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## **Outsourcing of Services: Case of the Czech Republic**

Radka Vaníčková and Gabriela Gabrhelová

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http://dx.doi.org/10.5772/intechopen.72774

#### Abstract

The chapter deals with an analysis, assessment, and use of the outsourcing in a public institution that employs an external firm to service office and common office cleaning. Based on the methodology and objective were information established by personal interviews and monitoring, the calculation of the cost of individual employees was designed for all forms of employment, i.e., both the full-time and part-time employment, the work and job agreements and related number of cleaning staff, gross wage, health and social insurance payments, super gross wage, income tax, tax allowance, and net wage of the cleaning worker. Transferring the competence of an ancillary activity to an external company enables the public institution to have an advantage of focusing on the main activity, including the time advantage, as it can provide a higher quality of services to citizens (clients) with a lower administrative burden. The conclusion of the chapter assesses the advantages of outsourcing for the public sector including core business and risk transfer as a comprehensive solution of facility management with the emphasis on expanding and improving the portfolio of services in the future. Furthermore, the benefits of outsourcing in the context of the service sector, advantages and disadvantages of the client and outsourcing provider, current trends, development, innovations and changes in outsourcing in the context of services, the prediction of future development and the estimation of the use of outsourcing in services.

**Keywords:** outsourcing, services, public sector, forms of employment, core business, risk transfer, facility management

## 1. Introduction

In general, outsourcing is an opportunity to restructure an enterprise [1]. It is appropriate to use it for those activities that are not effective in their own way—for example, the full capacity of the technical equipment [2] or the selection of employees is not used completely [3].



© 2018 The Author(s). Licensee InTech. This chapter is distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/3.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. [cc] BY Outsourcing as a short for Outside Resource Using is always a decision between two possibilities—Make or Buy as reported in **Figure 1** [4].

Kadefors [5] reports that each company may have its own requirement on outsourcing providers. Such service differs both by the main focus of the company [6] and the outsourcing plan [7]. A number of companies that choose a provider of company's processes by different needs and criteria have been growing. Assignment of the responsibilities to an outsourced supplier offers a stable service delivery of guaranteed quality [8] and usually at a pre-determined price that guarantees concentration on the main business plan and key processes [9]. It not only generates a competitive advantage and significant market position but also predictable revenue and increased production [10].

Regarding the type of transactions, there are [11] local and international outsourcing—near shore and offshore outsourcing. Local outsourcing is provided by firms within the same state [12]. International outsourcing is its contrary [13]. The most important difference between outsourcing and a purchase of goods and services is the long-term base of the relation of the client and the provider [14]. Nowadays, as companies are looking for a new outsourcing provider, they can not only consider the financial issue but also have to take many other conditions into account [15]. The choice of the definition of a particular outsourcing company's activity is subject to a decision for several years. In decision-making, the role of other competing companies with whom a potential outsourcing contractor already cooperates plays an important role [16]. The top managers should take into account what activities should be outsourced and what activities should they focused on in relation to their own type of business [17]. The first question employees discuss is whether it makes sense to outsource the particular activity [18]. In business practice, there are cases where the company is able to carry out the same activity of the same quality on its own [19]. In such case, a transfer of the activity to a supplier is more favorable for the company considering the longer term aspect of the activities such as the future development of the cooperation of the supplier [20]. In the latter case, the company is unable to produce the product or service in the required quality. If the

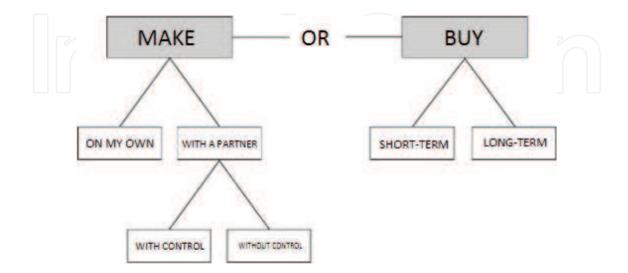


Figure 1. Make or buy. Source: [4].

company finds that it has limited capacities, it is more appropriate to outsource the activities [21]. The third alternative to outsourcing decisions is certain concerns about the emergence of risks that may threaten or restrict the company in the future, such as an employee who may have a long-term illness or they may damage a machine, a vehicle, and so on. In such case, a company should transfer the unpredictable risk to outsourcing supplier [22].

Outsourcing may also occur at the tactical level—the company has problems, and outsourcing offers a quick solution, such as addressing the shortage of workers [11]. Strategic outsourcing is successful if the organization realizes the added value [23], for example, the relationship between a supplier and a buyer is turning into partnership. Transformational outsourcing also serves to build a new face and structure [24].

The authors [25] described an outsourcing contract as a process of negotiation on outsourcing activities and its subsequent conclusion with an outsourcing contractor. Such contract provides long-term partnership, mostly for 3, 5, or 10 years. The company and the outsourcing supplier will be governed for several years under the agreement, and therefore the access to the contract from a senior management perspective must be as thorough as possible and satisfactory to both parties. The outsourcing contract is used and referred to as a means of reducing the risks related to business [4]. All requirements and obligations for both parties must be enshrined in the contract [16]. The main legal risks in the Czech Republic include the duration of the contract and the way in which the content is changed and the contract is terminated. The most common forms of outsourcing contracts include a contract for a work, a lease, or a mandate contract. If outsourcing is supposed to be successful, careful consideration should be given to the risks and possible impacts on the business [26]. It is clear from the various researches that approximately half of the contracts contracted did not meet the required expectations and results; however, providing outsourcing services both globally and locally is expected to further increase in the future.

