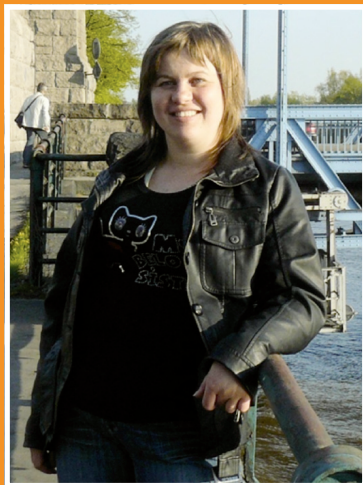


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Anna Dobrzycka – a graduate of management and the Wroclaw University of Technology. She is interested in issues connected with project management, especially the problems of receiving funds for project implementation, budgeting and controlling the changes in projects (project cost management).

In 2010 she analysed the aforementioned questions in relation to the @ktywny Senior project, while writing her thesis paper.

In her leisure time she enjoys watching sport. She loves reading and having fun with her friends.

Planning the @ktywny Senior project budget

Summary: The aim of the present article is to introduce the readers to the conclusions that I came to while analysing the budget of the @ktywny Senior project with the use of modern methods and techniques of project management. In the present article I concentrate on the analysis of the budget before the introduction of the instruments connected with its implementation as well as the results of my research. I have also presented the methods of controlling the adherence to the budget of the project with the use of the Earned Value method. To conclude I present propositions of certain changes to the @ktywny Senior project budget that could allow for the future avoiding of the financial difficulties that the authors and organisers of the project had to face previously.

Key words: cost, project management, budget.

Nowadays it is hard to imagine implementing a project without developing a plan. Proper implementation of a project as well as effective management

of the project while it is being carried out may be a source of substantial gain. Even the smallest of investments should be implemented on the basis of project documentation including plans and working drawings, technical calculations and the anticipated cost of the endeavour.

The project cost is what usually provokes strong emotions. One of the most important responsibilities of the project managers is to plan and adhere to the budget. Due to the consequences that customers and organisers may have to face in case of exceeding the budget the financial plan of the project must be developed with utmost care. Budgeting may turn out to be more or less effective depending on the methods and techniques used and the possibilities of receiving information on the costs and means of financing.

The preparation and implementation of such projects as *@ktywny Senior* carried out in Centrum Wspierania Organizacji Pozarządowych (NGOs support centre) Sektor 3 have always appeared to me as interesting. During my university studies I became familiar with the rules of project management¹⁾, which has confirmed my opinions. In the present article I shall try to introduce the results of my research and to employ the methods that I have learned in a particular project. *@ktywny Senior* is a prospective idea because, as we all know, we are an ageing society and such endeavours allow for the activation of seniors and the prevention of social exclusion. The project introduced below partially addresses the issues connected with the solving of certain problems of the old age and the participation in the inventions of modern civilisation which are, among others, computers. Acquiring the skills necessary to use these devices provides people of advanced age with new means of contact with the world and of realising some of their interests.

The aim of the conducted research was to propose instruments to be used and to carry out a control of the *@ktywny Senior* project budget. The research was based on a method²⁾ termed interview.

I have employed the following research techniques³⁾ as part of the method:

- ❖ In-depth interview with the project supervisor,
- ❖ Surveys among the participants of the project,

¹⁾ **Project management** is to be understood as the use of knowledge, skills, tools, and techniques during the actions of the project in order to achieve or surpass the needs and expectations of the ordering party. E. Nowak, *Strategiczne zarządzanie kosztami*, Kraków 2006, pp. 209–242.

²⁾ **Research method** is a set of theoretically justified concepts and instruments encompassing the entirety of the researcher's actions aimed at solving a scientific problem. http://pl.wikipedia.org/wiki/Metodologia_bada%C5%84_pedagogicznych, dostęp: 05.11.2010 r.

³⁾ **Research techniques** are actions regulated by the directives developed through empirical experience allowing for the receiving of optimally certifiable data.

- ❖ The Earned Value⁴⁾ method employed for the control of the project cost.

Budget of the *@ktywny Senior* project

The budget presented a list of all the tasks performed throughout the project and the cost thereof (chart 1). While looking at the financial plan of the *@ktywny Senior* project one may learn of the expenditures that had to be made in order to fulfil each of the tasks. Originally the budget was planned for 200–210 participants – on the basis of the answers received to the invitations to take part – but it was implemented for 60 people. Limiting the number of participants was caused by the lack of financial support from the borough. The following tasks were undertaken as part of the project⁵⁾:

- Medical examination at the start of the training,
- Physical and mental health assessment at the start of the training,
- Computer and internet skills training,
- Physical activity training,
- Andragogical workshops and seminars,
- "Filozofia człowieka" (The philosophy of human beings) workshops,
- Physical and mental health assessment at the end of the training,
- Medical examination at the end of the training,
- Project management,
- Scientific consultation.

