THE CREATION OF PROCESS ARCHITECTURE IN A MUNICIPAL COMPANY

Janusz Adamek[1], Krzysztof Głuc[2], and Natalia Potoczek[3]

Abstract
The article deals with legal and economic sources of process re-orientation of a municipal company. In case of municipal activity it is not the competition but the quick growth of investment that forces business entities to verify their business models. The growing costs of maintaining and implementing public services force the growth of managerial competencies and the search for better organization methods. The case study of the Nowy Sącz Water Company presented in the article is an example of changes occurring in the area of organization and management of public utilities. The process re-orientation creates possibilities of improving the business model and, inter alia, increasing the value provided to customers by more efficient management.
Keywords: *public utilities, water company, business model, business processes, process architecture.*

1. Introduction

The changes in the public utilities sector occurring in the first decade of the 21st century were mostly connected with the investment activity co-financed with the EU funds. The development of public utilities infrastructure quickly brought improvements to the quality of living by increasing accessibility and quality of public utilities services, but also led to increased production costs and consequently – price growth. Public means obtained by Poland since its accession to the European Union significantly affected the scope, range and quality of public utilities services offered to customers. This means that municipal entities increased the numbers of their customers and are able to offer more services and increase their value through higher quality and attractive prices.

1 Janusz Adamek, M.A., Chairman of the Board and Director of the Nowy Sącz Water Company, ul. Wincentego Pola 22, 33-300 Nowy Sącz, e-mail: janusz.adamek@swns.pl.
2 Krzysztof Głuc, Ed.D., Associate Professor, Department of Economy and Public Administration, Cracow University of Ekonomics, ul. Rakowicka 27, 31-510 Cracow. Vice-charman of the Board and Director of Strategy and Development of the Nowy Sącz Water Company, ul. Wincentego Pola 22, 33-300 Nowy Sącz, e- mail: krzysztof.gluc@swns.pl.
3 Natalia Potoczek, Ph.D., Associate Professor, Faculty of Social and Computer Sciences, Wyższa Szkoła Biznesu – National Louis University, ul. Zielona 27, 33-300 Nowy Sącz, e-mail: npotoczek@wsb-nlu.edu.pl.

Expenditure on infrastructure allowed to obtain the "economies of scale" effect, but simultaneously they burdened business entities with high maintenance costs. Currently public utilities entities face a serious challenge of optimizing their activities, mostly to maintain the acceptable level of prices for the services they provide.

A natural consequence of the above is the search for a proper business model which will let public utilities companies accomplish their goals set for them by their supervising local government organs. Public utilities entities are not burdened with competition mechanisms, but they are accountable for proper allocation of public resources. Legal regulations determine the level of responsibility and determine terms on which delegated tasks should be accomplished, but they do not impose concepts or methods of management which should be applied in public utilities management. This aspect of business entities' activity in public utilities economy is related exclusively to managerial competencies of local authorities and managers.

Referring to the perspective of changes occurring in the management practice in the past two decades it seems justified to make an attempt at re-orienting business entities in order to improve the efficiency of the activities. Since the 1990s, thanks to strong development and common availability of information and communication technologies, the development strategy, as well as on greater efficiency in the implementation of business processes. Bigger and small businesses, equally affected by the global economy, undergo process re-orientation in management, mostly in order to obtain greater control over their resources and activities. The goal of the article is to present the activities of the Nowy Sącz Water Company (Polish abbreviation: SWNS) which were taken to implement process re-orientation. The company is still operating within the functional system, however, being aware of its current and future constraints, it attempted at creating a new architecture for the organization, transforming the organizational structure and developing a new management system supported with proper IT tools.

2. Research questions and methodology

The Polish public utilities economy faces an enormous challenge of optimizing costs as a result of public utilities development, growing expectations of customers and significant growth of assets, especially construction and technology infrastructure. Taking into account the organizational changes observed in business it seems obvious that public utilities entities also have to take care of better organizational efficiency. This is why the widespread concept of process reorientation has also become popular in this sector of the economy.