## 2. Methodology and objective

The chapter deals with analyzing, evaluating, and using outsourcing services. A public institution from Prague with 562 employees was used in the research. The research took place from February to May 2016. The institution hires an external cleaning service company to clean offices and common parts. Outsourcing of services was analyzed to decrease possible financial, investment, and operating expenses. Studies and papers used as the secondary resources are listed in the references.

We stated the following research questions:

Research questions 1: The public institution has opted for outsourcing to reduce financial costs.

Research questions 2: Outsourcing is at an early stage of its life cycle.

Information necessary for the analysis was established by an interview with a governmental official and monitoring. The official answered the following questions:

Which company provides the cleaning service?

What is the cost of the institution for the service provided?

Have you ever thought about hiring your own workers to clean up the offices and common areas?

Do you have a sufficient number of cleaning staff?

For what period of time is a partnership contract signed with the external company?

How large rooms are cleaned by a worker?

What form of employment was signed with a cleaning company?

What is the net and gross wages of the cleaners?

What are the working time and the job of the cleaners?

What cleaning supplies do the cleaners have? Who provides the customer care for the cleaning supplies?

The above-mentioned questions were answered in order to prove or reject the hypotheses. Based on the information established by personal interviews and monitoring, the calculation of the cost of individual employees was designed for all forms of employment, i.e., both the full-time and part-time employment, the work and job agreements and related number of cleaning staff, gross wage, health and social insurance payments, super gross wage, income tax, tax allowance, and net wage of the cleaning worker.

The first type of employment analyzed was a full-time employment. The gross wage was calculated as follows: Employee's statutory payments + Health insurance =  $4.5\% \times \text{gross}$  wage, Social security =  $6.5\% \times \text{gross}$  wage. Employer's statutory payments paid by the employer: Health insurance =  $9\% \times \text{gross}$  wage, Social insurance =  $25\% \times \text{gross}$  wage.

Gross wages + Health insurance 9% + Social insurance 25% = Super gross wage (the amount is rounded up to hundred crowns).

Income tax = Tax rate 15% × Super-gross wage.

Income tax allowance = Income tax-Discount (2070 CZK a taxpayer).

Gross wage–Health insurance 4.5%–Social insurance 6.5%–Income tax + Tax allowance (e.g., 2070 CZK a taxpayer) = Net wage.

The second type of employment analyzed was a part-time job. The calculation was the same as the full-time job but halved.

The third type of employment analyzed was an agreement to perform work. There were two possibilities. The first possibility was calculated as follows: The gross wage was up to CZK 2500. As set by law, if this amount is not exceeded, no social security and health insurance payments are required. The gross wage of the cleaner is taxed on income tax of 15%, and then the monetary claim for net wage/1 cleaner is calculated.

The second possibility was different: the gross wage was set at CZK 3000 (more than the statutory deduction amount) where the calculation procedure was the same as the full-time form of employment. The last type of employment analyzed was an agreement to complete a job. The gross wage was less than 10,000 CZK and social security and health insurance payments were not required. The calculation was then the same as in case of work contracts up to 2500 CZK.

The agreement to perform a job and the agreement to perform work are special types of service contract agreements used in the Czech Republic. They both differ from standard employment by less strict rules and they are often used in case of part-time jobs.

The most important difference between these two types is as follows. The agreement to perform a job is a short-term contract—for one employer, it is possible to work under such agreement for a maximum of 300 h per calendar year.

The work is limited weekly. Usually, it is 20 h a week, i.e., a half of the average working hours for a full-time employment.

The investment costs included cleaning carts, industrial vacuum cleaners, and cleaning mops, where the selection criteria were price, quality, functionality, and usability. Based on the location, distance, availability, selection of services, and the relevant product range, a suitable supplier, a wholesale of Makro Cash & Carry ČR based in Prague, was chosen.

Based on the goal in line with financial savings, emphasis was placed on eliminating increased investment costs, minimizing own operating costs and lowering wage costs, transforming investment expenditures into operational tax optimization, more transparent cost planning by reducing or eliminating hidden costs, or sharing investment risk.

Transferring the competence of an ancillary activity to an external company will enable the public institution to focus on the main activity, including the time advantage, as it can provide a higher quality of services to citizens (clients) with lower administrative burden. Through an external firm, the public institution does not have to implement any operational processes because they are in the competence of an outsourcing company, such as the management of cleaning staff costs, wage and accounting agenda, controlling activities, the transfer of cleaners, recruitment of new cleaning staff and similar.

The conclusion of the chapter assessed the advantages of outsourcing for the public sector including core business and risk transfer as a comprehensive solution of facility management with the emphasis on expanding and improving the portfolio of services in the future.

## 3. Results and discussion

A public institution decided to outsource cleaning service of offices and common parts. An external supplier was chosen by a completion based on Czech Act 134/2016, Coll., on Public Procurement [21]. The competition was entered by 22 companies; the most important criterion was the lowest price.

The costs for the public institution amounted to CZK 338,660 per year and CZK 28,221.60 per month (the contract price takes the sum of the necessary costs to fulfill the subject of the contract into account). An external firm is not a VAT payer; the price is not increased by the value

added tax of 21%, so it is the final price. The charged price is paid monthly by the customer based on the invoice issued by the contractor within 14 days after the end of the respective month with a maturity of 21 days from the date of delivery to the customer.

The obligations of the contractor-client are as follows: training of managers of the provider related to labor safety, provision of free electricity and water consumption for service providers, provision of comprehensive technical functionality, safe and hygienic storage of personal belongings in the premises, closed cleaning premises with the cleaning equipment and machines, and commissioning of responsible persons by operative contact with the operations manager [27].

Obligations of the provider are the following: providing work clothes, protective, cleansing, cleaning and disinfecting agents; preventing workers from other workplaces away from cleaning; training of employees in the field of general standards of hygiene and disinfection; and determination of responsibility for the allocated cleaning areas.