During the preparation of the project the sense and practicality of the project were confirmed during the informal talks and meetings with the representatives of the Urząd Miasta (City Office); however, it turned out eventually that no one was willing to risk spending public funds on such an innovative programme, even though these would only constitute 50% of the entire budget⁶⁾. Despite the numerous cuts in the planned costs it was impossible to receive any funding from the borough.

The amounts in the original budget were estimated on the basis of the approximate expenditures on each of the planned actions. All the costs of the teachers' pay were estimated on the basis of their offers and verified according

⁴⁾ **The Earned Value Management** allows for all of the participants of a project (investors, owners and stockholders, sponsors, financial institutions, project managers and the project team, contractors and co-operators) to have a comprehensive control of the implementation of the contract in the substantive, time, and cost aspects. Thanks to the full integration of information on the works carried out, their deadlines, and the expenditures an ongoing analysis of the realisation of the budget can be conducted. (BCWP – budgeted cost of work performed, ACWP – actual cost of work performed, BCWS – budgeted cost of work scheduled). http://www.getmanager.com.pl/narzedzia/earned_value.html, retrieved: 27.12.2009 r.

⁵⁾ Interview conducted with the project supervisor M. Ferenc on 10.03.2010 r.

⁶⁾ Interview conducted with the project supervisor M. Ferenc on 10.03.2010 r.

to the current market standards. The further numbers were established in a similar way. None of the project management methods was employed in the estimation, which is why the calculations were not precise. In the future emphasis must be put on this issue and one of the four methods of cost estimation used⁷⁾:

- I. Bottom-up estimation.
 1. Includes the following elements:
 - a) Breaking the project down into the smallest parts,
 - b) Estimation of the cost of each of the particular elements,
 - c) Summing the costs from the bottom up.
 2. Characteristics of the method:
 - a) Estimation accuracy of about 5%,
 - b) Labour-intensive method, especially in the original estimations,
 - c) Detailed documentation of the analysis can be used for further projects (capitalization of knowledge).
 3. To employ the bottom-up method detailed information on the following is required:
 - a) material resources necessary for the performing of the particular tasks,
 - b) human resources,
 - c) all expenditures (incl. administrative ones).
- II. The top-down method – estimation through analogy:
 1. Estimation on the basis of the actual costs of earlier projects.
 2. If the estimation is based on a „similar” project from the past – the average miscalculation is $\pm 15\%$, in the case of different projects $\pm 35\%$.
 3. A „knowledge bank” about the costs of projects of different types is required (capitalization of knowledge of the implemented projects).
- III. Parametric models:
 1. The estimated cost of the project (sub-project, tasks) is included in an analytical equation.
 2. It is enough to substitute the necessary values (parameters) to the equation.
 3. Example of parameters:
 - a) in construction: e.g. the area, the volume,
 - b) in IT: number of instructions in a source code,
 - c) in any other field: the complexity of the project, innovativeness, the level of knowledge (difficulty) of the customer.
 4. Parametric models require testing on numerous projects.
 5. The verified data is very valuable.
- IV. Expertise:
 1. A single expert may be very wrong (up to 70%), that is why the estimations of numerous experts are averaged.

⁷⁾ www.ioz.pwr.wroc.pl/Pracownicy/Kuchta/dokt-proj1.ppt, dostęp: 11.12.2009 r.

- 2. To unsure an estimation accuracy of about 15–20% the participation of ca. 70 experts is required (!).
 - 3. The method is expensive⁸⁾.
- On the basis of experience the best method may turn out to be the top-down (analogy) one.

Chart 1. Budget of the @ktywny Senior project for 60 people

N.	Cost type – substantive and administrative costs connected with the performing of the tasks	Number of units	Unit cost (in PLN)	Type of measurement	Total cost (in PLN)
1.	Medical examination at the start of the training	60	80	Number of examinations	4800
2.	Physical and mental health assessment at the start of the training	60	50	Number of examinations	3000
3.	Computer and internet skills training instructors' pay	180	50	hours	9000
4.	Physical activity training instructors pay	180	25	hours	4500
5.	Andragogical workshops and seminars costs	12	100	hours	1200
6.	"Filozofia człowieka" (The philosophy of human beings) workshops costs	12	70	hours	840
7.	Physiotherapy examination at the end of the training	60	80	Number of examinations	3000
8.	Medical examination at the end of the training	15	320	hours	4800
9.	Project management costs	2	2500	months	5000
10.	Scientific consultations	0	0	hours	0
TOTAL					36140

Source: Interview conducted with the project supervisor M. Ferenc on 10.03.2010.