Public utilities companies usually operate on the basis of a business model they have developed for years. Their privileged monopolist position made their static business model good enough to determine directions of activities or principles of market participation. A fundamental question arises, whether it is possible to shape the process architecture based on a business model. If we relate to the contemporary concepts of a business model and standards of process modeling, it seems justified to assume that the starting point should be to define the basic value chains by key elements of the model.

Creating the process architecture of an enterprise is one of the first and key stages in designing the process reorientation. In the analyzed SWNS an attempt was made at creating the process architecture based on the business model developed by Osterwalder and Pigneur (2005) and the model of business processes contained in the international standard developed by APQC association (*American Productivity and Quality Center*). The main research goal was to find an answer to the following question: Will the combination of the business model of the Company and the identified processes according to the APQC standard facilitate the creation of process architecture in the organization? The research was conducted at the SWNS, which initiated some activities towards process reorientation in management.

3. Legal and economic determinants of the operations of a municipal company

The current condition of the municipal economy is the outcome of the self-government reform initiated in 1990 when municipalities were established as basic self-government units on the local level. Within the next years the model of economic and municipal activity was developed. The valid legal act regulating the activity of municipalities in this scope is the Act of 20th December 1996 on Municipal Management, which defines the economic system of municipalities (Act of 1996). In its first article, the Act determines the principles and forms of municipal management of territorial self-government units, consisting of performing their own tasks in order to satisfy collective needs of the self-government community.

The recommended forms of municipal economy are self-government utilities and commercial law companies. It is also allowable to delegate the municipal tasks to individuals, corporate bodies or organizational units which do not have the status of a legal person (subject to reservations listed in Article 3.1, Act of 1996). The municipality, constituting the lowest self-government level, performs the widest scope of tasks related to satisfying social needs and thus conducting economic activity. It should be emphasized that the constituting organs of territorial self-government units (municipal

councils, district councils, province parliaments) take decisions in the form of resolutions on the choice of the way of conducting the public utilities activity.

The activity of a municipal company in form of a self-government budget unit is financed with its own revenues from performed services. It can be supported with self-government unit budgetary means in the form of object, purpose and subject subsidies. Commercial law companies can be established by one entity – as sole shareholder companies of self-government units, or by several entities, for example by some municipalities. Such companies then have the status of a legal person and their own assets. The Polish public utilities sector is dominated by limited liabilities companies and joint stock companies. Territorial self-government units which own the shares in these companies may manage the activities of the established companies by passing resolutions. There are also public-private municipal ventures, for which capital companies, limited partnerships and limited joint-stock partnerships are established, on the basis of the Act of 19th December 2008 on public – private partnership (Act of 2008). Another form in which municipal tasks are accomplished is non-profit associations which may be created in cooperation with some self-government entities, also of various municipal, district and province levels.

The Polish self-government system entrusts the municipalities with the biggest number of public utilities tasks. A vital factor determining the public utilities management is the possibility of public forms of cooperation granted by the lawmakers. The Act on the municipal self-government (Act of 1990) and the Act on the district self-government (Act of 1998) allow to create inter-municipal and inter-district associations in order to perform public tasks together. There is a possibility of establishing institutional forms of cooperation in the shape of public utilities associations, which may be given the status of a legal person. In practice a constituting and supervising organ for an inter-municipal association is the meeting of partners established by heads of municipalities. Similar organizational solutions are used on the district level. Public utilities associations may be established independently or with the participation of other public entities or private commercial law companies or foundations in order to manage public utilities.

The cooperation between municipalities in public utilities services is particularly justifiable in case of water and waste management. Water extraction, processing and distribution, as well as waste collection and purification requires investments that often go beyond the capabilities of single self-government units. The creation of a network infrastructure and the use of technologies allowing to meet various requirements often exceeds the capabilities of municipalities, especially those with a small population that is spatially dispersed.

Self-government units may also sign agreements without the necessity to establish separate entities, granting the performance of public tasks to other municipalities or districts which have sufficient resource and technology potential. Units which grant their tasks to be performed by other municipalities are obliged to participate in the costs of performing them.