As reported in the contract, the provider's workers are allowed to clean the offices and common parts from certain time only. They are allowed to start working with the termination of official hours at a public institution. The contract also reports the schedule of cleaning divided into different groups: offices (daily, weekly, and monthly cleaning), halls (daily, weekly, and monthly cleaning), staircases (daily, weekly, and monthly cleaning), toilets (daily, weekly, and monthly cleaning), meeting rooms (weekly and monthly cleaning), and warehouses (cleaning only if agreed upon). The provider employs seven cleaners under the agreement to complete a job. The cost on workers for the provider consist of the monthly gross wage, social insurance payment (25%) and health insurance (9%) and insurance as required by law taken out the Kooperativa insurance company (9%).

**Table 1** reports the data necessary for the calculation of net wage. Gross wage is 10,255 CZK; health insurance payment amounted to 462 CZK, and social insurance 667 CZK (total deduction/one cleaner 1129 CZK). As the cleaners report their employment as the main employment in the Declaration of the taxpayer liable to personal income tax from dependent activity (employment) and office-holders' emoluments, the income tax is 15% of the gross wage and the tax allowance is 2070 CZK per a taxpayer; monthly deduction of the employer is the health insurance 923 CZK and the social insurance 2564 CZK.

The total monthly cost of the employer to seven cleaners is CZK 71,785, health insurance of 6461 CZK contributions and social insurance of 17,948 CZK. In total/ seven cleaners = 96,194 CZK/month + CZK 100 per quarter (Kooperativa insurance).

#### Annual cost of the employer

(Deduction, gross wage) = 96,194 × 12 = **1,154,328 CZK.** 

Kooperativa insurance (7 workers) = (100 × 4) × 7 = 2800 CZK.

Annual cost of the employer in total = 1,157,128 CZK.

Number Gross of wage workers	Gross	Employee		Employer	Employer					
	wage	Health insurance	Social insurance	Health insurance	Social insurance	Super Gross wage	Income tax	Tax allowance	Net wage	
1	10,255	462	667	923	2564	13,800	2070	2070	9126	
2	10,255	462	667	923	2564	13,800	2070	2070	9126	
3	10,255	462	667	923	2564	13,800	2070	2070	9126	
4	10,255	462	667	923	2564	13,800	2070	2070	9126	
5	10,255	462	667	923	2564	13,800	2070	2070	9126	
6	10,255	462	667	923	2564	13,800	2070	2070	9126	
7	10,255	462	667	923	2564	13,800	2070	2070	9126	
Total	71,785	3234	4669	6461	17,948	96,600	14,490	14,490	63,882	

Table 1. Net wage of cleaners in case of full-time employment.

As reported by the annual cost, such possibility is not economical as there is a high excess amount of 818,468 CZK for the service provided. Full-time employment contract sets the obligation to work 8 h a day. Due to time and capacity reasons (the shift has to start in the afternoon), it is not possible to decrease the number of workers. The possibility is not advantageous.

#### 3.1. Part-time employment

Part-time employment is a second possibility of employment. Monthly gross wage amounts to 6000 CZK.

If the public institution decides to pay the workers a gross monthly wage of CZK 6000, the net wage is CZK 3915, health insurance of 270 CZK, and social insurance of 390 CZK, with 15% of the income tax (15%) and health insurance additional payment of 180 CZK. This was due to the employer's duty to pay for health insurance for the employees under the minimum gross wage of CZK 8000 and not from CZK 6000 as stated in **Table 2**. For this reason, an additional payment is paid, which the employee pays for himself/herself. A total deduction for a worker is 2085 CZK. The total monthly cost of an employer for a part-time employment is estimated at CZK 42,000 (Gross wage), health insurance of CZK 3780, and social insurance of 10,500CZK, a total of CZK 56,280.

#### Annual cost of the employer

(Deduction, gross wage) = 56,280 × 12 = 675,360 CZK

Kooperativa insurance = (4 × 100) × 7 = **2800 CZK** 

Number Gross		Employee		Employer			Employer						
of wage workers	wage	Health insurance	Social insurance	Health insurance	Health insurance additional payment	Social insurance	Super Gross wage	Income tax	Tax allowance	Net wage			
1.	6000	270	390	540	180	1500	8300	1245	0	3915			
2.	6000	270	390	540	180	1500	8300	1245	0	3915			
3.	6000	270	390	540	180	1500	8300	1245	0	3915			
4.	6000	270	390	540	180	1500	8300	1245	0	3915			
5.	6000	270	390	540	180	1500	8300	1245	0	3915			
6.	6000	270	390	540	180	1500	8300	1245	0	3915			
7.	6000	270	390	540	180	1500	8300	1245	0	3915			
Total	42,000	1890	2730	3780	1260	10,500	58,100	8715	0	27,405			

Table 2. Net wage of cleaners of part-time employment.

#### Annual cost of the employer in total = 678,160 CZK

Annual cost is calculated to be 678,160 CZK. Such amount is higher by 339,500 CZK compared to the amount paid by the public institution. It does not include the cleaning supplies costs such as the hygiene supplies, detergents, purchase of vacuum cleaners, etc. This possibility cannot be accepted.

#### 3.2. Agreement to perform work

An agreement to perform work is another choice. A cleaner works 300 h a year as those are the working hours in the public institution in the afternoons. If the gross wage paid to the cleaners is up to 2500 CZK, it is not necessary to pay social and health insurance and income tax of 15% is only paid. The social and health insurance are obligatory is the gross wage is more than 2500 CZK, including the income tax.

See Table 3 for the first possibility if the gross wage is up to 2500 CZK.