Realisation of the budget of the @ktywny Senior project

While conducting the analysis of the budget of the @ktywny Senior project I have noticed certain differences between the cost calculation methods. The actual budget is higher by 965 PLN than the original one, so the amount that needs to be invested in 37,105 PLN. However, some of the costs are lower the original ones. The differences result from the discrepancies between the rates of pay that were not taken into account in the original budget estimation and the detailed costs of the use of the rooms and the costs that were taken into account in chart 2 in the actual cost column.

⁸⁾ www.ioz.pwr.wroc.pl/Pracownicy/Kuchta/dokt-proj1.ppt, dostęp: 11.12.2009 r.

Chart 2. Actual budget of the @ktywny Senior project

N.	Cost type – substantive and administrative costs connected with the performing of the tasks	Number of units	Unit cost (in PLN)	Type of measurement	Actual cost (in PLN)
1.	Medical examination at the start of the training	62	50	Number of examinations	3100
2.	Physical and mental health assessment at the start of the training	62	111	Number of examinations	6882
3.	Computer and internet skills training instructors' pay	180	50	hours	9000
4.	Physical activity training instructors pay	72	79	hours	5688
5.	Andragogical workshops and seminars costs (24*75+8*120)/32(persons) ⁹⁾	32	87	hours	2784
6.	"Filozofia człowieka" (The philosophy of human beings) workshops costs	30	120	hours	3600
7.	Physiotherapy examination at the end of the training	0	0	hours	0
8.	Medical examination at the end of the training	57	43	Number of examinations	2451
9.	Project management costs	2	1800	months	3600
10.	Scientific consultations	0	0	hours	0
TOTAL					37105

Source: Interview conducted with the project supervisor M. Ferenc on 10.03.2010.

Since the project received no financial support from the borough the people conducting the examinations and the trainings declared that all the tasks performed as part of this pilot project would be carried out without pay, because the costs of the necessary support were related first and foremost to this part of the budget¹⁰⁾.

Monitoring and control of the costs of the @ktywny Senior project

In project management controlling the costs of the implementation is just as important as respecting the dates of payment and the technical requirements¹¹⁾.

Control of the costs is connected with supervision of the changes. It consists in the monitoring of the implemented costs, detecting departures from the plan,

⁹⁾ Cost of the andragogical workshops and seminars – the calculation: sum of the product of the multiplication of the hours, the cost of the examination by the value of the examination divided by the number of people.
¹⁰⁾ Interview conducted with the project supervisor M. Ferenc on 10.03.2010.
¹¹⁾ H. Brandenburg, *Zarządzanie projektami*, Wydawnictwo Akademii Ekonomicznej, Katowice 2002, pp. 189–222.

ensuring that the changes are applied correctly, preventing incorrect changes, and informing. In other words, it consists in constantly asking "why?"¹²⁾. It must be conducted throughout the entire duration of the project in order to make it possible to react immediately to the results of a lack of funds. During the realisation of the @ktywny Senior project no such control was carried out. Such situation should never take place in the future.

In connection with my reflections based on the received documents and the balances of the costs paid by the Centrum Wspierania Organizacji Pozarządowych Sektor 3 I planned such control for 26.03.2009 with the use of the Earned Value method. Project management with the use of this method allows for all of the participants of a project (investors, owners and stockholders, sponsors, financial institutions, project managers and the project team, contractors and co-operators) to have a comprehensive control of the implementation of the contract in the substantive, time, and cost aspects. Thanks to the full integration of information on the works carried out, their deadlines, and the expenditures an ongoing analysis of the realisation of the budget can be conducted. (BCWP – budgeted cost of work performed, ACWP – actual cost of work performed, BCWS – budgeted cost of work scheduled) and the amount and the causes of departures can be identified objectively and in detail¹³⁾.

In the Earned Value method realised on the basis of both of the parameters (budgeted cost and actual cost) is constructed with the use of a third variable, as well, the latter being a combination of the two former ones. Therefore, the method consists in three parameters:

- 1) The budgeted cost of work scheduled (BCWS), determined before the start of the implementation of the project and forming a plan of project expenditures (it is the amount of funds that that we want to dedicate to the realisation of the project),
- 2) The actual cost of work performed (ACWP) which one learns of only during the carrying out of the particular project tasks and it constitutes the costs actually spent on the implementation of the project. If all works are conducted on schedule the actual cost of work performed is equal to the budgeted cost of work scheduled. Seldom does this happen, however, and the actual costs are usually higher than the budgeted costs, which is typical especially of highly innovative endeavours,
- 3) The budgeted cost of work performed (BCWP) which one learns of during the realisation of the project is constructed through a comparison of the budgeted cost with the work performed; it constitutes, therefore, a combination of the two formerly discussed parameters and forms the actual cost of the work performed.

