

## Lean Six Sigma Based Administration Municipal Services versus Current Ones: Measuring the Gap from Civil Servants Perspective

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### Abstract

*The study compares the ideal municipal administrative services based on Lean Six Sigma with the current quality of administrative services provided by municipality, from the perspective of civil servants. Municipal civil servants have been interviewed and their responses have been analyzed. 12 Critical Success Factors (CSFs) and 36 sub factors have been used for the realization of the research. Statistical methods: Descriptive, Sample t-test, Independent t-test and One Way Anova have been used for the analysis. This research measures the gap, provides statistics and conclusions of the civil servants estimation differences regarding municipal administrative services, civil servants compliance for the identified gap and offers recommendations for administration service improvement in the future.*

**Keywords:** Lean Six Sigma, LSS Critical Success Factors, Local Government Administration

### 1. Introduction

Municipalities generally provide services to citizens starting from the issuance of various certificates and permits, collection of taxes and fees, the realization of payments, allocation of subsidies, request's reviewing and response to citizens' etc. Of all government services, those provided by local government most directly affect the day-to-day lives of individuals (Sikander, 2015). Local governments are continually engaged to bring innovations in administrative services by improving the working environment, by installing modern systems and advanced means of communication and information, by training of civil servants in all levels of local government. Changes that improve processes are needed but before starting changing public management model, it is necessary to assess and measure the quality of current services in the municipality. Performance measurement is seen as a tool for improving public budgeting, promoting a better reporting system and modernizing public management (Greiling, 2005). The condition of the quality of services and the need for change, in this regard better than anyone else can help civil servants themselves who are working in the municipality. They are people who are part of the system of communication and information, they spend all the time communicating with citizens (customers) by using devices that are available, by listening their requests and complaints and experiencing pressures and privileges from their superiors. They know best as anyone else to assess performance in the municipal civil administration and their assessments help best to identify defects in the system. It is preferred that all civil servants that perform a task and produce a service for citizens should be involved in the process to improve administrative services. Lean six sigma management model is a suitable model for improving processes in administration, this has been proven in many municipalities in developed countries. Lean six sigma is the name typically given to process improvement programs that attempt to implement an approach that is more robust than either Lean or Six Sigma individually (Maleyeff, 2014). In this research the difference of services based on lean six sigma and those currently provided in the municipality will be investigated, based on the civil servants estimations.

### 2. Literature Review

Lean Six Sigma is a process improvement philosophy which enables people to do a better job, eliminates waste and reduces cost, ultimately resulting in greater process efficiency and customer satisfaction (Martin, 2010, p. 58). It is based on the concept of combining two improvement programs, Lean Enterprise and Six Sigma. Lean is defined by Womack and Jones (1994) as the systematic removal of waste by all members of the organization from all areas of the value stream (Näslund, 2008, p. 273). The concept of LM can be traced to the Toyota Production System (TPS), a manufacturing philosophy pioneered by the Japanese engineers Taiichi Ohno and Shigeo Shingo (Kee, 2010, p. 12). Six Sigma is both a quality management philosophy and a methodology that focuses on reducing variation, measuring