The cleaners are paid their gross wage of 2500 CZK. Social and health insurance are not paid and the income tax is 15% (375 CZK). The total monthly costs of the employer for the Work Agreement (1)/7 cleaners are CZK 17,500 for the gross wage, health, and social insurance payments of 0, i.e., the total amount of 17,500 CZK.

#### Annual cost of the employer

(Deduction, gross wage) = 17,500 × 12 = **210,000 CZK** 

Kooperativa insurance = (100 × 4) × 7 = **2800 CZK** 

#### Annual cost of the employer in total = 212,800 CZK

	Gross	ross Employee		Employer					
	wage	Health insurance	Social insurance	Health insurance	Social insurance	Super Gross wage	Income tax	Tax allowance	Net wage
1.	2500	0	0	0	0	0	375	0	2125
2.	2500	0	0	0	0	0	375	0	2125
3.	2500	0	0	0	0	0	375	0	2125
4.	2500	0	0	0	0	0	375	0	2125
5.	2500	0	0	0	0	0	375	0	2125
6.	2500	0	0	0	0	0	375	0	2125
7.	2500	0	0	0	0	0	375	0	2125
Total	17,500	0	0	0	0	0	2625	0	14,875

Table 3. Net wage of cleaners of Agreement to perform work (1).

The above-mentioned cost is significantly lower compared to the amount paid by the public institution for the service. Although the total amount is lower by 125,860 CZK, it is not the really the total amount, as it does not include additional cost such as vacuum cleaners, cleaning carts, sanitary and cleaning products, detergents and so on. The option is not appropriate.

See Table 4 for the second possibility if the gross wage is over 2500 CZK.

As reported in **Table 4**, if the public institution opts for this possibility, it pays the gross wage of more than 2500 CZK, and the social and health insurance payment is obligatory. In case of the gross wage of 3000 CZK, the payments are 135 CZK (health insurance) and 195 (social insurance). There is the income tax of 15% (615 CZK). The resulting net wage amounts to 2055 CZK.

Total cost for the agreement to perform work (2) is as follows: gross wage/1 cleaner (3000 CZK), charges—Health insurance/1 cleaner (270 CZK), social insurance payments/1 cleaner (750 CZK), i.e., a total of 4020 CZK per month/1 worker; in case of seven workers = 28,140 CZK.

#### Annual cost of the employer

(Deduction, gross wage) = 28,140 × 12 = 337,680 CZK

Kooperativa insurance = (100 × 4) × 7 = **2800 CZK** 

#### Annual cost of the employer in total = 340,480 CZK

Assuming this option is preferred by the public institution, the annual cost of the cleaning staff is CZK 340,480, which corresponds to real possibilities and willingness to pay for the services provided by an external firm (CZK 338,660). Unfortunately, the total amount of 340,480 CZK does not include additional cost such as vacuum cleaners, cleaning carts, sanitary and cleaning products, detergents, and so on. The option is not appropriate.

	Gross	Gross Employee			Employer					
	wage	Health insurance	Social insurance	Health insurance	Social insurance	Super Gross wage	Income tax	Tax allowance	Net wage	
1	3000	135	195	270	750	4100	615	0	2055	
2	3000	135	195	270	750	4100	615	0	2055	
3	3000	135	195	270	750	4100	615	0	2055	
4	3000	135	195	270	750	4100	615	0	2055	
5	3000	135	195	270	750	4100	615	0	2055	
6	3000	135	195	270	750	4100	615	0	2055	
7	3000	135	195	270	750	4100	615	0	2055	
Total	21,000	945	1365	1890	5250	28,700	4305	0	14,385	

Table 4. Net wage of cleaners of Agreement to perform work (2).

#### 3.3. Agreement to perform a job

The public institution can also opt for an agreement to perform a job. If a cleaner works up to 300 h a year (a gross wage of less than 10,000 CZK), the income tax is of 15%. The total amount does not include additional cost such as vacuum cleaners, cleaning carts, sanitary and cleaning products, and detergents, and it is necessary to add them to the total amount paid for the service.

By a personal interview with a cleaner and the monitoring, trademarks of cleaning products, including suppliers, were found to calculate the operating costs of the service. Personal conversation could not be recorded because of privacy concerns about the person being addressed.

#### 3.4. Choice of the cleaning cart

Assuming that a public institution decides not to hire an external company for the service (cleaning) and opts for hiring its own cleaning staff, it will be essential to equip the cleaning staff with the necessary sanitary and cleaning supplies designed to clean the offices and common parts. A personal interview with a worker showed that each cleaner has their own cleaning cart, including vacuum cleaners and detergents, which are located in the closed premises of a public institution attended by the cleaning staff in the afternoon.

**Figure 2** depicts a simple wheeled cleaning cart, which helps to be easily moved and manipulated both inside and outside. It is equipped with a plastic bucket and mop rigs [29]. The cost of one trolley is CZK 1597/1 cleaning staff (11,179 CZK/7 workers).

The above-mentioned cleaning cart (see **Figure 3**) is not plastic; its base is a chrome structure that allows you to handle two 17l plastic buckets. An advantage is the side baskets, which can

be purchased individually, including a mop-wringer [31]. The price of one cleaning trolley is 2650 CZK/1 cleaning worker (18,550 CZK/7 workers) (**Figure 4**).

The third type of the cart is a professional trolley. It has a chrome-plated construction, a waste bin, two smaller buckets, one big plastic bucket, part of which is a mop-wringer [33]. The cost of one cart is CZK 5977 per 1 cleaner (41,839 CZK/7 workers).

Although a large number of cleaning carts are available, the three we have selected are common, and perfectly suitable for cleaning work. In terms of price, functionality, and ease of use, the first cart was chosen.

