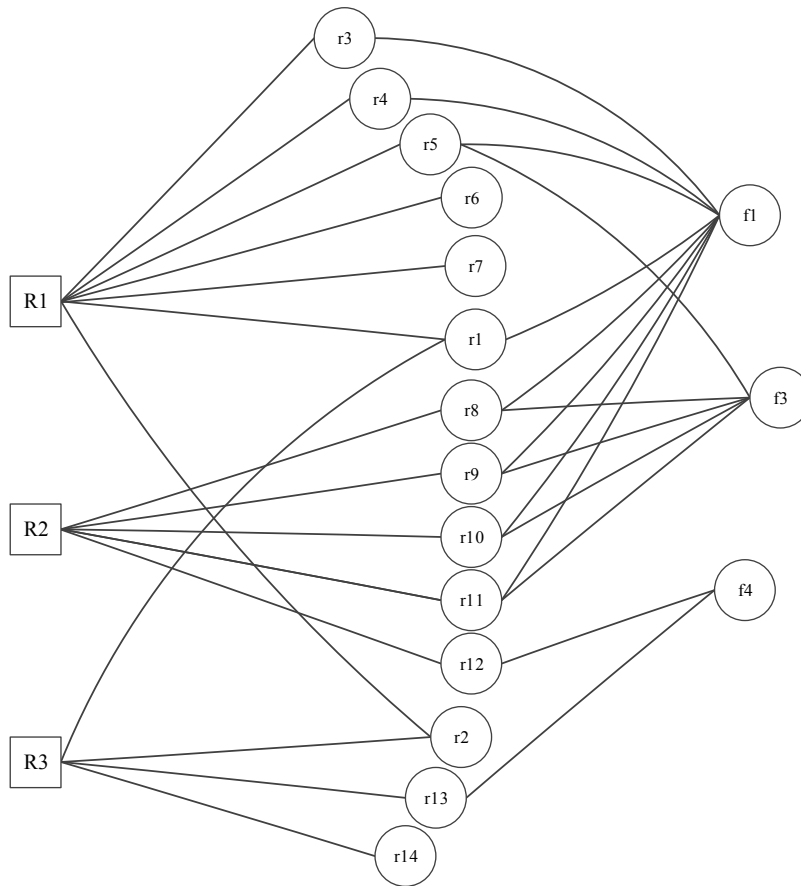


Figure 1 The correlation between risks and indicators at the segment "Reception and registration of the applicant's documents"

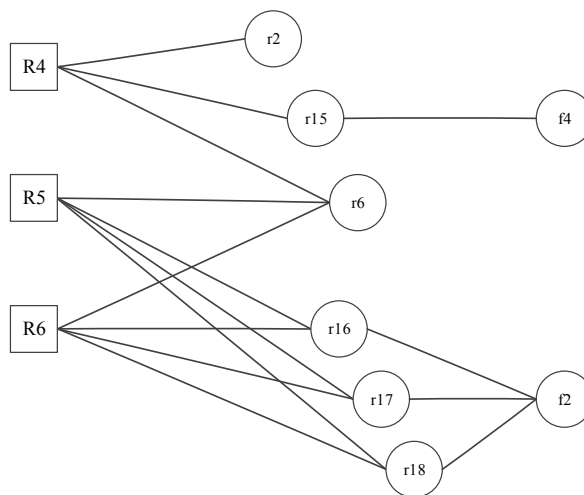


Figure 2 The correlation between risks and indicators at the segment "Check/Inspection of the documents"



Figure 3 The correlation between risks and indicators at the segment "Result"

*Indicators assessment.* It is used the method of expert assessments for development the matrix of key indicators. Matrix of MFC quality indicators of regional evaluation is presented at Figure 4. Matrix of MFC quality indicators of federal evaluation is presented at Figure 5.