¹²⁾ <http://www.skutecznyprojekt.pl/artykul.htm?AID=100>, retrieved: 11.12.2009 r.

¹³⁾ http://www.getmanager.com.pl/narzedzia/earned_value.html, retrieved: 27.12.2009 r.

The three parameters are presented in the form of the curves in the diagram below; their analysis allow for an easy determination of departures from the budget and the schedule (Diagram 1).

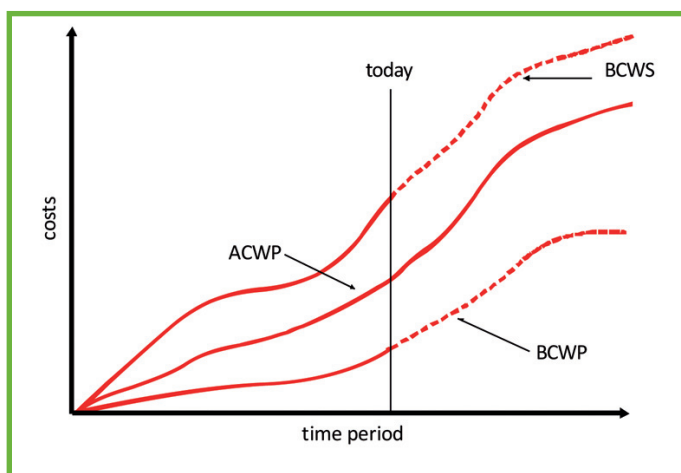


Diagram 1. A presentation of the Earned Value method

Source: E. Nowak, *Strategiczne zarządzanie kosztami*, Kraków 2006, p. 233.

Departures from the implementation of the planned budget are divided into the variance caused by falling behind schedule (SV – schedule variance) and variance from the budgeted costs (CV – cost variance). The results of these variances allow for an ongoing evaluation of effectiveness at all stages of the project and provide an opportunity to finish the project on schedule and within the planned scope and the agreed budget¹⁴⁾.

In the @ktywny Senior project the progress of tasks is measured in hours. The modified project and the budget are presented in chart 3, and in chart 4 the implementation of the project (the planned and the actual ones) is presented. Modification of the project in order to make it possible the conduct the control does not include the medical examinations at the start and at the end nor does it include the cost of project management, because these were measured with number of examinations and the number of months respectively. All the other costs were measured in hours and they are included in the control on the basis of the plan of actions of the @ktywny Senior project.

¹⁴⁾ http://www.getmanager.com.pl/narzedzia/earned_value.html, retrieved: 27.12.2009 r.

Chart 3. The modified budget of the @ktywny Senior project

Action	Planned duration (h)	Planned cost per hour	Budget
Computer and internet skills training instructors' pay	180	50	9000
Physical activity training instructors' pay	180	25	4500
Andragogical workshops and seminars costs	12	100	1200
"Filozofia człowieka" (The philosophy of human beings) workshops costs	12	70	840
Project			15540

Source: Developed on the basis of the non-governmental organisations project @ktywny Senior.

Chart 4. Implementation of the project (planned and actual)

Action	Planned implementation in hrs.				Actual cost per hour	Actual implementation in hrs.			
	06.03.09	13.03.09	20.03.09	27.03.09		06.03.09	13.03.09	20.03.09	27.03.09
Computer and internet skills training instructors' pay	12	42	72	92	50	12	42	72	92
Physical activity training instructors' pay	8	27	36	36	79	8	27	36	36
Andragogical workshops and seminars costs	3	6	24	27	87	3	6	24	27
„Filozofia człowieka” (The philosophy of human beings) workshops costs	0	24	24	48	120	0	24	24	48

Source: Developed on the basis of the @ktywny Senior project.

In the basis of the data correlated in the charts calculations can be made, which are presented below in chart 5, related to the budget control. The EAC – estimate at completion – method is employed.

Chart 5. Budget control¹⁵⁾

27.03. 2009	Planned budget	Modifi- cations	BAC							
	15540		15540							
	Measure of budget implementation			Costs variance and its cause			Evaluation at the end of the project			Variance
Action	BCWS	BCWP	ACWP	BCWS – ACWP	CV = BCWP – ACWP	SV = BCWP – BCWS	BAC	ETC	EAC = ACWP + ETC	VAC = BAC – EAC
Computer and internet skills training instructors’ pay	4600	4600	4600	0	0	0	9000	0	4600	4400
Physical activity training instructors’ pay	900	900	2844	–1944	–1944	0	4500	0	2844	1656
Andragogical workshops and seminars costs	2700	2700	2349	351	351	0	1200	0	2349	–1149
“Filozofia człowieka” (The philosophy of human beings) workshops costs	3360	3360	5760	–2400	–2400	0	840	0	5760	–4920
Total cost	11560	11560	15553	–3993	–3993	0	15540	0	15553	–13

Source: Developed on the basis of the @ktywny Senior project.

