

BALANCED SCORE CARD AS A TOOL FOR IMPROVING EFFICIENCY, PRODUCTIVITY AND QUALITY OF SERVICE IN CABLE OPERATORS

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A b s t r a c t: Organizational management is based on the basic principles: planning, organizing, motivating, coordinating and controlling. Proper (optimum) use of the work force, the introduction of control mechanisms, and the introduction of a Balanced Score Card (BSC) can seriously affect the increase in the efficiency and productivity of organizations and contribute to increasing their revenue. Managers' teams are up to the challenge to optimize resources for work, improve quality of work, increase profits, increase productivity and efficiency of the organization, i.e. to perform a greater amount of work with the optimum number of employees, while not sacrificing the quality of the work done.

Key words: balanced score card (BSC); human resource management; cable operator

БАЛАНСИРАНА КАРТА НА ОЦЕНА КАКО АЛАТКА ЗА ЗГОЛЕМУВАЊЕ НА ЕФИКАСНОСТА, ПРОДУКТИВНОСТА И ПАРАМЕТРИТЕ ЗА КВАЛИТЕТ НА СЕРВИС ВО КАБЕЛСКИ ОПЕРАТОР

А п с т р а к т: Менаџментот на организациите се заснова на основните начела: планирање, организирање, мотивирање, координирање и контролирање. Правилното (оптималното) користење на работната сила, воведувањето на контролните механизми, како и воведувањето на балансираната карта на оцена (БКО), можат сериозно да влијаат врз зголемувањето на ефикасноста и продуктивноста на организациите и да придонесат за зголемување на нивните приходи. Менаџерските тимови се исправени пред предизвикот како да ги оптимизираат ресурсите за работа, да го подигнат квалитетот на работењето, да го зголемат профитот, да ја зголемат продуктивноста и ефикасноста на организацијата, т.е. со оптимален број вработени да сработат поголем обем на работа, притоа не жртвувајќи го квалитетот на сработеното.

Клучни зборови: балансирана карта на оцена (БКО); управување со човечки ресурси; кабелски оператор

INTRODUCTION

The Balanced Score Card (BSC) is a system for strategic planning and management of organizations in order to improve internal and external connection in the organization, to monitor its position in order to fulfill its strategic goals and development [1]. The goal is to show how with proper (optimal) use of the work force, by introducing control mechanisms and introducing BSC, the results in the work

can be significantly improved. The efficiency and productivity of the operator depends not only on the number of employees it has, but also on the way they are organized and motivated. The quality of service (QoS) parameters, and above all the thoughts of the satisfaction of its users, depend directly on the availability of its service, i.e. in which period of time the user can use the services of the operator uninterruptedly (television, internet and telephony). In addition to increasing the efficiency and

productivity of its employees, BSC seriously influences the performance of the operator's network, i.e. in stabilizing the network. BSC as a tool for motivating employees can be widely used in many companies that have a large number of employees. Certainly, depending on the area in which the companies deal with, the parameters will be appropriately defined, but the essence of measuring the results is the same, the image that management receives for each employee is the same and the possibility that each employee receives for career development is the same. The goals and parameters of the BSC are derived from the organization's strategy, i.e. they should not be ad hoc inserted, but should be correlated with the mission and the strategy of the organization. The combination of all parameters should be a balance between the results achieved and the desired results.

Balanced Score Card, as a new concept, was first published in a Harvard Business Review article in 1992. It is based on a one-year research project run by the Nolan Norton Institute and based on research done in twelve successful organizations on the topic "Measuring Organizational Performance in the Future" [2]. The research is conducted by Robert S. Kaplan (Harvard Business School) and David P. Norton, executive director of the Nolan Norton Institute [3]. Robert S. Kaplan and David P. Norton met with representatives of twelve organizations twice a month in order to create a new system for measuring organizational performance [3]. The goal of the project was how to measure the performance of organizations' operations, not just through traditional financial accounting indicators, but also through the value of intangible resources they believed to play a central role in creating organizational value. The principle of this project was that everything that can be valued, i.e. measure, can be improved. Robert S. Kaplan and David P. Norton believed that everything that can be valued is fundamental to both managers and scientists. If organizations can improve the management of intangible resources.