defects and improving the quality of products, processes and services (S. Furterer, A. K. Elshennawy, 2005). According to Harry and Schroeder (2000) Six Sigma is a concept that was originated by Motorola Inc. in the USA in about 1985. Lean, Six Sigma, and Lean Six Sigma are all variants of continuous improvement systems which have evolved from focused methodologies (Taylor et. al., 2014). Lean Six Sigma methodology is preferred over Lean or Six Sigma or any other continuous improvement methodology for process improvements across all the sectors in service industry (Sunder, 2013). Lean Six Sigma was originally devised to eliminate waste and improve manufacturing quality to no more than 3.4 defects per million opportunities (P. Guarraia, et. al., 2008, p. 1). Lean Six Sigma has been equally beneficial both for manufacturing or service concerns and Large or small scale organizations (X. Zhu, M. Hassan, 2012). A disciplined process improvement methodology, such as Lean Six Sigma, can benefit any organization, from large corporations to small municipalities (Maleyeff, 2007, p. 32). Lean six sigma concept is already being applied in many municipalities in USA and elsewhere as Fort Wayne, North Ayrshire, City of El Paso, Huston City, City of Tyler, City of Irving, Erie County. Successful implementation of lean six sigma usually is influenced by various factors. Brotherton and Shaw (1996) define CSFs as the 'essential things' that must be achieved by the company to identify which areas will produce the greatest "competitive leverages" (Baghban, 2016, p. 3463). There is some literature that suggests factors like leadership, strategic orientation, teamwork, technical approaches (metrics-systems), and training will probably affect LSS application. Psychogios et al. (2012), says that top management commitment, involvement & support; quality-driven organizational culture; quality-driven training; teamwork in problem solving; direct link between lean six sigma and customer satisfaction; strategic orientation of LSS; supportive technical systems (Tools, Techniques & IT); clear selection of LSS projects; prior implementation of other quality improvement programs; supportive performance management system are key factors that drive to successful implementation (A. G. Psychogios, L. K. Tsonis, 2012, p. 412). Today in the era of globalization and great competition one of the most important principles and aim of the large reforms is the principle of improving the quality of public services (E. Vanags, I. Vanags, I. Vilka, 2006, p. 13). The local governments that have decided to start this innovation path since the early 1990's have developed a new conception in the way they manage their organizations, from improving the quality of the services provided; executing their processes in a more effective and efficient way, to reduce the costs of the municipal management (money saving); until keeping the principle of legality, without being rigid, and guiding and approximating political decisions to the citizens through process standards in order to keep the current social services as higher as possible (Suárez-Barraza, 2013, p. 209). According to Akhake (2013), local government administration allows for clientele participation in decision making and implementation of government programs that affect their lives (Agbodike F.C. et. al., 2014, p. 100). Linderman, Schroeder, Zaheer, and Choo (2003) pointed out that six sigma can be implemented on the processes of producing manufacturing goods, business trade, executive management, and services. Service is about people, whether internal or external to the organization, and the relationships between them (Lisa, 2008).

### 3. Hypothesis

Since lean six sigma can ultimately helping companies and institutions achieve zero defects beside prompt delivery at lower costs and better customer satisfaction (Baghban, 2016, p. 3463), then it can be concluded that an organization that is successfully implementing this managerial concept is also offering ideal services to its customers. If a local municipal administration works with zero defects will satisfy the citizens, civil servants and its leadership. The question is whether the local municipal administration is offering ideal services to its citizens, if not, what is the gap between the LSS-based services and quality of services offered currently? In this paper, the gap between LSS-based services and the quality of services offered currently by a municipality in Kosovo is been explored. Hypotheses to be verified are:

H1: Municipality in Kosovo is not providing ideal administrative services to the citizens as would be achieved through lean six sigma based services.

H3: There is compliance between civil servants in their estimations regarding the existing gap between quality of LSS-based services and those currently provided by municipalities.

### 4. Methodology

This research was conducted in a municipality which deals with about 97,000 resident inhabitants. Administration of the civil service in the municipality is administered from 14 departments, plus the mayor's cabinet. In this administration are engaged 220 civil servants divided into three administrative levels: Managerial, professional, technical and administrative level. To 159 civil servants was conducted personal interview by using a structured questionnaire. In the questionnaire were 36 questions, three for each critical factor (12 CSF's). Interview questions are formulated on enabling factor basis

which are presented to the respondents with ideal content for administrative services based on LSS CFS's where respondents give their estimation score from their perspective using 5 options: Poor, Satisfactory, Good, Very Good and Ideal. Critical factors studied were selected from authors (Sunil Sharma, Anuradha R. Chetiya, 2012, p. 298) and (Ayon Chakraborty, Kay Chuan Tan, 2012, p. 998). The collected data were analyzed by using SPSS statistical models as descriptive analysis, One Sample T-test, Independent T-test and One way ANOVA.