4. The business model at the Nowy Sącz Water Company

According to the main assumption of the authors of Business Model Canvas concept, the starting point in constructing a model is to determine the values the company may deliver to clients. The main goal of the water company is to provide water and to collect waste through its water and sewage network. For clients, however, the essence of the transaction lies not only in the supply of water and collection of waste but also in the terms on which these services are provided, especially for those clients who have decided to join the network and resign from their own, home water uptakes and sewage treatment plants. The Company guarantees, first of all, regular supply of high-quality water and regular collection and treatment of waste. Acting in accordance with the Water Management Law, the Company ensures it uses technologies and meets the norms guaranteeing the appropriate standard of water processing and sewage treatment. It is nearly impossible for individual inhabitants to achieve the same level of quality when they process water and treat waste on their own. Technology and competence barriers make the use of the water network not only more comfortable but also cheaper. Among the values delivered to external clients one can list many related to the activities supporting the accomplishment of the main processes, for example conducting laboratory tests, renting construction and transport equipment, sale of water meters, sale of energy, providing processed water in specialist vehicles, sale of water and sewage system materials. The Company owns its own infrastructure but also services water and sewage networks and related objects belonging to shareholders – municipalities.

The proposed values are received by two main segments of clients: individual clients, inhabitants of municipalities – shareholders, and institutions (commercial and non-commercial organizations) conducting their activities in the area of the above municipalities. The own water and sewage networks and those belonging to municipalities are the main channels through which water and sewage are distributed. Analyzing the key relations with clients, we should present the detailed division of segments into individual and institutional recipients of water and individual and institutional providers of waste. Contacts with each group of clients are maintained either via batch or individual correspondence or through individual contacts of customer service

center staff or Board Representative for Field Matters with local media, and within the Aquarius Academy directed mainly at schools run by self-governments of the municipalities – shareholders.

The sales of water and collection of waste via the network currently account for 98% of the revenues from all services provided by the Company. The remaining revenues come from the services offered within the auxiliary activity. Both fixed and variable fees are determined in the annual tariff, created on the basis of the Act of 07th June 2001 on Collective Water Provision and Collective Waste Collection and the Regulation of the Minister of Construction of 28th June 2006 on determining tariffs, a sample application for tariff confirmation and terms of settlement for collective collection of waste. The main assumption in shaping prices is to maintain the lowest possible level which nevertheless guarantees the water and sewage company can maintain its operations. In practice, with the current water extraction level, applied technology, established infrastructure and contracted loans for the implementation of the investment co-financed with EU funds, it is possible to maintain the acceptable level of prices and at the same time engage the budgetary means of the partner municipalities.

The key Company resources are most of all assets necessary to conduct business activity. According to the definition included in International Accounting Standards (IAS), assets are resources controlled by a company as a result of past events, from which it expects the inflow of future economic benefits to the enterprise. Company assets are most of all physical assets covering the whole construction infrastructure of the network, network buildings, plant buildings, technological infrastructure in the water processing plants and the sewage treatment plant, equipment, car fleet. Human resources are a vital resource of the Company, namely everything that people bring to the Company: their knowledge, skills, abilities, creativity, involvement, and availability. Non-tangible assets also include the brand developed by SWNS for over 100 years of its activities. Key financial resources include liabilities, that is all sources of financing, mostly profits generated by the Company, loans, and bonds.