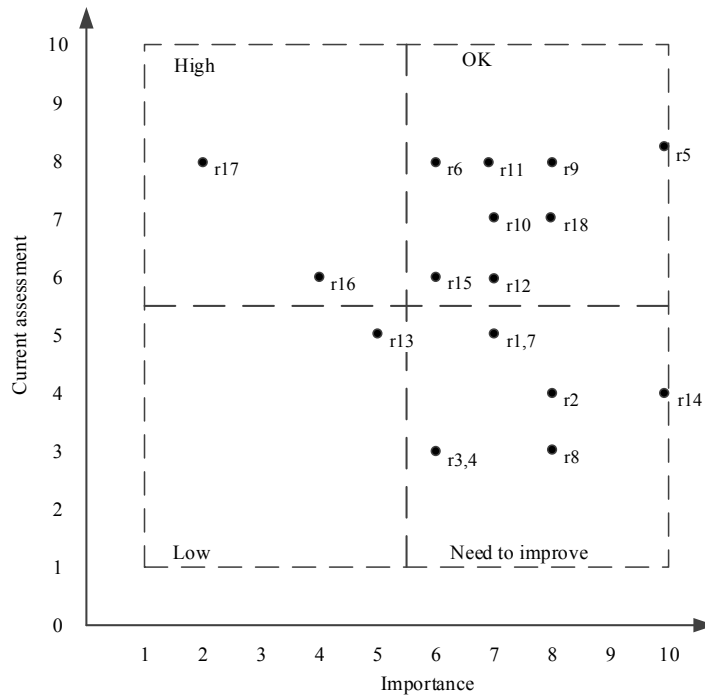


Figure 4 Matrix of MFC quality indicators of regional evaluation

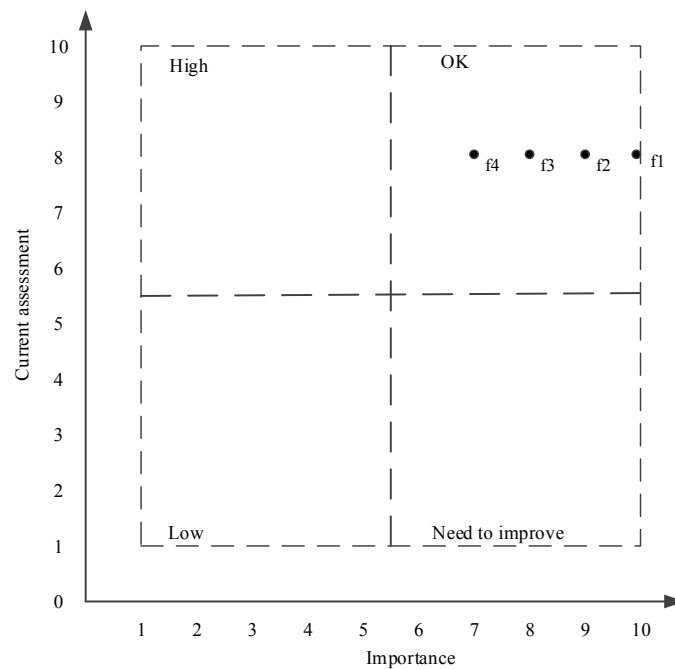
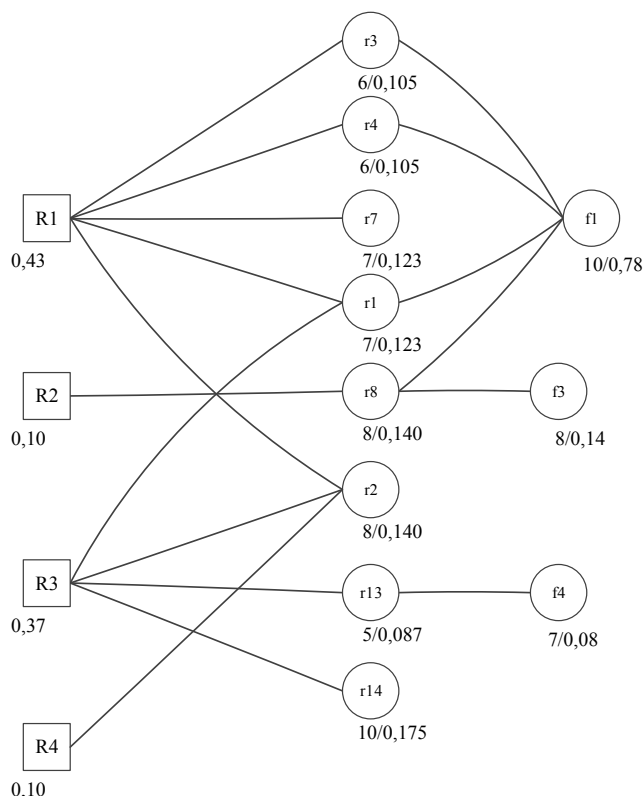


Figure 5 Matrix of MFC quality indicators of federal evaluation



In according to these results we have another graph (Figure 6) with indicated risks. In addition, we can calculate priority of risks and indicators accordance to expert assessments (Figure 3, 4)



**Figure 6 The correlation between indicated indicators and risks with high priority**

*The improvement.* Based on the results obtained in this paper and identification of priority risks, improvement should be made by carrying out some organizational measures. Implementation of measures will lead the minimization of risks, improvement of the quality indicators of regional and federal evaluation and increase the efficiency of the MFC in Perm. Therefore there are some measures for indicated risks minimization: the increasing of working places quantity, extension of the MFC operators quantity, informing applicants about the required set of documents and rules of filling of it's components more thoroughly.

Also, it is rather necessary to develop and apply the applicants traffic management method for distributing the flow branches depending on the time, location and service type.

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## Conclusion

This research has been conducted at the MFC, leading in Russia over the last 3 years. So it has been revealed short stack of significant risks in the process of the state services providing which should be minimized. However, the method of service providing modeling with further analysis and definition of risk points proved to be a way to increase the efficiency of MFC operations and process.

The results obtained by this method, may be a justification for further stages of the modernization of the MFC structure in Perm region.

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