To accomplish these goals, it is necessary:

1. To provide equal opportunity to all career development staff within the organization itself by measuring the single indicators for both the teams and each employee. In this way, each employee knows his place in the BSC ranking.
2. To provide an objective assessment of each employee in a channeled team culture, not as strong solo players, i.e. individuals.
3. To provide additional income to the salary of each employee as a reward for the BSC ranking

which is a motivation for better and more successful individual and team work for the employees.

4. Show single and clear goals to strive for.
5. Give us information on how well we do our work according to the expectations and requirements of the company.
6. Give us information on how our users evaluate our work (through the so-called Customer Satisfaction Surveys).

Prior to initiating the application of the BSC, it is presented to all stakeholders (technicians and dispatchers), because the basic idea is that the Balanced Scorecard is the basis for the further evaluation of the employees. Of course, no one can be described with a figure, i.e. there is no ideally made system that will outline the operation of people by number. So, aware that BSC is not an ideal system, the basic idea at the beginning was to point out it's not ideality, but also to present our commitment to continually upgrading and improving it. The practice will show that group and significant changes in the parameters have been made on several occasions, which will contribute to a more realistic representation of the true picture.

The basic principles of the Balanced Score Card are:

1. All employees work in the same conditions, with equal workload, work with the same equipment and serve the same users. They therefore have exactly the same working conditions!
2. Parameters are measured in the same way for everyone, i.e. the same data processing software is used, so "not the accuracy of BSC" is all about the same!
3. The results are always transparent and anyone can check their individual achievements vis-a-vis the achievements of the entire team.... There is a greater influence of the participants themselves in the creation of the changes and its improvement!

The model itself is not sufficient if it does not exactly define all the parameters that will be monitored every day, which will be their weight coefficients, how these parameters will be interconnected, etc. The goal is to establish a system through which the strategic goals and parameter has an appropriate weight of 10 points in the final calculation.

Repeated ticket (installation): The number of interventions on the field where the first 30 days before the installation was completed successfully, was examined on the total number of successfully completed installations. This parameter has an appropriate weight of 10 points in the final calculation.

Team results are a set of three parameters:

Productivity: The number of tasks carried out in one region, each task being multiplied by an appropriate weight coefficient (depending on the complexity of the task, the number of technicians who perform the task (one or two), the type of task ...), the number of working hours from the respective region for the given period. This parameter has an appropriate weight of 15 points in the final calculation.

Customer satisfaction: The percentage of satisfied users of the total surveyed users for the respective region. This parameter has an appropriate weight of 10 points in the final calculation.

Independence to user: The percentage of dissatisfied users from the total surveyed users for the respective region. This parameter has an appropriate weight of 5 points in the final calculation.

The assessment by the immediate manager is a set of two parameters:

Disciplinary / Work in the team: The manager assesses how the technician adheres to the work procedures set by the company, how it relates to users and the means of work, whether it is team-set ... This parameter has an appropriate weight of 10 points in the final calculation.

Technical acceptance: The manager assesses the technical readiness of the technician, i.e. how quickly and effectively he can perform tasks of all kinds. This parameter has an appropriate weight of 10 points in the final calculation.

In the maximum number of points that can be earned on a monthly basis, individual scores affect 50 points (50%), team scores with 30 points (30%) and grade by the manager with 20 points (20%), i.e. the maximum is 100 points per month.