## 5. Analysis

In this section are presented demographic profiles of respondents, gap analysis results which was conducted with the "one sample T-test", gender-based differences which is realized by "Independent sample t-test" and group differences that are realized with "Anova". The demographic profile of the respondents shows that 36.5% of the respondents who participated in the questionnaire were aged from 18-40, 30.2% were aged from 41-52 and 33.3% were aged from 53-64. This suggests that the separation of civil servants at the municipality was stratified into three groups, balanced with average around 30.3%. The total number of respondents was 159 with 3 employed at rank and five groups of working experience, 76 (47.8%) were male and 83 (52.2%) female, 19 chief officer's, 111 officer's, 15 assistant's and 14 other in which nearly 50% of them have been working in municipality for at least 9 years, 34% at least 18 years, 3.1% at least 27 years, 10.7% at least 36 years and 3.1% at least 42 years.

**Table 1: Descriptive Analysis - Respondents Demographic Profile**

Age	Frequency	Percent
18-28	13	8.2
29-40	45	28.3
41-52	48	30.2
53-64	53	33.3
Total	159	
<b>Gender</b>		
Male	76	47.8
Female	83	52.2
Total	159	
<b>Position</b>		
Chief officer	19	11.9
Officer	111	69.8
Secretary	1	0.6
Assistant	14	8.8
Other	14	8.8
Total	159	
<b>Experience</b>		
0-9	78	49.1
10-18	54	34
19-27	5	3.1
28-36	17	10.7
37-42	5	3.1
Total	159	

**Table 2: Gap Analysis One Sample T-test, Results for Critical Success Factors (N=159)**

Variable/Critical Success Factor (CSF)	Estimation Score		Maximum Score	GAP	t- value	Sig. (2-tailed)
	(P)	(M)	(M)	(Mean difference)		
	Mean	SD	Mean	(P-M)		
MNG. INVOLVEMENT	4.027	0.9315	5	-0.97275	-13.17	0
CULTURE	3.589	0.8562	5	-1.4109	-20.78	0
COMMUNICATION	3.541	0.9084	5	-1.45912	-20.26	0
INFRASTRUCTURE	3.604	1.0092	5	-1.39623	-17.45	0
SKILLS	3.681	0.795	5	-1.31866	-20.92	0
STRATEGY	3.224	0.9462	5	-1.77568	-23.67	0
EXPERTS	3.086	0.9173	5	-1.91405	-26.31	0
VISIBILITY	3.512	0.9306	5	-1.48847	-20.17	0
MOTIVATION	3.193	0.9681	5	-1.80713	-23.54	0
TRAINING	3.331	0.9075	5	-1.66876	-23.19	0
EQUIPMENTS	3.153	1.0061	5	-1.84696	-23.15	0
CITIZEN FOCUS	3.31	0.9752	5	-1.68973	-21.85	0

In the Table 2 is presented GAP analysis to see the differences between the estimates of municipal civil servants regarding the quality of services they provide for the citizens and ideal quality to be achieved through the application of Lean Six Sigma (5.0). One sample t-test was used to see the results of the statistical significance. In the first row of Table 2 are presented data for the CSF Management Involvement, which shows that there is a difference between civil servants estimates and the ideal quality based on lean six sigma application. Average estimates are 4.02, the maximum rate based on application of lean six sigma 5.0 and the difference -0.97 5.0. Through the data issued by one sample t-test (t=

13,167; sig. 0.000 <0.005) it can be argued that there is statistically significant difference between the civil servants estimation and the ideal quality based on lean six sigma application. In this table, based on estimations of civil servants of the municipality, the differences between the ideal quality based on lean six sigma (5.0) and quality offered by the municipality are evident throughout all CSF's. This table shows that Management Involvement factor has the highest estimate and the smallest difference in comparison to other factors, and the Experts Engagement factor is estimated less than the others and has the highest difference. For Experts Engagement the average estimates are 3.08 out of 5.0 which ideal score is. The difference is -1.91 where t-test is (t=-26.312; sig. 0.000<0.005). The table shows that differences exist in all factors (CSF's), in all cases we have differences with statistical significance because in all cases we can see sig. 0.000<0.005. The differences vary from -0.9 which is the smallest and -1.91 which is the largest one. So, the average estimates by civil servants for all CSF's are less than 5.0.