#### 3.5. Choice of the industrial vacuum cleaner

It is necessary to choose an industrial vacuum cleaner of higher performance can clean up a larger area of dirt on everyday use (**Figures 5** and **6**).

The above vacuum cleaner is capable of vacuuming dry and wet dirt on smaller surfaces [35], which are sufficient to clean the office and common areas. The product is made on the basis of interchangeable sachets that capture dirt [36]. The cost of one industrial vacuum cleaner is 5044 CZK/1 workers (35,308 CZK/7 workers).



Figure 2. Cleaning cart AMIGO 35 l. Source: [28].



Figure 3. Cleaning cart CLAROL. Source: [30].



Figure 4. Cleaning cart with one bucket. Source: [32].



Figure 5. Kärcher NT 27/1 vacuum cleaners. Source: [34].



Figure 6. PLAY 202 STEEL vacuum cleaners. Source: [29].

This vacuum cleaner is designed for everyday use, it is suitable for cleaning common areas, and however it cleans dry dirt only. The price of one industrial vacuum cleaner is 4538 CZK/1 cleaner (31,766 CZK/7 workers) (**Figure 7**).

Another possible vacuum cleaner is the Bolezzo 151 industrial vacuum cleaner, which is designed for daily vacuuming of dry and wet dirt that is captured by a long-life filter (7 years



warranty) [38] that is influenced by vacuum cleaner maintenance. The price of one industrial vacuum cleaner is CZK 3589 per 1 cleaning worker (25,123 CZK/7 workers).

**Table 5** revealed that the most advantageous candidate for quality purchase is the first Kärcher vacuum cleaner, however, with the highest price and no warranty period. The second Soteco vacuum cleaner is more affordable, the power consumption of the device is lower by 80 W compared to the previous, and the volume of the tank is sufficient (191). The disadvantage is the use only for dry dirt, which is unacceptable for practical use in offices and common areas due to the winter season. The third Bolezzo vacuum cleaner is best priced. It is made for both dry and wet dirt, but the power and volume of the tank have the lowest values. As cleaning is done every day, the Bolezzo is the recommended type to be purchased [39].

The basic equipment also includes a cleaning trolley, a vacuum cleaner, a mop, detergents and supplies [40], such as a mop holder, an aluminum rod or a flat mop. A suitable option for is the 41.5 cm flat mop holder is made of high-quality hardened plastic; the rod for the mop holder is made of aluminum. The cleaning mop suitable for water washable floors with a length of 41.5 cm and a lifetime of 250 washing, corresponding to the area of the office and common areas.

Producer	Kärcher	Soteco	Bolezzo
Weight(kg)	7.5	10.64	
Power input (W)	1380	1300	1000
Noise level (dB)	72	63	
Tank volume (l)	27	19	15
Dry dirt	yes	Yes	yes
Wet dirt	yes	No	yes
Shipping cost	0 CZK	182 CZK	0 CZK
Guarantee (years)	_	1	7
Price (1pc)	5044 CZK	4538 CZK	3589 CZK
Price (7pcs)	35,308 CZK	31,766 CZK	25,123 CZK
Source: Authors.			

Table 5. Industrial vacuum cleaner parameters.

Supplier	B2B partner	Habra	Simply clean
Holder type	Flat mop holder 40 cm	Flipper holder 40 cm	Flipper holder 40 cm
Holder material	plastic	plastic	plastic
Price 1pc	844.58 CZK	823.00 CZK	653.00 CZK
Price 7 pcs	5912.06 CZK	5761.00 CZK	4571.00 CZK
Shipping cost	0 CZK	0 CZK	157 CZK
Total price	5912.06 CZK	5761.00 CZK	4728.00 CZK

Table 6. Options for a supplier of a mop holder.

Supplier	B2B partner	Habra	Simply clean
Rod brand	Not known	Alu	Alu
Material	Aluminum rod	Aluminum rod	Aluminum rod
The length of the rod	140 cm	140 cm	140 cm
Rod diameter	2.35 cm	2.35 cm	2.35 cm
Price 1pc	204.49 CZK	163.00 CZK	109.00 CZK
Price 7 pcs	1431.43 CZK	1141.00 CZK	763.00 CZK
Shipping cost	0 CZK	0 CZK	157 CZK
Total price	1431.43 CZK	1141.00 CZK	920.00 CZK

Source: Authors.

Simply Clean is also a suitable supplier according to the price criterion with the same product quality.

**Table 7.** Options for a supplier of an aluminum rod.

Supplier	B2B partner	Habra	Simply clear
Mop brand	Flat mop-combin	Flipper	Flipper
Mop length	41.5 cm	40 cm	40 cm
Price 1pc	177.87 CZK	151.00 CZK	104.00 CZK
rice 7 pcs	1245.09 CZK	1057.00 CZK	728.00 CZK
Shipping cost	0 CZK	0 CZK	157 CZK
<b>Total price</b>	1245.09 CZK	1057.00 CZK	885.00 CZK

Source: Authors.

As it is the same product with a different price, Simply Clean is a suitable supplier due to the lowest price of 885 CZK.

Table 8. Options for a supplier of a mop.

		Cleaning mop
Eastmop AMIGO 351	BOLEZZO 151	FLIPPER
1597 CZK	3589 CZK	866 CZK
11,348 CZK	25,123 CZK	6062 CZK
		42,533 CZK
or clearing supplies amounted to 42 giene, soaps, and similar).	2,533 CZK (it does not include the co	st of sanitary products,
	1597 CZK 11,348 CZK or clearing supplies amounted to 42	1597 CZK 3589 CZK 11,348 CZK 25,123 CZK or clearing supplies amounted to 42,533 CZK (it does not include the co

Table 9. Initial investment for clearing supplies.