From the above we can see that each task is related to the weight coefficient, depending on the complexity of the task and the time it takes to realize it. But weight ratios also depend on the goals of the organization and the direction of management. Depending on what management wants to achieve, the coefficients, i.e. if we want to achieve a higher workload with satisfactory quality, then we give more weight to the productivity

The first three parameters aim to educate all those who have worked on "old glory" until then, and they were absent from work when they liked it. The last parameter is aimed at encouraging the right workers and all those who look long-term as employees in a company that has strictly and equally valid rules for work.

The figures below show the original layout of the spread sheet used to process the parameters required for the monthly calculation of the BSC. This table lists all information entered by the dispatcher when running the team. For example, there is: a task completion date, who typed it, who performed it, a task type, whether it was done by one or two technicians, and complexity of the task, which user is the intervention, which comment is closed the ticket, etc. Correctly filling this table, i.e. the correct input of data by the operator is essential for the correct calculation of the monthly BSC and is the basis for all reports related to BSC.

Реон	Град	Диспечер	Дата	број на запис	Слож.	Планираност	Бр.	Час	Адреса на клиентот	Име на клиентот
Југ	Прилеп		01.12.2011	396730	ниска	Планирана	1	15:29		
Запад	Скопје запад		01.12.2011	394768	ниска	Планирана	1	11:10		
Запад	Скопје запад		01.12.2011	396090	ниска	Планирана	2	11:11		
Запад	Скопје запад		01.12.2011	396328	ниска	Планирана	3	11:12		
Запад	Скопје запад		01.12.2011	396174	ниска	Планирана	4	11:12		
Запад	Скопје запад		01.12.2011	396313	ниска	Планирана	5	14:39		
Запад	Скопје запад		01.12.2011	394444	ниска	Планирана	1	12:14		
Запад	Скопје запад		01.12.2011	395263	ниска	Планирана	2	12:15		
Запад	Скопје запад		01.12.2011	395252	ниска	Планирана	3	12:15		
Запад	Скопје запад		01.12.2011	395249	ниска	Планирана	4	12:16		
Запад	Скопје запад		01.12.2011	395641	ниска	Планирана	5	12:16		
Запад	Скопје запад		01.12.2011	393483	ниска	Планирана	6	12:17		
Запад	Скопје запад		01.12.2011	396646	ниска	Планирана	1	19:38		
Запад	Скопје запад		01.12.2011	396567	ниска	Планирана	2	19:39		
Запад	Скопје запад		01.12.2011	396139	ниска	Планирана	3	21:20		
Запад	Скопје запад		01.12.2011	396699	ниска	Планирана	4	21:21		
Југ	Велес		01.12.2011	396853	висока	Планирана	1	15:49		
Запад	Скопје запад		01.12.2011	391055	ниска	Планирана	1	10:25		
Запад	Скопје запад		01.12.2011	393638	ниска	Планирана	2	10:25		

