

**EVALUATION OF THE MEASURES IN THE COMPLETED
EU PROJECTS SUPPORTING E-SERVICES DEVELOPMENT
IN SOME LOCAL GOVERNMENTS
OF THE KUJAWSKO-POMORSKIE REGION**

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Abstract: The article aims at evaluating the measures applied in the EU projects supporting e-services development in selected local governments. The article provides characteristics of three partner projects co-funded as part of the 2014-2020 Operational Program Knowledge Education Development, specifically actions implemented under priority axis II *Effective public policies for the labour market, economy and education* (measure 2.18). Then the actions focused on e-administration development and evaluated it in terms of the benefits for the participating local governments, and thus the residents using the e-services. Further the, article presents the training actions completed as part of the projects and which were evaluated by 672 local government administration employees. Participants evaluated the trainings in terms of acquiring competencies, professional career development and the possibility of applying the knowledge in their professional work. Detailed questions also consisted in collecting the opinions on training organisation and the teaching methods and tools applied. Recapitulation stresses the importance and significance of e-administration development for clients using e-services provided by local governments. Finally, there are some conclusions and recommendations presented, referring to the execution of EU projects with the participation of local governments. This article is an introduction to a series of publications aiming at performing research on the effect of EU funds on the development of local governments, and thus the regional competitiveness.

Keywords: European Union, training, implementation, e-administration, project, co-founding.

1. Introduction

Local governments are obliged by law to apply Information and Communication Technologies (ICT) for rendering e-services, namely to provide e-services, which would be a two-way communication, authorised with e-signature and available around the clock within e-administration (Baron-Wiaterek, Grzanka, 2011). Despite the institution-related difficulty and some resistance of local government employees and clients' concerns in connection with introducing and operation of e-administration, there is no turning back. The process will result in creating e-authorities as a natural consequence of information society development, with a growing role of computer science and the Internet (Adamska, 2011; Dąbrowska, Janoś-Kresło, Wódkowski, 2016).

An opportunity to acquire co-funding which would support e-authorities is offered by the national and regional operational programmes. One of them is the 2014-2020 Operational Program Knowledge Education Development (OP KED), whose measure 2.18 addresses public services digitalisation.

Local governments submit applications for co-funding of projects evaluated as part of the announced competitions. Projects recommended for co-funding are then implemented, and the local governments receive funds from the European Union for the planned e-administration-oriented implementations and training (OP KED, 2018).

In the article, the author has provided characteristics of three partner projects with the participation of 23 local authorities. The author presents implementation actions focused on e-services development co-funded by projects and evaluated them in terms of the benefits for the participating local governments. Further in the article, the author provides characteristics of training actions being part of the projects and evaluates them from the perspective of the participating local government employees. The article recapitulation includes conclusions and recommendations concerning EU local government projects.

2. Characteristics of selected EU projects

A chance to build an efficient and effective public e-administration at all levels may be found in EU funds, including the regional and domestic operational programmes. One of them is axis II *Effective public policies for the labour market, economy and education* (measure 2.18), ensuring high quality administration services supporting local governments in creating e-administration (OP KED, 2018).

Detailed information on project co-funding potential under measure 2.18 is presented in the table below (Table 2).

The Intermediate Body (Ministry of Internal Affairs and Administration) for measure 2.18 annually approves the action plans for successive years of programme development.

Then, competitions are announced which focus on funding the actions supporting the enhancement of institutional capacity and effectiveness of public administration, as well as the quality of public services leading to strengthening a reliable cooperation between administration and an entrepreneur.

Entities entitled to submit applications for co-funding comprised local authorities, associations of local authorities, non-government organisations, higher education institutions and their establishing bodies, scientific facilities, training institutions, while the target group in the project included only local authorities and their local government employees (OP KED 2015 Annual Action Plan). In response to the announced competitions announced, local authorities prepare co-funding applications in which they plan and budget the training and implementation actions addressed to their institutions and local government employees. Table 1 presents the characteristics of three partner projects co-funded as part of the competition announced in 2015 (OP KED Competition Regulations 02.18.00-IP.01-00-005/15).

Table 1.