**Table 6** reports the suppliers of the same goods with a different price. From the point of view of the identity of the goods, a purchase is recommended with a Simple Clean supplier whose price is the lowest and is CZK 4728 (the quality of the product is the same) (**Tables 7–9**).

### 4. Conclusion

At first, the analysis was carried out to find if service outsourcing is profitable for the institution considering the financial cost per a cleaner.

As there are several forms of employment, the present chapter presents possible options, including the calculation of the total monthly and annual wage costs that the public institution would spend if it did not accept the possibility of using outsourcing services and chose the way of employing cleaning staff itself. In connection with the individual calculations, the cost of cleaning accessories, such as cleaning carts, industrial vacuum cleaners and mops, including the valuation of suppliers of external firms, was also calculated.

Based on the calculations, a suitable supplier, the wholesale of MAKRO CZ [41], was chosen due to its long tradition, the wide range of offered assortment, transport accessibility, the possibility of payment by cash payments, repayments or invoices, and various offers of sales representatives, the number of offered discounts, offers, sales support system, such as the core business focusing on the company's core business in terms of concentration on key business processes. After considering the variants submitted, the public institution decided to use outsourcing in order to reduce the financial costs, which confirms the research questions 1.

The financial saving was designed in order to eliminate increased investment costs [42], minimize the operating costs and reduce the wage costs, to transform investment spending into operational tax optimization, by more transparent cost planning and by reducing or eliminating hidden costs, and sharing investment risk. Transferring the competence of an ancillary activity to an external company enables the public institution to have an advantage of focusing on the main activity, including the time advantage, as it can provide a higher quality of services with a lower administrative burden. Through an external firm, the public institution can implement support processes as they are in the competence of an outsourcing company, such as the management of cleaning staff costs, wage and accounting agenda, control activities, transfer of cleaning products, recruitment of new cleaning staff and similar. Other reasons for outsourcing include the transfer of risk to another business entity, for example, in case of damage, loss of property, electronics, written documentation or possible delay. In the case of a full-time worker employed in a public institution, the amount of compensation is 60,000 CZK.

It was found that in the event of dissatisfaction with an external firm, the public institution initiates an immediate working meeting with a view to the operational elimination of the problem, including the possibility of joining the sanctions stipulated in the contract or possibly bringing legal proceedings, for example due to failure to pay the invoice in time.

The geopolitical risks, which are often ignored, are a challenge for risk managers who need to take into account or set up defensive measures when defining business prospects. By [43], such rick include deflation in the euro area, i.e., the expected fall in prices in the euro area sector, with may start the deflation spiral to spin, stagnation of salaries due to a reduction in household spending and unfavorable geopolitical development in the world, for example in Ukraine. So, there has been evidence of global geopolitical risks in the world.

After considering all of the above-mentioned possibilities, the public institution has outsourced supporting subsidiary activities by addressing an external company providing cleaning service where the annual service cost is CZK 338,660 CZK. As research questions 1 was confirmed, the institution did not use the possibility to employ the cleaners on its own due to too high financial cost, in particular the wage (annual payment of 1,157,128 CZK). Such amount is higher by 818,468 CZK, and it is not economical as it is not possible to employ the cleaners in a full-time employment as they can work in the afternoons only. A part-time job is a possible solution as the working time is shorter (the cost would be 678,160 CZK, compared to current 338,660 CZK).

Another possibility is the agreement to perform work, where the gross wage amounts up to 2500 CZK (the annual wage costs for the cleaning staff are 212,800 CZK). Such amount is lower by 125,860 CZK than the annual amount paid out to the outsourced company. If the monthly gross wage of the cleaning staff was set at 3000 CZK, the annual cost would be 340,480 CZK. Although the sum is very similar to the amount paid by a public institution to an external company for the services provided, it does not take into account the amount of operating costs (the outsourcing option is more favorable and economical). The outsourcing competition may also be an alternative to the agreement to perform a job. Although the calculated monetary amount is lower, it only takes into account the costs of the cleaning staff, not the operating costs.

Based on the results found and the confirmation/rejection of the research questions, it can be stated that for a public institution the variant of outsourcing of services as ancillary activity is advantageous due to the reduction of the financial costs especially the wages.

With regard to long-term partnerships, it is appropriate to conclude a contract with an external company, including description of the penalties, damages, default, and extraordinary events, which may result in litigation between the parties. In the current contract, the maturity date is from January 1, 2016 to December 31, 2016, which implies that outsourcing is at the final stage of the life cycle. This rejects research questions 2.

The interview with a cleaning worker revealed that contracts with external companies were only concluded for a fixed period of 1 year, so it would be appropriate to confirm mutual cooperation by signing the contract in the long term for a minimum of 3 years or more with the possibility of further renewal in case of positive business partnerships. The advantage of concluding a longer-term contract is that the supplier can better plan the process of obtaining financial income, investment, or obtain better certainty of future income by obtaining a guaranteed customer/buyer, without the cost of maintaining a competitive advantage due to longer cooperation.

#### 4.1. Disadvantages of the outsourcing customer

In case the outsourcing relation is not optimal, cost saving might not meet the expectation. There may be an increase in costs, in particular transaction costs, transport cost, and consultancy costs. The cost of changing the contract may be expensive for the outsourcing client, and at the same time very risky, because the supplier in most cases passes ownership of the property or infrastructure.

If the relationship with an external organization collapses, there is a risk of leakage of sensitive information due to the breakdown of the mutual intensive cooperation of the partners. A customer tends to withdraw from a contract with a supplier, bringing increased expense to change legal documents in the short term in order to reach out to new, suitable outsourcing providers who take responsibility for purchasing of equipment and technology.