Table 3: Independent sample t-test results for differences across genders

Factor	Gjinia	N	Mean	t-value	df	Sig. (2-tailed)
MNG. INVOLVMENT	Male	76	4.0175	-0.125	157	0.809
	Female	83	4.0361			
CULTURE	Male	76	3.6754	1.219	157	0.509
	Female	83	3.51			
COMMUNICATION	Male	76	3.5658	0.33	157	0.054
	Female	83	3.5181			
INFRASTRUCTURE	Male	76	3.5702	-0.401	157	0.185
	Female	83	3.6345			
SKILLS	Male	76	3.6974	0.243	157	0.956
	Female	83	3.6667			
STRATEGY	Male	76	3.2763	0.662	157	0.434
	Female	83	3.1767			
EXPERTS	Male	76	3.2325	1.944	157	0.526
	Female	83	2.9518			
VISIBILITY	Male	76	3.614	1.332	157	0.441
	Female	83	3.4177			
MOTIVATION	Male	76	3.1974	0.056	157	0.809
	Female	83	3.1888			
TRAINING	Male	76	3.5904	0.785	157	0.509
	Female	83	3.2771			
EQUIPMENTS	Male	76	3.2061	0.636	157	0.054
	Female	83	3.1044			
CITIZEN FOCUS	Male	76	3.3728	0.773	157	0.185
	Female	83	3.253			

Table 3 shows the results of Independent Sample t- test which presents the gender differences in terms of their estimates for the quality of services in the municipality. In the first row of Table 3 data can be learn for Management Involvement factor where the average estimate regarding this factor is with very close difference, where (M = 4.0175 and F = 4.0361). Further we can read the results of t-test (t = -0.125; sig.0.809 <0.05), which means that there is no gender statistically significant difference regarding Management Involvement estimates. Table shows also that by other factors are not noted large differences between the estimates outlined in both genders. The largest pronounced difference is noted by Visibility factor (M = F = 3.6140 and 3.4177) dif. = 0.1963 while the the smallest difference is noted by Motivation factor where (M = F = 3.1974 and 3.1888) dif. = 0.0086. Below, in the tables 4, 5 and 6 measurement analysis on estimation differences based on dimensions like age, work position and experience are presented. Table 4 shows the results of One Way ANOVA and we can see differences on estimation between different age groups. In the first row of the table 4 we can read data for Management Involvement factor and the results are: (age22-age26 = 4.15, age27-age39 = 3.93, age40-age52 = 4.08 and age53-age65 = 4.02), F value is 0.287 and the significance coefficient is 0.809. This means that the observed differences have no statistical significance, and that there is more than 80% chance that these differences happens randomly. According the analysis, it can be concluded that also by other CSFs' there are no statistically significant differences between respondents with different age groups, in terms of civil servants estimations regarding quality services in the municipality. Also based on these data, we can say with much certainty that age has no impact on the assessment of civil servants. Observed data in the tables 4 and 5 shows similar results for assessments based on working position and experience. The differences are also small, no statistical significance difference is observed on civil servants estimation. Example, table 5, "Management Involvement" factor interpretation for working experience says this: (year 0-year 9 = 4.07; y10-y18 = 3.88; y19-y27 = 4.06; y28-y36 = 4.27 and y37-y42 = 3.86), F value = 0.686 while significance coefficient is: sig. = 0.602. In the table 6, "Management Involvement" factor interpretation for working position says following (Chief Officer = 4.03; Officer = 4.060; Assistant = 3.64 and other = 4.02), F value = 0.679 and the significance coefficient is sig. 0.61. Three tables show that differences between groups in the three cases are small, there is no statistically significant difference. This means that municipal civil servants regardless of age, experience or work position have similar opinions about the quality of municipal services.