Characteristics of selected EU projects performed by local governments in 2016-2017

Item	Specification	Project 1	Project 2	Project 3
1.	Local authorities covered by the project	Municipality of Wąbrzeźno Wąbrzeźno Powiat Książki Commune Dębowa Łąka Commune Rypin Municipality Jabłonowo Pomorskie Municipality	Białe Błota Commune Dąbrowa Chełmińska Commune Dobrcz Commune Koronowo Commune Nowa Wieś Wielka Commune Osielsko Commune Sicienko Commune	Barcin Commune Gąsawa Commune Janowiec Wielki Commune Łabiszyn Commune Rogowo Commune Żnin Commune Janikowo Commune Pakość Commune Dąbrowa Commune Szubin Commune
2.	Project topic	Partnership of 6 local authorities for the implementation of high quality administration services	e-government closer to the residents and entrepreneurs in Bydgoszcz Powiat	Digitilisation of the entrepreneur service processes in 10 local authorities of the Kujawsko-Pomorskie Voivodeship
3.	Competition number	POWR.02.18.00-IP.01-00-005/15		
4.	Project execution period	From 1 September 2016 to 31 December 2017		
5.	Project value (Euro*)	272 093	365 052	449 018
6.	Number of the persons trained	169	225	278
7.	Project value per person (Euro*)	1 610	1 622	1 615
8.	Project value per local authority (Euro*)	45 349	52 150	44 902
9.	Key project objective	Enhanced effectiveness and quality of the administration services rendered by the local authorities covered by the support in terms of taxes, charges and immovable property management by integration and modernisation (SD and ESOD systems), implementation of modern managerial solutions and improved competencies of the personnel as part of 6 tasks from 1 September 2016 to 31 December 2017		

Source: own work based on: Project co-funding applications.

In the following parts of the paper, the author presents implementation and training actions co-funded as part of the projects and their evaluation in terms of benefits for 23 local governments participating in implementations and the level of satisfaction of 672 employees of local government administration taking part in the trainings.

3. Project implementation actions evaluation

In Poland, e-administration development is quite difficult due to numerous institution- and personnel-related barriers (Stempnakowski, 2007). The key institution-related problems of local authorities making the development of e-administration difficult include the lack of resources for the development of IT infrastructure, insufficient use of e-flows of documents, few services available online and no trusted profile validation facilities where the residents could receive a free-of-charge electronic signature indispensable for e-communication with the authority (Klemke-Pitek, 2018). These problems can be minimised as part of the implementations co-funded from EU projects.

Table 2 presents brief characteristics of implementation actions focused on the development of e-services as part of EU projects.

Table 2.

Characteristics of implementation actions in projects implemented in the years 2016-2017

Item	Specification	Project 1	Project 2	Project 3
1.	Project topic	Partnership of 6 local authorities for the implementation of high quality administration services	e-government closer to the residents and entrepreneurs in Bydgoszcz Powiat	Digitilisation of the entrepreneur service processes in 10 local authorities of the Kujawsko-Pomorskie Voivodeship
2.	Project implementation tasks (1-3)	1. Integration and modernisation for local authorities of e-flow of documents (ESOD) and domain systems (SD) for taxes and charges for the digitalisation of tax service process, automation of settlements and enhanced access to information on the manner of handling the case and its progress 2. Implementation of solutions within the local authorities, enhancing the access to administration services and information on commercial premises and plots for investments 3. Introduction of managerial solutions for customer satisfaction management for local authorities, enhancing the quality of service to residents and entrepreneurs		
3.	Task 1 description	As part of the task, the following has been financed: -the purchase of IT hardware (servers, computers, scanners, shredders, etc.) -development of e-forms for service cards to facilitate the clients' (residents' and entrepreneurs') use of e-services -purchase of e-portals for taxes and charges -implementation of e-flow of documents - launching the trusted profile validation points (free of charge signatures)		

Cont. table 2.

4.	Task 2 description	As part of the task, there have been developed dedicated Investor's e-Portals in which local authorities can present online their investment offers: real estates and commercial premises for sales, lease or rental and the client can filter and search through the offers according to various evaluation parameters, download an investment offer in PDF, find the directions to the investment location of interest using Google map or ask for the offer using electronic means.
5.	Task 3 description	As part of the task there have been developed dedicated e-Portals for Customer Satisfaction Evaluation which allow the residents to evaluate the quality of services rendered by the Authority from the e-survey in the customer panel on the Authority's website and the Authority can automatically analyse the results thanks to the automatic reporting system.

Source: own work based on: Project co-funding applications

Based on Table 1, one can note that 23 local authorities implemented e-administration actions in three partner training and implementation projects. After the completion of the projects, local governments evaluated the effectiveness of the most applicable forms of support for e-administration development.