The calculations made are to help in finding the answers to the following questions:

- 1. Is the project implementation cheaper or more expensive than planned?
- 2. Is the work performed greater or smaller than planned?
- 3. Were there any payment problems as of 27.03.2009?
- 4. Does the project adhere to the budget?

On the basis of the chart a conclusion may be drawn that the project is on schedule (no departure from the plan), but it is more expensive than planned

¹⁵⁾ Chart legend: BCWP – budgeted cost of work performed, ACWP – actual cost of work performed, BCWS – budgeted cost of work scheduled, BCWS – ACWP – the difference between the budgeted cost of work performed and the actual cost of work performed, CV – cost variance, SV – schedule variance, BAC – budget at completion, ETC – estimated total cost, EAC – estimate at completion, VAC – variance of actual cost.

(CV = -3993). The organisers of the project would spend more than the funds estimated as of the day of the control – the variance presented above reached -3993. If money was to still be spent in such a way by the time of the end of the project the budget would have been exceeded by 13%. The variance of actual cost exceeds (-13) the project budget. The planned percentage of realisation as of the day of the control was $11560/15540 = 74\%$. The actual percentage of implementation was unchanged¹⁶⁾.

Estimation of the realisation of the particular tasks leads to the conclusion that the actions such as:

- 1. Physical training and education (exercise),
 - 2. „Filozofia człowieka” (The philosophy of human beings) workshops,
- were more expensive than planned.

Chart 6 below presents the values of the scheduled, performed, and actual work in the particular stages of the project. Diagram 2, in turn, presents the earned Value method curves, i.e. it constitutes the presentation of the control conducted with the use of this method.

Chart 6. The scheduled, performed, and actual work in the particular stages of control

	06.03.09	13.03.09	20.03.09	27.03.09
Computer and internet skills training instructors’ pay	600	2100	3600	4600
Physical activity training instructors pay	632	2133	2844	2844
Andragogical workshops and seminars costs	261	522	2088	2349
„Filozofia człowieka” (The philosophy of human beings) workshops costs	0	2880	2880	5760
Actual (ACWP)	1493	7635	11412	15553
Computer and internet skills training instructors’ pay	600	2100	3600	4600
Physical activity training instructors’ pay	200	675	900	900
Andragogical workshops and seminars costs	300	600	2400	2700
„Filozofia człowieka” (The philosophy of human beings) workshops costs	0	1680	1680	3360
Scheduled (BCWS)	1100	5055	8580	11560
Computer and internet skills training instructors’ pay	600	2100	3600	4600
Physical activity training instructors pay	200	675	900	900
Andragogical workshops and seminars costs	300	600	2400	2700
„Filozofia człowieka” (The philosophy of human beings) workshops costs	0	1680	1680	3360
Performed (BCWP)	1100	5055	8580	11560

Source: Developed on the basis of the @ktywny Senior project.

As it was mentioned before, the necessary co-financing was related first and foremost to the project instructors’ pay; however, since the borough refused to provide

¹⁶⁾ Interview conducted with the project supervisor M. Ferenc on 10.03.2010.

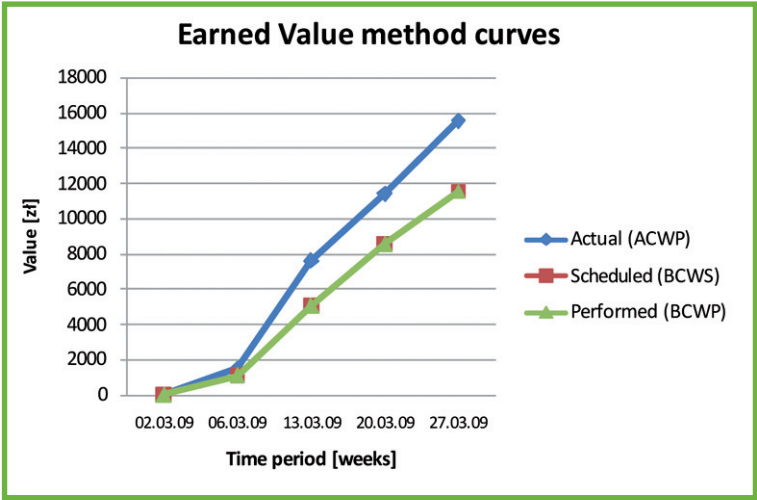


Diagram 2. Earned Value method curves

Source: Developed on the basis of the @ktywny Senior project.

any financial support these people worked for free¹⁷⁾. That is why the control described above was of a prognostic character proposed by me for the remaining part of the project.