As the companies also require references and experience in the area of their business, it is vitally important to choose a trustworthy outsourcer with a positive references who is able to guarantee the protection of intellectual property.

#### 4.2. Disadvantages of the outsourcing provider

The outsourcing provider may deviate from the current business and business model by acquiring a new subscriber. Higher assets, and an increase in the capital and human capital requirements, increase the management requirements, such as increased number of non-productive jobs, the change in the organizational structure of the enterprise, the assumption of risk for changes of technology.

Business reasons for outsourcing and its possible benefits include competitive, strategic advantages taking future, long-term business advantages into account. Factual reasons develop core business and its improvement in the most important activities, accenting the support of tradition, reputation and image of an enterprise, in some unfortunate cases also the survival of the enterprise. Financial reasons for outsourcing include cost reductions and/or revenue increases, where the costs (finance) are the decisive and evaluating factor of outsourcing. Simplified management and downsized organizational structure known as restructuring is related to the specialization of an enterprise, its employees, but also the middle management. Due to the long-term contract and the mutual knowledge of the partners, it is not necessary to invest high costs for advertising, marketing and direct sales (savings can be used in transaction costs). For example, an outsourcing client may leave the logistics center to an external company that obtains a convenient coverage of a particular location.

Short-term advantages generate the flow of funds and the release of capital and sources of use for other purposes; reduce operational costs, and share risk. Certain difficulties are related to the unpredictability of costs and transparency of expenditure in the area. An enterprise does not have sufficient human resources to manage functional areas; some resources are not internally available, when moving to another location. Some activities are difficult to control, such as inter-operational control.

Due to the strategic importance of the decision to implement the outsourcing process through the project, it is advisable for an enterprise to develop a detailed project and methodology for addressing service provider issues with regard to individual phases, strategic functional area analyses and their determination to be excluded in the context of risk analysis and identification, requirements and selection of outsourcing providers including managed contractual partnerships.

Improving the overall perception of the outsourcing contract in terms of overcoming some of the barriers in communication should include interactivity between the communicator and the recipient of the communication calling for a contact person, who can be addressed if necessary.

Pro-activity between managers/shareholders/employees is required to communicate information, support team cooperation, and understand the members of the team. It is important to spread messages by setting up communication channels at regular intervals and in a standardized format; together with pointing to cultural differences related to misunderstanding of the main principles of communication and misinterpretation of its importance.

In order for companies to be able to provide complex facility management services, it is appropriate, on the basis of a good contractual relationship, to conclude a long-term advantageous contractual contact with the external supplier in the agreed quality and service level with regard to the merger of the services. If possible a single supplier is required whose interconnection have and high degree of substitutability and reinsurance of stable levels of stability and delivery quality with an emphasis on human resources and labor safety management and guaranteed level of savings, higher labor productivity and an integrated management system with a contact person for the customer (the client of a public institution) that manages, delegates the services provided, eliminates possible duplicates and misunderstandings when entering work assignments. High emphasis is placed not only on the soft and hard skills of managers, especially on communication and bargaining skills, but also on the management of crisis situations and empathy, including professional expertise and practical experience of a complex service worker.

Regarding the location of service providers, most of them are located in Prague as it is a more attractive location compared to other regions of the Czech Republic. The second highest representation of enterprises in the field of outsourcing in the Czech Republic is in the

Moravian-Silesian Region, as reported by study [16]. There are 1/3 of small enterprises; middle-sized enterprises with more than 250 employees account for 2/3 only.

Regarding the service portfolio, personal outsourcing is popular in the Czech Republic such as occasional help, helpdesk and consultancy. In terms of trend and innovation in human resources, many HR managers are leaving the traditional pattern of employing workforce, transferring to the permanent hiring of a skilled, top worker who brings innovative experience, practical skills and quality information into the work process, having a long-term positive impact on the reduction of the total costs of the enterprise (operating, financial, and HR), which is a basic prerequisite for the success of each enterprise in a dynamic environment. By using outsourcing services, time savings can be achieved and also cost savings in particular the wages (variable fixed costs transfer), improved cash-flow, longer-term risk elimination, long-term efficiency of personnel processes with an emphasis on employee skills development, personnel audit and company-wide analysis, increased production volumes, including the handling of unpopular personnel steps by an independent external expert.

Efficient management through specialized tools, innovative management solutions, reduction of administrative burden using modern IT technologies and a single entry of inputs and outputs, checks, reports or invoicing of services increases the interest of clients in complex solution of facility management services with the emphasis on expanding and improving the portfolio of services.

The importance of system integration, streamlining the functionality of different departments with the support of strategic alliances working together with an outsourcing partner is also necessary to be taken into account. Investing in data center operations and security is one of the prerequisites for sustainability and strategic competitiveness with the synergies used by strategic alliances with outsourcing partners.

With the accession of the Czech Republic to the EU on 1st May, 2004, the Czech Republic has become a more attractive business environment for foreign, strategic, business partners, especially in the field of development of outsourcing. With the ability to transfer information and deliver real-time business results with the support of functional communication channels and resources and a low value for the workforce valuation, the Czech Republic continues to maintain one of the world's leading outsourcing markets.

In terms of expected future developments, the cost of service might be reduced again. The cost-cutting process might be caused by an increasing number of providers/competitors of both current and future. At the time of the economic recession, companies have a competitive advantage, above all, the price by which they reduce their own costs and change the terms of the outsourcing contract in relation to the volume of services, Service Level Agreement, etc., to reduce as spending much as possible and increase competitiveness in the global market.

The drop in prices can put pressure on Asian suppliers, whose competitive advantage is mostly the lowered price of products/services as the quality is low in most cases. This state may also decrease the final price for the product/service.