With the results of the research performed, one can state that:

1. Local governments considered the highest effectiveness of e-administration support through the digitalisation of tax-related services, the automation of settlements and improvement of information access concerning the manner of handling the case and case progress. The expenditure budgeted allowed for financing equipment and tangible implementations which directly facilitate the development of e-administration and e-services:
 - the purchase of IT hardware for the authorities (servers, computers, UTM systems, scanners, shredders)
 - development of e-forms for service cards to facilitate the clients' use of online online in the matters related to taxes (e.g. property tax, agriculture tax, woodland tax) and local charges (e.g. municipal waste management charge);
 - purchase of e-portals for taxes and fees to allow the clients get an easy access to the catalogues of e-services on ePUAP, to make e-payments and to have access to information on the status of the case processing and the amounts of taxes and payment deadlines;
 - implementation of e-document flow in the authority facilitating the e-flow of documents between the client and the authority
 - launching the trusted profiles validation centres in the authority, namely receiving free-of-charge e-signatures by customers, indispensable for e-communication with the authority.
2. Local governments considered as average the effectiveness of e-administration support in implementing solutions for local authorities that improve the access to administrative services and information on commercial premises and land allocated to investments. Local governments promote investment areas on their website and see no need to create dedicated e-portals to serve investors online.

3. Local governments observed the lowest effectiveness of support for e-administration in developing management solutions for the customer satisfaction management by local authorities enhancing the quality of serving the residents and entrepreneurs. Local governments, while investing in the customer satisfaction, apply a paper questionnaire and see no need to create dedicated e-portals for the online evaluation of authorities.

In conclusion, one may say that thanks to the execution of the implementation tasks in completed projects, the residents and entrepreneurs can use public services online (e-services) 7 days a week for 24 hours, confirming their identity on the Internet with the electronic signature (qualified signature or trusted profile). Local government administration provides public services to clients online, using e-portals, e-services and e-flows of documents as part of the projects (*Wpływ cyfryzacji na działanie urzędów administracji publicznej [Impact of digitisation on the operation of public administration offices]*, 2015). One must stress that the next step in the evolution will be mobile technologies, the so-called mGovernment, immediately derived from public e-services, most often as the next step in their evolution (*Mobilne państwo*, 2016).

The current responsibilities of the Polish local government administration will include an intensive promotion of e-services as an effective channel of communication with the client since more than 75% of clients settle the matters in a traditional way, directly by visiting the public authority (*E-administracja w oczach internautów*, 2016)

As a result, the clients' contacts with e-government will be intensified, which will be reflected in a greater diversity in the methods of providing information and their higher quality. It is also time-saving and offers high flexibility both in terms of the selection of the place and time during the day to settle official matters. All that should result in enhancing the quality of the rendered services and client satisfaction (Grodzka, 2007).

4. Evaluation of project training actions

The key personnel problems include: insufficient personnel competencies in terms of IT system operation, unwillingness of the employees to introduce changes, difficulties in computer and Internet operation among the 50+ employees and insufficient budget for digital competences development training (Klemke-Pitek, 2018). At the same time, to ensure high personnel improvement effectiveness, it is essential to adapt the teaching methodology to the specific nature of adult education (Kolb's cycle) (Kaźmierska, Lachowicz, Piotrowska, 2014). It is justified to evaluate the applicability and effectiveness of training actions for an ongoing improvement of local government employee education (Grzeszczak, 2011).

Table 3 presents brief characteristics of trainings co-financed as part of the projects.

Table 3.*Characteristics of trainings implemented as part of the projects in the years 2016-2017*