Fig. 1a. Working table for the calculation of BSC among field teams

Телефон	Задача	TV	инт	тел	Забелешка	Техничар1	Техничар2	Тип	Статус
76663194	Проблем		ЛАН		checking router ro_p	Благојче Трпкос	Томислав Спиркс	2	Успешно завршено
75479388	Проблем	АТВ			на сите канали бара Филип Ристовски			1	Успешно завршено
23246574	Проблем		КИ		Uptime: 1 hour 49 mi	Филип Ристовски		1	Успешно завршено
23212343	Проблем	АТВ			не знаат од кога! 07	Филип Ристовски		1	Пренасочено кон Мрежни Операции
23077089	Проблем		КИ		од утро до 16.00ч. се	Филип Ристовски		1	Пренасочено кон Мрежни Операции
70676700	Проблем	ДТВ			прескенирање- рес	Филип Ристовски		1	Успешно завршено
71791489	Проблем		ЛАН		рестартиран и пак н	Јовица Наумовски		1	Успешно завршено
77555850	Проблем		ЛАН		нема пинг до корис	Јовица Наумовски		1	Успешно завршено
75230645	Проблем		ЛАН		имаат лимитирана к	Јовица Наумовски		1	Успешно завршено
70698677	Проблем		ЛАН		ping 92.53.53.160	ARI Јовица Наумовски		1	При посетата не е констатиран пробле
75285406	Проблем	АТВ			Лоши слики со снег	Јовица Наумовски		1	Пренасочено кон Мрежни Операции
70536862	Проблем	ДТВ			бара да му се смени	Јовица Наумовски		1	Успешно завршено
76689967	Проблем			Л-ТЕЛ	PING 10.255.135.103	Игор Стојановски		1	Пренасочено кон Мрежни Операции
71216268	Проблем		ЛАН		checking router ro_g	Игор Стојановски		1	Пренасочено кон Мрежни Операции
71644320	Проблем		ЛАН		072/605-997 checkin	Игор Стојановски		1	Успешно завршено
75469837	Проблем		ЛАН		нема ниедна услуга	Игор Стојановски		1	Успешно завршено
76555139	Проблем		ЛАН		Нема интернет, при	Љубчо Крстев	Миле Дамев	2	Успешно завршено
70636105	Проблем	АТВ			лоша линка на сите к	Владимир Неде		1	Успешно завршено
75303270	Проблем		ЛАН		checking router ro_g	Владимир Неде		1	Успешно завршено

Fig. 1b. Working table for the calculation of BSC among field teams

RESULTS FROM THE 6-YEAR APPLICATION OF THE BALANCED SCORE CARD

A period of 6 years, 2011 to 2016, has been considered. The goals set are not only achieved, but they are also overwhelmed. The main focus was to introduce order and discipline through a system for objectively measuring and evaluating an employee's performance. Once this is achieved, the results themselves will come back.

However, the main goal is to increase the company's profit. The increase in profits depends directly on improving more measurable parameters, which are:

- then they should be subject to measuring organizational performance.

The following table shows the historical development of the BSC:

Table 1

Historical development of the BSC

Year	Literature	Development of BSC
1992	"The BSC: Measures that Drive Performance"	Balance between financial and non-financial indicators. Concept with four perspectives
1993	"Putting the BSC to Work"	Linking measures with organizational strategy
	"Using the BSC as a Strategic Management System"	Four management processes:
		– Translating the vision
1996	The BSC: Translating Strategy into Action	– Communication and connectivity
		– Business planning and goals
		– Feedback and learning
	"Linking the Balanced Scorecard to Strategy"	
1999	The Strategy Focused Organization	A higher emphasis on BSC as the basis of the management system
2000	"Having Trouble with Your Strategy" Then Map It.	Introducing "strategic maps"
2004	Strategy Maps	Expanding the role of BSC in the strategic process with the concept of a "strategic map" How to create, manage and communicate organizational strategy
2005	The Office of Strategy Management	Creation of a new corporate department, a strategic management office

BALANCED SCORE CARD – PRACTICAL APPLICATION IN CABLE OPERATOR

BSC was first implemented in cable operator in 2011. Its main goal is to represent a system through which employees' efficiency and productivity will be increased, a distinction between better and less quality employees would be made, employees would have the opportunity for monthly bonuses, and with this they would be far more motivated to work.

The main goal is, of course, the company to reduce its operating costs by properly and properly reducing the number of employees and by reducing unnecessary costs caused by poor quality of work and inadequate control of daily work tasks.

CONCLUSION

There is not a sufficiently perfect method that will impeccably bring order and discipline into an organization; there is no single figure that will evaluate the work of the individual and the team without a magic wand with which we can create a favorable climate for a fair and equal competition between the employees, but the Balanced Score Card, with all its faults, showed that it is a method very close to the

ideal one. It's a good method for the employee, because it provides a number-based reliability, and for the company, because it can recognize the right workers. The method is easily applicable in any organization where there is an operational team that performs every day tasks. It can be: a health institution, an administrative facility, a contact center, a telephone sales center, etc. It is important to just define the parameters that we want to measure and improve, to find an appropriate connection between them, to control whether this connection is right or not, to be transparent with all employees and they know our ultimate goal and of course we have the support of the senior management in conducting all of this