The key activities of the Company are directly related to developing products and offering services to clients. The main value chain always comprises activities related to water extraction and treatment, providing water to clients, collecting waste, waste treatment and sales and financial servicing of clients. The company activities so far have been conducted along the functional orientation in management, tasks of particular cells have been grouped in three departments, and recently (2016), in the transition period, in two departments. Both main and auxiliary activities were dispersed in tree or two departments. Currently, the Company is working on streamlining its

Table 1. The business model of SWNS

<table>
<tr>
<td rowspan="2">Key partners
Construction work sub-contractors
Suppliers of materials
Board consultants
Construction designers
Scientific research centers
Sector associations
Chamber of Commerce – Polish water Systems</td>
<td>Key activities
Water extraction and processing
Waste purification
Water and waste distribution
Exploitation of water and sewage network
Investments and modernizations
Licenses, regulations, tariffs
Regulations and contracts with clients
Participation in tenders
Organization of tenders</td>
<td rowspan="2">Values for clients
1. Regular, convenient supply of high quality water
2. Regular, convenient collection and treatment of waste</td>
<td>Key relations with clients
Correspondence with clients: paper, e-mail
www. swns.pl ; FB
Personal relations
Direct relations with municipalities maintained by Board Representative
Contacts with media maintained by Promotion Specialist</td>
<td rowspan="2">Key segments of clients
1. Individual clients – water recipients
2. Individual clients – waste providers
3. Institutional clients – water recipients
4. Institutional clients – waste providers</td>
</tr>
<tr>
<td>Key resources
Infrastructure: 3 water extraction and processing plants, water and sewage network with buildings, sewage treatment plant, administration buildings, warehouses, car fleet, technical equipment
Human resources
Financial resources: Loans, bonds
Client bases, IT resources
Brand/trust</td>
<td>Key channels
Water and sewage network belonging to the Company
Water and sewage networks belonging to municipalities</td>
</tr>
<tr>
<td colspan="3">Costs structure
Direct costs: water production and supply, waste collection, treatment, costs of other activities
Indrect costs: costs of management, costs of auxiliary activities</td>
<td colspan="2">Revenue flows
Fixed fees for water and waste
Variable fees for water and waste</td>
</tr>
</table>

Source: Based on Osterwalder & Pigneur (2010, pp. 19-48).

activities along the process orientation, which is supposed to bring greater efficiency of operations, quicker decision-taking and lower operational costs. The key supportive activities include investment and renovation activities, obtaining and maintaining licenses, creating regulations of water provision and waste collection and other activities supporting production, creating tariffs, signing contracts with clients, participation, and organization of tenders for procurement of materials and services.

Conducting such complex activity requires strong external support. Investments and renovations call for cooperation with external entities, both construction companies and such specialists as geodesists, designers, construction inspectors, surveyors, etc. The Company regularly cooperates with suppliers of water and sewage materials. The range of managerial issues dealt with by the Company makes it necessary to hire consultants – specialists in law, financial management, management systems and processes. The Company participates in the activities of various sector associations and projects implemented in cooperation with scientific research centers, thanks to which it has access to knowledge and can develop new competencies. One of the most important institutional partners is the Chamber of Commerce – Polish Water Systems.

The cost structure should reflect particular elements of the business model. The current costs analyses relate to the division into direct costs, associated with the core activity of the Company and additional services provided by it. Indirect costs cover costs of management and costs of auxiliary activities. This area is less transparent and difficult to examine at present. It is assumed that proper identification of supporting processes should help precisely identify indirect costs. Proper process management should also allow the Company to optimize fixed costs and to achieve greater predictability of variable costs. The current business model relies on effects obtained from economies of scale, with the high potential of the Company at present it is advisable to develop the existing segments of clients, that is individual and institutional clients connected to the network. The current activities related to obtaining benefits from the scope of such activities as laboratory tests, equipment rental, have not increased the Company revenues significantly. It is possible, however, that the business model may be changed due to the appearing possibilities of using the network in order to distribute other values.

5. The use of the business model in creating the process architecture

The creation of process architecture is associated with the individual choice made by the enterprise. However, companies more and more often use standards developed either by international organizations (associations,

consulting companies, scientific centers) or by producers of software supporting process management. It is widely accepted that processes are classified into two groups: business processes (core, economic, operational) and supporting processes (supporting, auxiliary). Some classifications also include managerial processes. In practice, we often observe the phenomenon of identifying process architecture with the map of processes in an organization. Many scientists, however, point out that the creation of process architecture is a very complex and onerous process. Harmon (2007) identifies a few key steps that need to be made when designing process architecture of an organization:

- identifying proper value chain,
- determining proper strategic goals which will be supported in the value chain,
- determining how to examine whether strategic goals are accomplished in the value chain,
- dividing the value chain into main processes, main processes into sub-processes, in order to build the hierarchy of processes,
- determining how each process from the first level will be measured, who will be responsible for it and what resources are needed to accomplish each process,
- repeating the procedure for each next level of processes.