**Table 4: One way ANOVA results for differences across different age groups**

Factor	Age	N	Mean	F-Value	Sig.
MANAGEMENT INVOLVEMENT	22-26	13	4.1538	0.287	0.84
	27-39	45	3.9333		
	40-52	48	4.0833		
	53-65	53	4.0252		
	Total	159	4.0273		
CULTURE	22-26	13	3.4359	2.042	0.11
	27-39	45	3.4741		
	40-52	48	3.4792		
	53-65	53	3.8239		
	Total	159	3.5891		
COMMUNICATION	22-26	13	3.2564	2.133	0.1
	27-39	45	3.3481		
	40-52	48	3.5625		
	53-65	53	3.7547		
	Total	159	3.5409		
INFRASTRUCTURE	22-26	13	3.3077	0.924	0.43
	27-39	45	3.4741		
	40-52	48	3.6944		
	53-65	53	3.7044		
	Total	159	3.6038		
SKILLS	22-26	13	3.3559	1.93	0.13
	27-39	45	3.5333		
	40-52	48	3.7569		
	53-65	53	3.8176		
	Total	159	3.6813		
STRATEGY	22-26	13	3.1538	1.127	0.34
	27-39	45	3.0889		
	40-52	48	3.1597		
	53-65	53	3.4151		
	Total	159	3.2243		
EXPERTS	22-26	13	2.7436	2.796	0.04
	27-39	45	2.9556		
	40-52	48	2.9931		
	53-65	53	3.3648		
	Total	159	3.086		
VISIBILITY	22-26	13	3.0513	2.527	0.06
	27-39	45	3.3333		
	40-52	48	3.5972		
	53-65	53	3.6981		
	Total	159	3.5115		
MOTIVATION	22-26	13	3.1026	0.606	0.61
	27-39	45	3.1185		
	40-52	48	3.125		
	53-65	53	3.3396		
	Total	159	3.1929		
TRAINING	22-26	13	3.4872	2.767	0.04
	27-39	45	3.0296		
	40-52	48	3.3472		
	53-65	53	3.5346		
	Total	159	3.3312		
EQUIPMENTS	22-26	13	2.9231	1.655	0.18
	27-39	45	2.9556		
	40-52	48	3.1597		
	53-65	53	3.3711		
	Total	159	3.153		
CITIZEN FOCUS	22-26	13	3.0513	1.339	0.26
	27-39	45	3.1259		
	40-52	48	3.4028		
	53-65	53	3.4465		
	Total	159	3.3103		