Propositions of changes and improvements of the budget

The @ktywny Senior project generated a lot of interest of the beneficiaries as well as the organisers; that is why it was decided to organize the activity once again. To improve the project the conclusions and suggestions resulting from the research conducted and described above should be taken into account. In the light of the presented reflections it must be stated that the budget of the project was planned correctly. The lack of financial support from the borough turned out to be the greatest disadvantage – it was the reason that the budget cuts had to be made – and the lack of budget control throughout the duration of the project was another one. In the future the project ought to be managed in such a way as to avoid similar problems. The results of the survey research carried out at the end of the first edition of the @ktywny Senior project by the organisers of the endeavour might prove helpful. They were aimed at determining the usefulness of the project in the target social group as well as its faults. The opinion of the seniors themselves constituted a crucial element, who stated that, for instance, it would have been better for them if the classes took place 4 times a week with an additional day off, and not

¹⁷⁾ Interview conducted with the project supervisor M. Ferenc on 10.03.2010.

– as it was organised formerly – 5 times a week. Every day the classes started at 9.00 and lasted until 3.00, with the beneficiaries participating in one 3-hours-long block¹⁸⁾. Shortening the duration is justified by the fact that seniors get tired more quickly, and an additional day of would allow them to regenerate, which would let their effort be more fruitful and the time devoted to learning to be managed in a more effective way.

In connection with this it should be considered if organising the classes 4 times a week, e.g. on Mondays, Tuesdays, Thursdays, and Fridays, with Wednesdays put away for relaxing or perhaps social events and recreation such as games, meeting for tea or coffee, or organising dances would not be a better solution. Because of the limiting of the number of the class days each of the beneficiaries would participate in an 3,5-hours-long block instead of the hitherto 3-hours-long one. The classes of each beneficiary would be 45 minutes longer every day. The general class time would remain unchanged and it would last from 9.00 to 3.00.

Furthermore, introducing classes on employment law an running one’s own business which the beneficiaries could potentially start could be of great value.

Cooperation with businesses and institutions organising active recreation is planned in order to prepare trips on Saturdays, Sundays, and the free Wednesdays – with partial payment from the participants – to introduce various forms of active recreation. It would be made possible for each of the beneficiaries to participate in 4 hours of employment law and starting one’s own business education in cooperation with employment agencies which would provide information and help in this field.

In Chart 7 below the classes that are to be organised as part of the modified project are presented as integrated in an hour structure.

Chart 7. The trainings for each of the beneficiaries in the modified project budget

Computer skills training	30
Physical activities	14
Health and physical activities education	14
Andragogical workshops	12
Andragogical seminars	10
English	4
Media and reading education	4
The conscious consumer	2
Employment law and business	4
TOTAL	94

Source: Developed on the basis of the @ktywny Senior project.

¹⁸⁾ Interview conducted with the project supervisor M. Ferenc on 10.03.2010.

Having carried out an analysis of the entire project I wish to propose a number of changes to the budget:

1. First of all, it seems necessary to send invitations to these people who could not participate in the first edition of this project because of its limited budget, which means having to write invitations to 150 people, because in the previous edition 200 were sent, and 60 benefitted from the participation on the project. Cost of the invitations is 3,41¹⁹⁾.
2. Preparing the aims of the *@ktywny Senior* project for 60 people 3 months with 2,000 PLN for each month (the gross pay for one employee that can be realised or two working half time). Renting consulting rooms for the entire duration of the project – the estimated number of hours for 60 people for up to 40 hours with 20 PLN per hour. The cost of medical examinations at the start of the training 60 examinations for 50 PLN remains unchanged since it was the actual cost of the examinations.
3. Medical examinations at the end of the training may be conducted with full payment or it can be proposed to conduct them in a family clinic or to have consultations as to the health and physical condition with the GPs.
4. Physiotherapy examination at the start and at the end of the training, altogether 60 examinations for 111 PLN.
5. Computer and internet skills instructors' pay (1 h = 50 PLN gross). Total number of hours – 6 groups of 10 participants each * 30 hours = 180 hours.
6. Average pay for an hour in 2010²⁰⁾. It may be assumed 36 to 60 PLN. Physical activity instructors' pay for 6 groups of 14 hours for 60 PLN gross/h = 6 groups * 14 hours = 84 hours.
7. Cost of the andragogical workshops and seminars – 22 hours for 90 PLN/hour gross.
8. Cost of opening the clinic and of the supervision outside weekdays. The estimated number of hours 68 for 15 PLN per hour on contract.
9. Administrative and operational costs of the implementation of the project are estimated proportionally for 60 people for 11 months.
10. Cost of renting rooms for 60 people are estimated on the basis of the experience gained while realising the previous project proportionally for 200 people $2577/200 * 60 \text{ PLN} = 773$.
11. Project management cost for 11 months for 2,000 PLN gross.
12. I propose to hire a person on a casual contract with the possibility of further employment with the salary of 2,000 PLN gross. The employer's cost = 26,094.20 PLN.