Jeston and Nelis (2008) inspired by the works of Wagter, van den Berg, Luijpers and van Steenbergen (2002) developed a list of attributes of a good process architecture. An important assumption made by the above authors is the recognition of a dynamic nature of process architecture. Therefore process architecture:

- must be a collection of rules, principles and models of processes,
- must constitute the basis for designing and implementing processes of an organization,
- processes must be related to the goals and strategies of an organization,
- processes must be aligned with business architecture, information and technical architecture, which make up the architecture of the whole enterprise,
- processes must be easy to understand and apply by all stakeholders,
- process architecture must be dynamic, easy to adopt developing processes, business and changes in the enterprise.

The use of international standards offers a special benefit of making comparisons or using sector standards. One of the best known standards is the PCF model (*Process Classification FrameworkSM*) developed for nearly two decades by APQC association. The PCF model has been shaped by the experiences of APQC member companies in process management. The APQB database[4] covers over 1000 operational and support processes. The PCF project

4 Retrieved from APQC database, www.apqc.org/pcf

involves over 80 organizations from various sectors. The model is continuously updated, processes and activities are added and the process structure itself is subject to changes. The tables below (Table 2, Table 3) present twelve groups of processes, five of which relate to operational processes, while the other seven to supporting and managerial activities.

Table 2. Process Classification FrameworkSM (PCF) 6.1.1.

Operating processes				
1.0 Develop Vision and Strategy	2.0 Develop and Manage Products and Services	3.0 Market and Sell Products and Services	4.0 Deliver Products and Services	5.0 Manage Customer Service
Management and support services				
6.0 Develop and Manage Human Capital				
7.0 Manage Information Technology				
8.0 Manage Financial Resources				
9.0 Acquire, Construct, and Manage Assets				
10.0 Manage Enterprise Risk, Compliance, Remediation, and Resiliency				
11.0 Manage External Relationships				
12.0 Develop and Manage Business Capabilities				

Source: Retrievied from https://www.apqc.org/knowledge-base/download/313690/K05162_PCF_Ver_6.1.1%20final.pdf (accessed on: 20.12.2015).

Support and management processes were presented in groups of services, the name of the group reflecting their nature and role in an organization. Management and support processes provide services to staff implementing operational processes and all other processes (for example, in the case of services in human resource management). Management and support services have their own clients mostly inside an organization, the so-called internal clients.

Table 3. The interpretation of the numbers of levels included in PCF 6.1.1.

Level 1	**Level 2**	**Level 3**	**Level 4**	**Level 5**
Categories	**Process Groups**	**Processes**	**Activities**	**Tasks**
10.0 Managing risk in an enterprise, compliance, adjustment and resistance of an organization	10.1 Managing risk in an enterprise	10.1.4 Managing a business unit and risk of the function	10.1.4.3 Developing a plan of limiting risk	10.1.4.3.1 Assessment of adequacy of insurance cover

Source: Retrievied from https://www.apqc.org/knowledge-base/download/313690/K05162_PCF_Ver_6.1.1%20final.pdf.

All the process groups in the PCF model were aligned according to five levels. Table 3 above presents the interpretation of the level numbers and order of processes and activities. The five-grade structure *(Category, Process Group, Process, Activity, Task)* included in version 6.1.1 allows us to compare the tasks completed within particular activities. We should notice that the proposed model of process classification relates to processes identified in practice, the higher the level of generalization, for example within categories and groups of processes, the greater usefulness it has in creating process architecture of an enterprise. More detailed proposals, starting from the process level to single tasks can only constitute an illustrative material for design work in organizations.