**Table 5: One Way Anova results on Working Position**

Factor	Position	N	Mean	F-Value	Sig.
MANAGEMENT INVOLVEMENT	Chief officer	19	4.035	0.679	0.607
	Officer	111	4.060		
	Secretary	1	4.000		
	Assistant	14	3.643		
	Other	14	4.143		
Total	159	4.027			
CULTURE	Chief officer	19	3.561	1.728	0.147
	Officer	111	3.592		
	Secretary	1	3.000		
	Assistant	14	3.214		
	Other	14	4.024		
Total	159	3.589			
COMMUNICATION	Chief officer	19	3.438	1.348	0.255
	Officer	111	3.568		
	Secretary	1	2.000		
	Assistant	14	3.309		
	Other	14	3.809		
Total	159	3.541			
INFRASTRUCTURE	Chief officer	19	3.333	1.412	0.232
	Officer	111	3.598		
	Secretary	1	3.667		
	Assistant	14	3.476		
	Other	14	4.143		
Total	159	3.604			
SKILLS	Chief officer	19	3.579	2.556	0.041
	Officer	111	3.664		
	Secretary	1	3.667		
	Assistant	14	3.381		
	Other	14	4.262		
Total	159	3.681			
STRATEGY	Chief officer	19	3.105	0.614	0.653
	Officer	111	3.198		
	Secretary	1	2.667		
	Assistant	14	3.309		
	Other	14	3.548		
Total	159	3.224			
EXPERTS	Chief officer	19	3.211	0.586	0.673
	Officer	111	3.015		
	Secretary	1	3.000		
	Assistant	14	3.262		
	Other	14	3.309		
Total	159	3.086			
VISIBILITY	Chief officer	19	3.526	1.92	0.11
	Officer	111	3.451		
	Secretary	1	3.000		
	Assistant	14	3.381		
	Other	14	4.143		
Total	159	3.512			
MOTIVATION	Chief officer	19	3.017	0.854	0.493
	Officer	111	3.168		
	Secretary	1	3.333		
	Assistant	14	3.191		
	Other	14	3.619		
Total	159	3.193			
TRAINING	Chief officer	19	3.088	3.068	0.018
	Officer	111	3.303		
	Secretary	1	2.667		
	Assistant	14	3.191		
	Other	14	4.071		
Total	159	3.331			
EQUIPMENTS	Chief officer	19	3.123	1.45	0.22
	Officer	111	3.081		
	Secretary	1	3.000		
	Assistant	14	3.167		
	Other	14	3.762		
Total	159	3.153			
CITIZEN FOCUS	Chief officer	19	3.105	1.515	0.201
	Officer	111	3.291		
	Secretary	1	3.333		
	Assistant	14	3.167		
	Other	14	3.881		
Total	159	3.310			

**Table 6: One Way Anova results on Working Experience**

Factor	Experience	N	Mean	F-Value	Sig.
MANAGEMENT INVOLVEMENT	0-9	78	4.0769	0.6866	0.6023
	10-18	54	3.8889		
	19-27	5	4.0667		
	28-36	17	4.2745		
	37-42	5	3.8667		
Total	159	4.0273			
CULTURE	0-9	78	3.5726	3.1633	0.0157
	10-18	54	3.3827		
	19-27	5	3.8667		
	28-36	17	4.1765		
	37-42	5	3.8000		
Total	159	3.5891			
COMMUNICATION	0-9	78	3.4701	0.7072	0.5881
	10-18	54	3.5247		
	19-27	5	3.7333		
	28-36	17	3.8627		
	37-42	5	3.5333		
Total	159	3.5409			
INFRASTRUCTURE	0-9	78	3.6368	2.457	0.048
	10-18	54	3.3333		
	19-27	5	3.8667		
	28-36	17	4.1176		
	37-42	5	4.0000		
Total	159	3.6038			
SKILLS	0-9	78	3.5940	3.015	0.0198
	10-18	54	3.5864		
	19-27	5	3.8000		
	28-36	17	4.2549		
	37-42	5	4.0000		
Total	159	3.6813			
STRATEGY	0-9	78	3.1496	3.7248	0.0064
	10-18	54	3.0370		
	19-27	5	3.6000		
	28-36	17	3.9412		
	37-42	5	3.6000		
Total	159	3.2243			
EXPERTS	0-9	78	3.0214	4.6801	0.0014
	10-18	54	2.8642		
	19-27	5	3.4000		
	28-36	17	3.8235		
	37-42	5	3.6667		
Total	159	3.0860			
VISIBILITY	0-9	78	3.3376	2.3617	0.0557
	10-18	54	3.5432		
	19-27	5	3.7333		
	28-36	17	4.0000		
	37-42	5	4.0000		
Total	159	3.5115			
MOTIVATION	0-9	78	3.1453	3.1939	0.0149
	10-18	54	2.9815		
	19-27	5	3.9333		
	28-36	17	3.7451		
	37-42	5	3.6000		
Total	159	3.1929			
TRAINING	0-9	78	3.2179	4.2769	0.0026
	10-18	54	3.1914		
	19-27	5	3.6000		
	28-36	17	4.0784		
	37-42	5	3.8000		
Total	159	3.3312			
EQUIPMENTS	0-9	78	3.0641	3.3311	0.012
	10-18	54	2.9753		
	19-27	5	3.6667		
	28-36	17	3.8431		
	37-42	5	3.6000		
Total	159	3.1530			
CITIZEN FOCUS	0-9	78	3.2650	3.1211	0.0168
	10-18	54	3.1049		
	19-27	5	3.9333		
	28-36	17	3.9412		
	37-42	5	3.4667		
Total	159	3.3103			