¹⁹⁾ Interview conducted with the project supervisor M. Ferenc on 10.03.2010.

²⁰⁾ On the basis of: art. 30 ust. 5, art. 33 ust. 3 oraz art. 34 ust. 2 ustawy z dnia 26 stycznia 1982 r. – *Karta Nauczyciela*, Dz. U. z 2006 r. Nr 97, poz. 674, z późn. zm.

13. Scientific consultations – the estimated cost for 3 people for 2,000 PLN gross (the estimation of costs dependant on the scientific degree can be assumed).
14. The teachers' pay for conducting the classes – English, reading and media education, the conscious consumer 50 PLN gross/hour.
15. I propose to hire a full time or half time employee to help the groups to organise themselves, provide advice on how to get organised and how to help oneself and others on the way to professional and social activation and providing advice while starting one's own business. In the group of seniors there might be some people for whom this may be a way of continuing professional activity.
16. At the first stage of the implementation of the project the cost of the instructors' and teachers' pay result from the project, the funds of the organisers of the project, and in the future they should be provided by the local government, employment agencies or partially by the payments made by the seniors as well as from their activities. It would first need to be checked who could contribute or benefit and from which aspect. The areas where the seniors can be active and provide their services are e.g. childcare, taking care of seniors, the ill, and the disabled, organising clubrooms for youth and for adults, helping children and youth to study. Emergency childcare could be provided in the homes of the parents or the seniors depending on the possibilities. However, a survey would have to be carried out in a particular group to find out if the beneficiaries are happy with such way of solving the issue of financing the better functioning of the *@ktywny Senior* project. The person mentioned in point 15 would conduct the preliminary organisation of these activities in cooperation with seniors and various organisation and local government agencies. Seniors can establish an association, for instance, that can, in turn, enter a joint venture with an individual or a legal entity to conduct a particular form of activity. From the aforementioned services seniors could acquire income that would finance $\frac{1}{4}$ of all the expenditures of *@ktywny Senior* project, thanks to which further projects and activating training courses for people of over 60 years of age could be organised in the future.

In the case of a lack of financial support from the borough or other local government agencies some of the planned actions would have to be cancelled and own contribution increased. The seniors of the previous editions of *@ktywny Senior* project could organise a fund raising party concluding the endeavour and devote the collected amount to further editions of the project.

The total estimated cost of the project for 60 people is 118,768.5. Own contribution and the funds from the sponsors cover 39,814.5 PLN (32%) and the necessary financial support is 84,954 PLN (68%) which is presented in Chart 8 below illustrating the project budget with the modifications.

Chart 8. The @ktywny Senior project budget with modifications

Cost type	the substantive and the administrative costs of the implementation of the project	Number of units	Cost per unit (in PLN)	Measure type	Total cost (in PLN)	The postulated grant-aid (in PLN)	Own contribution, funds from other sources and the contributions and payments of the beneficiaries
Preparations, identification of potential project beneficiaries		150	3,41	persons	512	0	511,5
Preparing the aims of the @ktywny Senior project – engaging partners 3 months * 2,000 PLN		3	2000	months	6 000	0	6 000
Renting consulting rooms for the entire duration of the project		40	20	hours	800	0	800
Medical examinations at the start of the training		60	50	Number of medical examinations	3000		0
Physiotherapy examination at the start and at the end of the training, altogether 120 examinations for 0 PLN gross		120	111	Number of examinations	13320	13320	0
Computer and internet skills instructors' pay (1h=50 PLN gross). Total number of hours - 180 hours		180	50	hours	9000	9 000	0
Physical activity instructors' pay for 6 groups for 14 hours for 28 PLN gross per hour		84	60	hours	5040	5040	0
Costs of the andragogical workshops and seminars		22	90	hours	1980	1980	0
Cost of opening the clinic and of the supervision outside weekdays		68	15	hours	1020	1020	0