Table 4. The scope of tasks performed by Water and Sewage Network Plant

Water and sewage network plant - RS
The main goal of the Water and Sewage Network Plant is to ensure efficiency of the whole water and sewage network in the area covered by the activities of the Company in order to ensure a constant supply of water and collection of waste from the population. The accomplishment of the assigned goals and tasks is the responsibility of the Head of the Water and Sewage Network Plant, who directly reports to Strategy and Development Director.
RS comprises:
Processes of maintaining water and sewage network. • Organizing and conducting maintenance activity in the water and sewage network, bolts and hydrants and other appliances. • Removing the failures in the network in cooperation with the Department of Monitoring and Steering the Water and Sewage System. • Regular supplementation of the marking for water and sewage network development. • Cooperation with Department of Transport in organizing repair and modernization works. • Cooperation with Technical department in developing annual and section maintenance plans for the water and sewage network and plans for network overhaul. • Controlling the exploitation of the objects, water and sewage network appliances. • Organizing and conducting repairs of the appliances used by the Company. • Writing account of the materials used. • Writing timetables for shift work, monthly pay cards and technical emergency service timetables. Processes of developing water and sewage network. • Developing, jointly with Technical Department, plans for development or modernization of water and sewage network. • Cooperation with contractors of investments made by the Company in water and sewage network. • Liaising with the Department of Design Coordination when agreeing to technical conditions for connecting buildings to the city water and sewage network. • Preparing acceptance protocols so that the water and sewage network and connections could be taken over by the Company. • Participation in technical acceptances of the appliances and water and sewage network accepted for use. • Cooperation in developing a digital map of water and sewage network. • Registering and invoicing services of accepting water and sewage network and connections.

Source: Internal materials of SWNS.

The activities related to process classification at SWNS could only be taken up following the preliminary reformulation of the organization's rules and regulations. In line with classic models of documents created for functionally-oriented organizations, also the Company's rules and regulations contained sets of tasks subordinated to particular departments and organizational units. In order to develop process thinking and perception of work in process categories, the organization's rules and regulations were supplemented with the classification of activities according to performed processes. Firstly, the main goals of organizational cells were introduced. Secondly, tasks were grouped so that they could further be subordinated to proper levels of the PCD model structure. For example, the description of the tasks of the Water and Sewage Network Plant (Table 4) reflects the areas of tasks (main processes), participation in tasks or performing them individually, as well as other entities participating or responsible for processes. Such descriptions were introduced to the organization's rules and regulations which constitute a transition form before the final solution is achieved, developed specifically for the implementation of the new strategy of the company, directly aligned with the process classification adopted by the Company.

In order to identify the processes in the Company and create responsibility for the processes, we tied process groups in the PCF model to the functions of managers ultimately responsible for the process groups at SWNS (Table 5).

Table 5. Aligning processes to management functions at SWNS

Operating processes				
1.0 Develop Vision and Strategy	2.0 Develop and Manage Products and Services	3.0 Market and Sell Products and Services	4.0 Deliver Products and Services	5.0 Manage Customer Service
Strategy and Development Director	Production and Distribution Director	Managing Director	Production and Distribution Director	Strategy and Development Director

Management and support services	
6.0 Develop and Manage Human Capital	Managing Director
7.0 Manage Information Technology	Managing Director
8.0 Manage Financial Resources	Managing Director
9.0 Acquire, Construct, and Manage Assets	Strategy and Development Director
10.0 Manage Enterprise Risk, Compliance, Remediation, and Resiliency	Managing Director
11.0 Manage External Relationships	Strategy and Development Director
12.0 Develop and Manage Business Capabilities	Strategy and Development Director

Source: Internal materials of SWNS.

The goal is to implement the new organizational structure reflecting the conducted processes and the organization's regulations which will take

into account the new process structures and responsibilities for the processes performed in the Company.

Subordinating directors to particular process categories shows that one of the directors is responsible for all production and distribution processes, while others, including the Managing Director, are responsible for management processes and those that support the basic production and distribution activity.