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APPENDIX

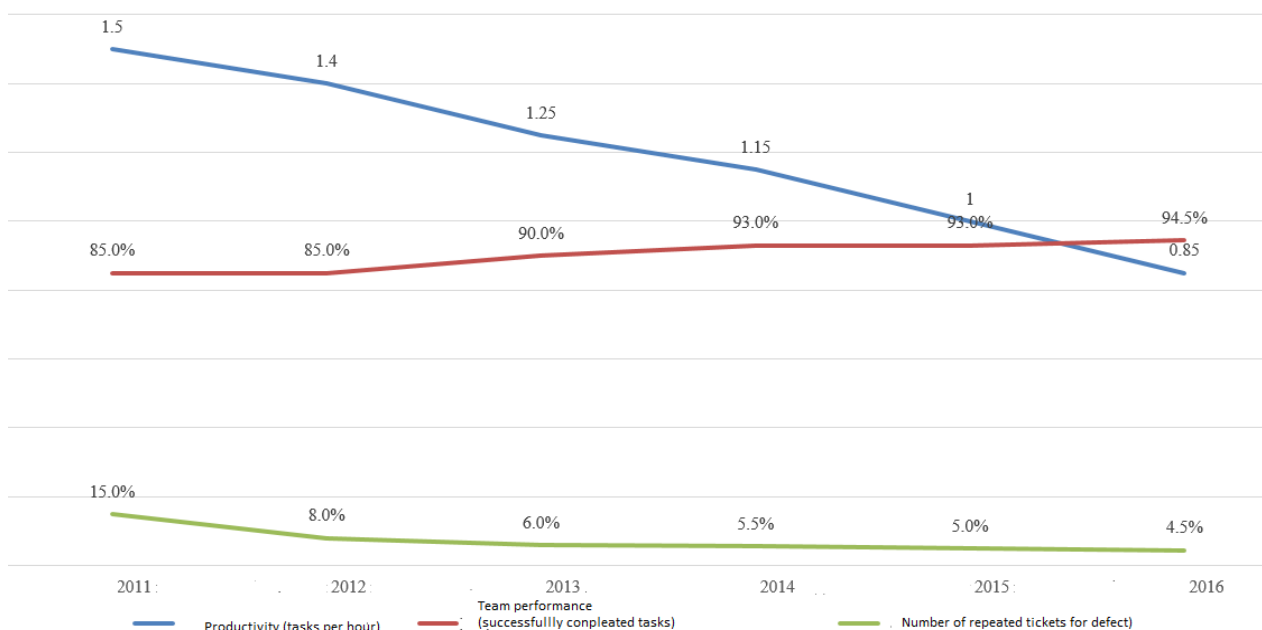


Fig. 2. Counter balance between 3 parameters (productivity, team performance and repeated tickets)