## 6. Discussion

In this part the results that have emerged from the data analysis are discussed. Explanations are given on identified results over the existing gap between LSS standards and current quality of services. Each Critical Success Factor is tackled and explained. It is also discussed on civil servants compliance regarding their estimations. The outcomes of the analysis show that civil servants have provided estimates for most of the critical factors around 3.0 or slightly above. This means that each critical factor is far from the ideal quality which should be the target to be achieved in the future when compared to the value determined of 5.0 based on LSS standards. Data have produced a difference of -1.31 for "skills" which is the best estimated factor and worst estimated factor for "experts" which is -1.91. This means chief offices and officials do not properly follow targeted policies and they don't share them in proper way with other officials, officials are not skilled to identify and report when there is a defect and to make proposals for solving the problem and they are not aware that their performance has an direct impact on all the chain of administrative service. Regarding the experts factor, there are no sufficient professional human resources and no external experts are engaged for specific projects that improve the quality of administrative services. Critical Success Factor "Management Involvement" makes an exception that has a positive score in this research. This factor was estimated by 4.02 points with only difference of -0.97 far from LSS standards which value in this research was 5.0. This means that the Chief Officers usually when necessary they spend time, even if not at ideal level as LSS standards requires, with employees in the workplace and provides assistance if required, he/she encourages officers to present the problem and solving the problem when it occurs during the process and he/she teach them how to conserve values and principles of the department. Regarding civil servants consistency the data shows that despite gender, age, position or work experience they all share similar estimation about the existing gap between the LSS standards and current services offered by the municipality. Observed results show similar estimations at three levels, meaning that their estimations are self-critical and all the three levels agree that the quality of services is far from the quality of services based on standards of LSS. Civil servants agree that improving quality of services at the levels of LSS, municipality must build contemporary electronic system, civil servants should receive more trainings, should increase confidence in the whole structure of the administration, must improve communication systems and above all municipalities should focus more to the citizens.

## 7. Conclusion and Recommendation

In conclusion, the hypothesis raised in this research are proven completely and can be concluded that the municipalities in the Republic of Kosovo do not provide the ideal quality of services for their citizens as would be the case with the application of lean six sigma standards. To this findings agree civil servants of Kosovo municipalities regardless of age, gender, place of work or experience. The quality of administrative services is an average of 3.5 from 5 points which is ideal level. Since the Republic of Kosovo is a new country, which is only 8 years as an independent country, it can be concluded that the level of administrative services is not disappointing because they are above average of 3.0. Still remains to be worked and improved in municipal service administration in order to satisfy needs of citizens. Since Lean aims to optimize costs, quality, and customer service constantly (N. Bhatia, J. Drew, 2007), municipalities such as is the case with Kosovo, as an emerging country, should be determined as soon as possible to start applying this concept. It is recommended that municipalities begin with application of LSS in selected departments, to plan investment of financial means, expert's engagement, training for most capable civil servants so that in the future they can be leaders of the continuous improvement of administrative services in all municipality. Municipalities need to start using lean six sigma mechanisms and tools in order to identify defects in processes, to understand reasons why their work is not efficient enough.

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