Item	Specification	Project 1	Project 2	Project 3
1.	Project topic	Partnership of 6 local authorities for the implementation of high quality administration services	e-government closer to the residents and entrepreneurs in Bydgoszcz Poviát	Digitilisation of the entrepreneur service processes in 10 local authorities of the Kujawsko-Pomorskie Voivodeship
2.	Project training tasks (4-6)	4. Local government employees' training to enhance local authorities' personnel competencies in the field of taxes and charges 5. Local government employees' training to enhance local authorities' personnel competencies in the field of real-estate management 6. Local government employees' training to enhance local authorities' personnel competencies in the areas indispensable for the improvement of specific-domain services management effectiveness		
3.	Target groups (Segments) covered by support and training modules	Segment/Module 1: Employees dealing with local taxes and fees Segment/Module 2: Employees dealing with real-estate management, commercial premises and land allocated to investments or investment promotion in the region, Segment/Module 3: Employees holding managerial positions Segment/Module 4: Employees dealing with the office's IT service Segment/Module 5: Other employees according to the needs of the specific positions, dealing with the flow of e-correspondence and customer support		
4.	Organisation method (training venue)	Segment 1 and Segment 2 - Training during working time in the office Segment 3 and Segment 4-Training in the field, with accommodation outside the office Segment 5 Training in the training hall, outside the office		
5.	Number of training hours	6 days x 8 hours =48 hours		
6.	Teaching methods	Lectures, tutorials, discussions, case studies, role plays, experience, simulations		
7.	Teaching means and tools	Printouts, flipcharts, multimedia presentations, interactive tables, computer programmes, the Internet		
8.	Training topics. Module 1	<ul style="list-style-type: none"> - Changes in local taxes and charges, - Administrative procedure code, tax and fees, case law - e-document handling in terms of office instructions - e-tools: text processing and spreadsheets 		
9.	Training topics. Module 2	<ul style="list-style-type: none"> - Managing the local-government real estate resources and State Treasury resources - Procedures of granting the right of perpetual usufruct together with defining fees and their updating - Practical aspects of health promotion and disposal of real-estate resources - e-document handling in terms of office instructions - e-tools: text processing and spreadsheets in the clerk's job 		
10	Training topics. Module 3	<ul style="list-style-type: none"> - Personnel management - Satisfaction management - Communication and customer support - e-documents management in terms of office instructions - Security while working with computer and Internet search engine 		
11	Training topics. Module 4	<ul style="list-style-type: none"> - Certified trainings MS-20411 Administering Windows Server® 2012 		
12	Training topics. Module 5	<ul style="list-style-type: none"> - Communication and customer support - Administrative procedure code and case law, e-document handling in terms of office instructions - e-tools: text processing and spreadsheets in the clerk's job 		

*project value calculated according to the EUR average exchange rate of 6 May 2018: 1 EUR=PLN 4.2771

Source: own work based on: Project co-funding applications.

Training recipients, grouped according to Segments 1-5, were providing the evaluation of the training module they participated in, in the form of an anonymous survey questionnaire with a 5-degree scale (where 5 is the highest score and 1 – the lowest score). Detailed questions referred to the opinion on the applicability of the training topics, training organisation method and the evaluation of teaching methods, aids and tools.

The study results demonstrate that:

1. The highest training effectiveness in terms of the job needs and professional career development concerned manager training (Segment 3). The high-scoring training topics included both specialist training (e.g. e-document management) and interpersonal training (e.g. personnel management), which demonstrates that the training topics satisfied the expectations of employees, however, also the managers are most “open” to raising their qualifications.
2. The highest training effectiveness in terms of teaching aids and tools applied was noted for IT personnel (Segment 4), since during the trainings coaches used various media of communication, printed materials, flip-chart, multimedia presentation, specialist computer programmes and the Internet, whereas the use of the teaching methods was most appreciated by the managers due to the use of adult activating methods; discussion, case study, role-play, experience, simulations.
3. The highest scores in terms of training organisation were given to the trainings addressed to managers (Segment 3) in a form of workshop in the field with accommodation (outside the office and the place of work). IT training scored same positive (Segment 4) and the other officers (Segment 5) as a stationary training (outside the office) in the training hall. On the other hand, the training place scored lowest among the employees dealing with taxes and fees (Segment 1) and real-estate management (Segment 2) due to the fact that training was performed during their working time in the office.

5. Summary

Having evaluated the training and the method of its implementation, the following conclusions and recommendations have been formulated for EU projects with the participation of local governments:

- Local governments are interested in financing the purchase of IT hardware with software to the biggest possible extent (servers, computers, scanners, UTP devices);
- In the implementation process one must budget the works allowing for the creation or modification of e-forms for service cards, purchases of e-portals for electronic taxes and

- charges service as well as electronic document flows enabling the e-documents flow between the client and the authority;
- It is essential to plan the expenditure for launching the trusted profile validation points for the clients to receive free-of-charge electronic signatures required for e-communication with the authority;
 - Training topic coverage per module should vary; next to specialist issues (hard training) on content-wise knowledge for a given job, general issues (soft training) focused on the development of individual features in the participants;
 - Class methodology must be based on a short introduction (lecture), then individual or group tutorials using the case study and involving the participants in discussion and sharing of good practices. Training process must refer to participants' experience and knowledge of real problems faced in a given job according to Kolb's cycle (concrete experience – reflective observation – abstract conceptualisation – active experimentation);
 - Teaching methods and tools must vary, participants should be given a chance of working with the text and the coach should, to the greatest extent, use various media (flip-chart, multimedia presentation, interactive table and computer programmes);
 - The training venue should be located outside the work place (in the training hall); training with 1-night accommodation has been considered most effective.

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