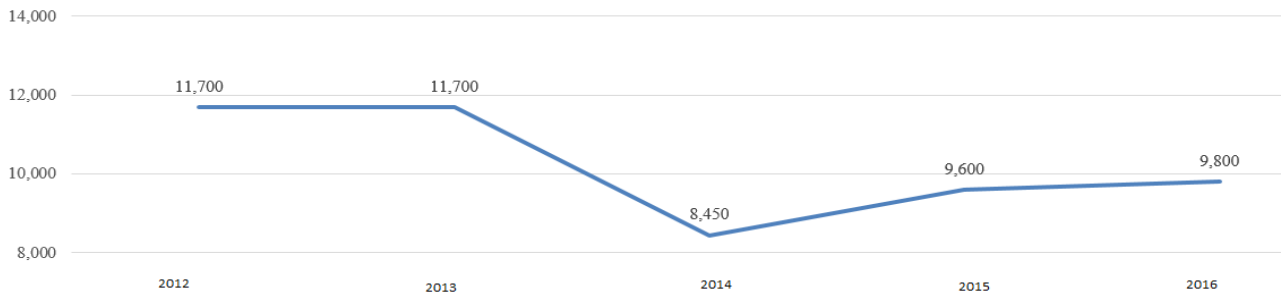


Fig. 3. Unnecessary outings on the field

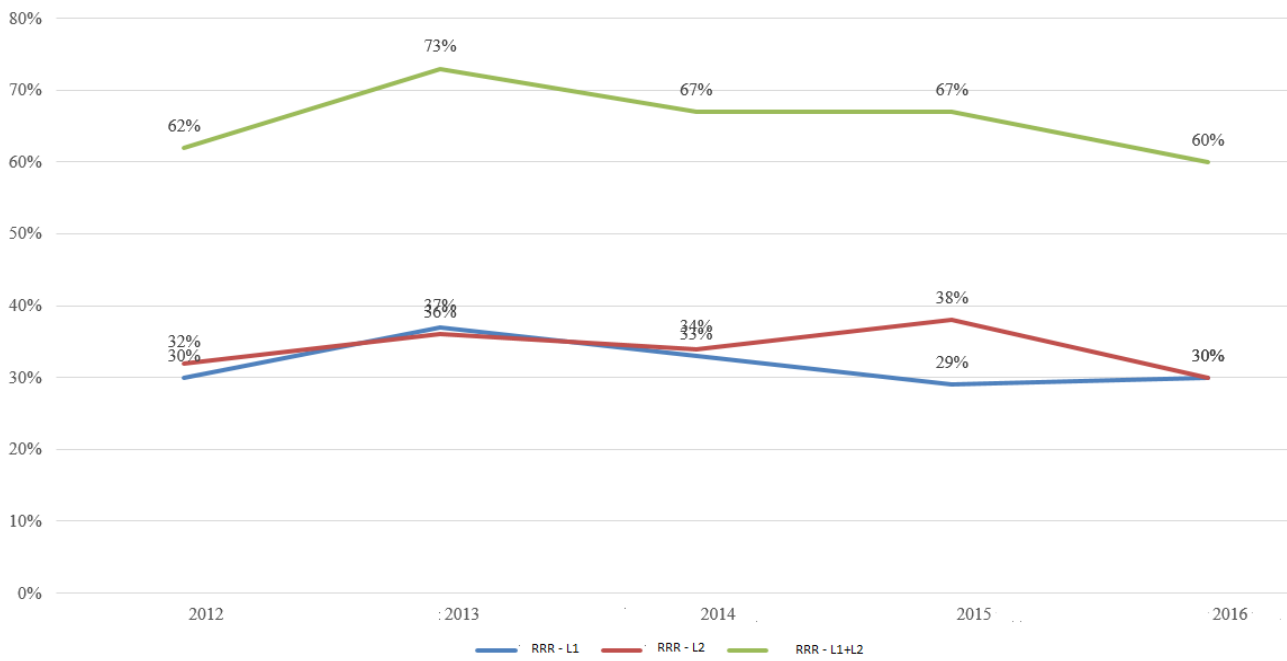


Fig. 4. Approximately 70% of tickets are solved remotely

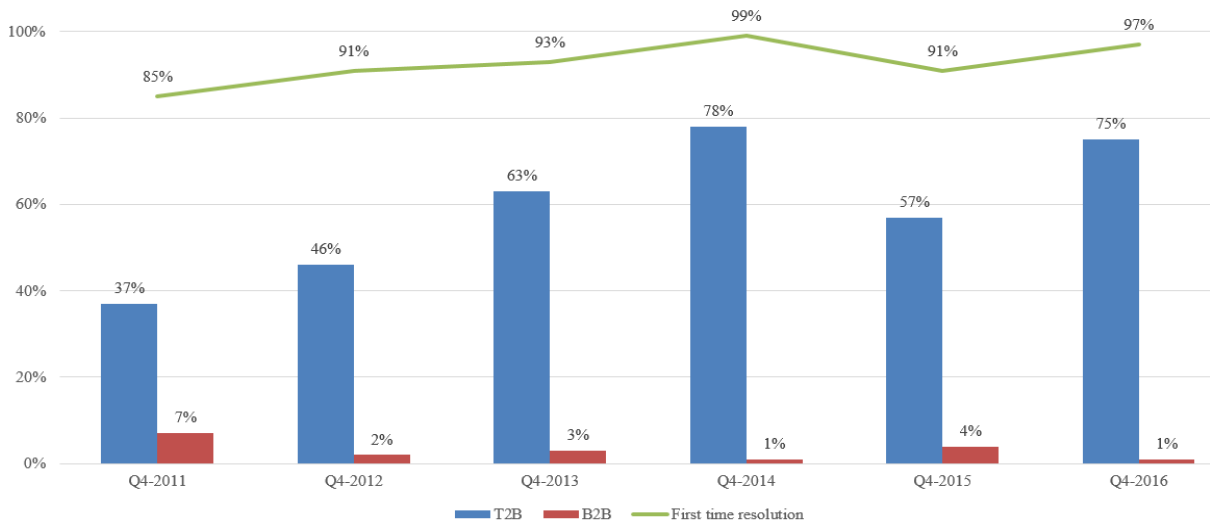