Administrative and operational costs of the implementation of the project for 60 people are estimated proportionally for 200 people	11	682	months	7502	0	7500
Cost of renting rooms for 60 people estimated proportionally to the cost for 200 people	11	773	months	8503	0	8503
Project management cost for 11 months for 2x2,000 PLN gross, 2x2,372 PLN cost for employer	11	4744	months	52184	52184	0
Private sponsor funding – 5% discount on computers/6 groups of 10 people	60	75	person	4500	0	4500
Publishing the results of the project	2	3000	unit	6000	0	6000
Pay for the teachers and instructors of English classes, reading and media education, the conscious consumer, work and business organisation 50 PLN gross per hour.	14	50	hours	700	700	0
Pay for the instructors on trips 4 × 8 hours = 32 hours for 30 PLN	32	30	hours	960	960	0
Co-financing of the trips	1	1500	unit	1500	750	
TOTAL				122521	84954	33814,5
		%				
Own contribution and funds from sponsors	39814,5	32				
Borough co-financing	84954	68				
Total	118768,5					

Source: Developed on the basis of the @ktywny Senior project.

Conclusion

The aim of my project, the results of which were first presented in my Master's thesis and subsequently in the above article was to plan the budget of the *@ktywny Senior* project. The article consists of two parts, which was determined by the character of me research. In the first part I have analysed the hitherto budget realised during the previous editions of the project. The second one constitutes a presentation of my work on the basis of the drawn conclusions, a proposition of modifications and introduction of new instruments.

The results are based on the survey research, the interview conducted with the project supervisor as well as the project documents. First and foremost I have made an attempt at demonstrating how to oversee a budget according to the rules of project management. These have proven that the *@ktywny Senior* project contained certain faults that should be eliminated in the future.

First of all, no cost control was carried out²¹⁾. Similarly, financial control was not carried out properly²²⁾. Cost control was lacking throughout the entire duration of the project. Only a balance of costs was made in the form of a budget chart. In this article the way of conducting control over project budget with the use of the Earned Value method was presented in the form of a prognosis. It serves to demonstrate to which elements special attention should be paid and when to react to incorrect changes. Furthermore, the graphical presentation of the method allows for a clear view of the general financial situation of the project.

A correctly prepared plan of cost management and ongoing monitoring of the finances throughout the implementation of the project, comparing the actual costs with the scheduled costs would allow for the ensuring of its timely completion within the agreed budget. This method also gives a lot of essential information on the estimated cost of the completion of the project and if the funds we have will last until the end of the implementation of the scheduled work. That is why the Earned Value method is crucial to the entire endeavour.

It must be emphasised that variances from the scheduled costs are not always connected with mistakes or neglects during the realisation of the project. They are sometimes connected with general changes in the project or they are independent of the organisers and they might appear even while using the best budget estimation. Minor departures from the scheduled costs are not a problem. However, ongoing cost control is crucial, since it allows for an instant and correct reaction and introduction of changes.

²¹⁾ Cost control is connected with a general control of changes. It consists in monitoring of the implemented costs, detecting departures from the plan, ensuring that the changes are applied correctly, preventing incorrect changes, and informing. In other words, it consists in constantly asking „why?“ <http://www.skutecznyprojekt.pl/artykul.htm?AID=100>, retrieved: 11.12.2009.

²²⁾ Financial control includes active participation in the controlled project, e.g. issuing directives on the basis of control results. http://pl.wikipedia.org/wiki/Kontrola_finansowa, retrieved: 07.11.2010.

The current pension and social security system is not perfect and it often causes financial problems of seniors. In my opinion a large group of the people of advanced age belong to the poorer social class; that is why they cannot fully realise their hobbies and interests, solve health problems, fulfil some of their cultural needs, deal with loneliness... To solve these problems, at least in part, various agencies and centres aimed at helping seniors are established, one of them being Sektor 3.

These organisations are not always able to finance themselves and they exist thanks to, among others, the projects they organise, with most of them having financial problems. It was also the case with the *@ktywny Senior* project, which received no support from the borough, which, in turn, caused the teachers and the instructors to work for free. That happens because nobody is willing to take the risk of donating funds to such innovative projects. In the future efforts must be made to ensure such situation does not take place again. The cost should be reduced as much as possible. One of the solutions could be a partial financing of the classes and training courses by the beneficiaries themselves or organising fund raising parties and events with their participation, with the funds collected used to continue the activity of the *@ktywny Senior*. First of all, the beneficiaries themselves should be asked what can be done to improve their lives. The opinions of the senior participants of the project suggest that they enjoyed the initiative and generally had no objections as to its realisation. It is only necessary to improve financial control, so that the major projects organised are not finished earlier than scheduled.

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