The key activities included in the business model of the Company were classified as process category in the PCF model (Table 6). The presentation of the main activities in the business model of the Company and process categories according to the PCF model show from the very first sight that the company focuses strongly on uncreative activities. The activities associated with long-term planning and designing products have not been emphasized. The company enjoys a monopolist position, whereas its core activity is determined by long production cycles. The biggest challenge is the development and use of water and sewage networks.

Table 6. The classification of main activities according to process categories of the PCF model

Main activities included in the business model	**Process categories according to PCF**
Water extraction and treatment	*Deliver Products and Services*
Sewage treatment	*Deliver Products and Services*
Water and sewage distribution	*Deliver Products and Services*
Exploitation of water and sewage network	*Manage Customer Service*
Investment and modernization	*Acquire, Construct, and Manage Assets*
Licenses, rules	*Manage Enterprise Risk, Compliance, Remediation, and Resiliency*
Regulations, tariffs	*Market and Sell Products and Services*
Contracts with clients	*Market and Sell Products and Services*
Participation in tenders	*Acquire, Construct, and Manage Assets*
Organization of tenders	*Acquire, Construct, and Manage Assets*

Source: Internal materials of SWNS.

Customer service processes are mostly associated with broadly understood network exploitation that is network maintenance ensuring failure-free exploitation, but also removing failures, conducting repair, modernization and investment works. The key elements of the business model demonstrate where the water company focuses its attention. In our case these are production and distribution processes, network maintenance processes, legal adjustment processes in water and sewage management, as well as processes of shaping prices which, apart from economic calculation, also depend on the valid legal regulations and the current utilities policy implemented by territorial self-governments.

6. Conclusions

The application of a business model to create process architecture in a utilities company is of vital significance if we take into account management practices in utilities entities in Poland. Another important aspect in creating process architecture in an organization is the use of benchmarking. The article presents the PCF Model, which is currently used all over the world as a benchmarking model. Undergoing constant modifications, the model has been developed for several years and it has been gathering information from all over the world. Therefore it is considered to have become one of the most important standards in classifying organizational processes. The combination of the business model and the model of process classification allows us to better understand the activities of a business entity and to identify the basic value chain and the main categories of business processes, both support and management ones. Initially it also helps us classify processes and align responsibilities in the current organizational structure of an enterprise.

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Biographical notes

Janusz Adamek, M.A., Chairman of the Board and Director of the Nowy Sącz Water Company, a graduate of Cracow University of Economics. Responsible for the implementation of the project "Modernization and extension of water and wastewater system of town Nowy Sacz with adjacent areas of neighboring communities", the largest investment water supply – sewage system of Sądecczyzna, co-financed by the EU Cohesion Fund in the group of large projects financed under the financial perspective European 2007–2013. The project was awarded the title of "Top Investment Municipal 2013 years" by the European Economic Congress and the portal samorządowy.pl.

Krzysztof Głuc, Ed.D., Vice-Chairman of the Board and Director of Strategy and Development of the Nowy Sącz Water Company. Jointly responsible for the implementation of the investment project "Modernization and extension of water and wastewater system of town Nowy Sącz with adjacent areas of neighboring municipalities", directly supervising operational Executing Unit Project. Associate Professor in the Department of Economics and Public Administration at Cracow University of Economics. Director of the Małopolska Szkoła Gospodarki i Administracji Publicznej at Cracow University of Economics.

Natalia Potoczek, Ph.D., Associate Professor in the Wyższa Szkoła Biznesu – National Louis University in Nowy Sacz at the Faculty of Social and Computer Sciences. Leads research in the field of process management and human resources management. Her most recent publication is a monograph "Human resource management in process-oriented organizations" (Wydawnictwo Naukowe PWN, 2016), prepared as part of a research project funded by the National Science Centre. Scientific consultant for public companies in the implementation of process management. Vice President of the Foundation for the Dissemination of Knowledge and Science "Cognitione".