Fig. 5. Difference between satisfied and dissatisfied users, percentage of tickets resolved after the first visit

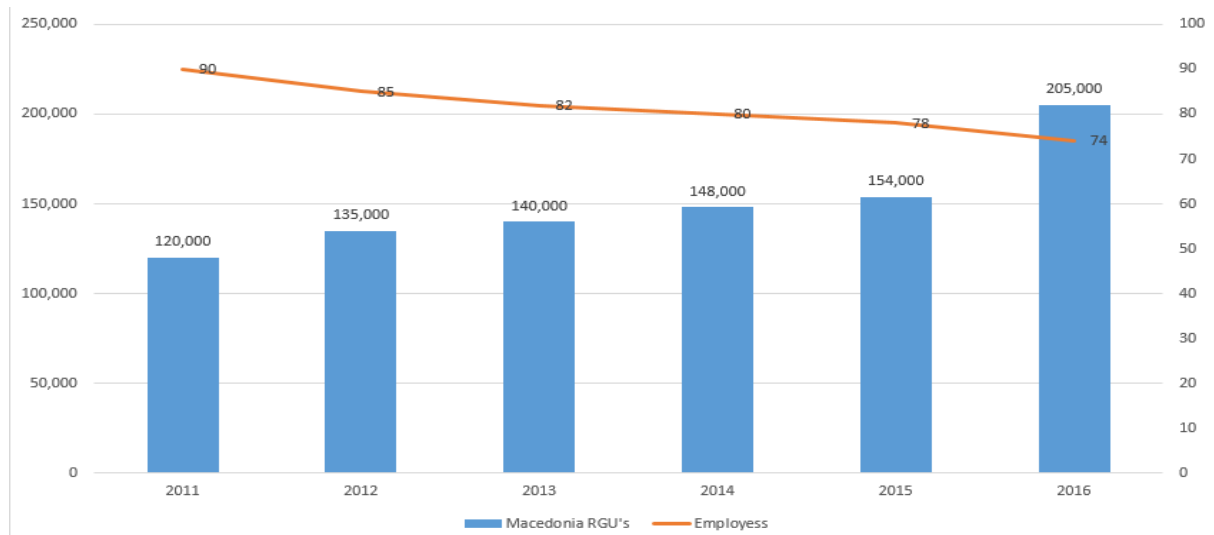


Fig. 6. Increasing the number of RGUs, despite the constant reduction in the number of employees