Based on the prediction of prices in North America and the EU, the analysts of Gartner Company [44] predicted by current trends and pressures of the economic crisis an average decrease of

outsourcing services by 5–15%, especially in the area of network services, data centers, and helpdesk use. Developments in price decline will be further influenced by location of enterprises, by the size of clients and outsourcing contractors. It might be useful for all the stakeholders, to achieve good and sustainable partnership, contractual relationships beneficial to all involved, with the call for increased quality of service provided as a potential competitive advantage.

## Author details

Radka Vaníčková<sup>1,2\*</sup> and Gabriela Gabrhelová<sup>1,2</sup>

\*Address all correspondence to: vanickovaradka@gmail.com

1 Department of Management, Faculty of Corporate Strategy, The Institute of Technology and Business in České Budějovice, Czech Republic

2 Department of Management and Economics, DTI University in Dubnica nad Váhom, Slovak Republic

## References

- [1] Rydvalová P, Rydval J. Outsourcing ve firmě: Průvodce pro manažera s tipy pro české prostředí. Brno: Computer Press; 2007. p. 2007. ISBN 978-80-251-1807-8
- [2] Sudi L. The Lived Experiences of Federal Agency Information-Technology Employees in Times of Outsourcing. ProQuest LLC; 2010. p. 240
- [3] Fučíková J, Šikýř M. Diversity management with focus on personality: The experience from the Czech Republic. The 7th International Days of Statistics an Economics; 2013. pp. 408-416
- [4] Dvořáček J, Tyll L. Outsourcing a offshoring podnikatelských činností. Praha: C.H.Beck; 2010. ISBN 978-80-7400-010-2
- [5] Kadefors A. Contracting in FM: Collaboration, coordination and control. Journal of Facilities Management. 2008;6(3):178-188
- [6] Bröchner J, Adolfsson P, Johansson M. Outsourcing facilities management in the process industry: A comparison of Swedish and UK patterns. Journal of Facilities Management. 2002;1(3):265-271
- [7] Anseeuw J, Van Seghbroeck G, Volckaert B, De Turck F. BPMN extensions for decentralized execution and monitoring of business processes. CLOSER 2015. 5th International Conference on Cloud Computing and Services Science, PRO; 2015. pp. 304-309
- [8] Simply Clean [Online]. 2013-12-14. Available at: http://www.simplyclean.cz/kuchyne/ 6240-savo-original-900ml.html
- [9] Stýblo J. Outsourcing and Outplacement. Praha: ASPI; 2005. p. 2005. ISBN 80-7357-094-7

- [10] Swift I. The Perceived Effect of Hidden Costs on the Operational Management of Information Technology Outsourcing: A Qualitative Study. ProQuest LLC; 2011. p. 169
- [11] Kampf R. Outsourcing dopravně-logistických procesů. Brno: Tribun EU; 2008. p. 2008. ISBN 978-80-7399-437-2
- [12] Brooks A, Lilley G. Enabling technology for outsources facilities management. Electronic Journal of Information Technology in Construction. 2006;11:685-695
- Barratt R. Outsourcing in the biopharma sector Opportunity or threat? EBR European Biopharmaceutical Review. (WINTER); 2009. pp. 32-34
- [14] Platy [Online]. 2013-12-14. Available at: http://www.platy.cz/platy/pomocne-prace/uklizecka
- [15] Brukner T, Voříšek J. Outsourcing informačníchsystémů. Praha: Ekopress; 1998. p. 1998. ISBN 80-86119-07-6
- [16] Khun J. Analýza nabídky i využití outsourcingu IT v ČR. Časopis IT Systems. vol. 4; 2005. pp. 1-2
- [17] Lam TYM. Outsourcing of housing services in Hong Kong: Optimization of transaction value. Journal of Facilities Management. 2011;9(2):114-126
- [18] Lorincová S, Hitka M, Balážová Ž. Corporate culture in Slovak enterprises as a factor of HRM quality – Case study. International Journal for Quality Research. 2016;10(4):719-732
- [19] Němec M, Holátová D. Crisis management and human resources. The 10th International Scientific Conference INPROFORUM. vol. 10; 2016. pp. 270-273
- [20] Hrazdilová Bočková K, Lajčin D. Inovace v době krize. Aspekty riadenia a vzdelávania ľudských zdrojov. Vol. 2014. Dubnica nad Váhom: Dubnický technologický inštitút v Dubnici nad Váhom; 2014. pp. 16-29. ISBN 978-80-897-32-18-0
- [21] Ventoyuori T, Lehtonen T. Alternative models for the management of FM services: An empirical investigation. Journal of Corporate Real Estate. 2006;8(2):73-90
- [22] Velkoobchod Makro. Leták sortimentu [Online]. 2013-12-14. Available at: https://catalogues.metro-group.com/makro-katalogy/vse-pro-uklid-2013-2014/page/1
- [23] Hrazdilová Bočková K, Lajčin D. Terminologické minimum nejen pro manažery. Dubnica nad Váhom: Dubnický technologický inštitút v Dubnici nad Váhom; 2014. ISBN 978-80-897-320-81
- [24] Fanta P. Outsourcing. In: Autoreferát k doktorské disertační práci. Praha: Vysoká škola ekonomická. Vedoucí práce Prof.Ing. Eva Kislingerová, CSc; 2004
- [25] Práce u nás [Online]. 2013-12-14. Available at: http://www.praceunas.cz/volna-mista/ tabor/index.php?id=5782670715
- [26] Lang H. Management Trendy a Teorie. Praha: C. H. Beck; 2007. p. 2007. ISBN 978-80-7179-683-1
- [27] Novák V, Vokoun M, Stellner F, Vochozka M. Institutional analysis of contemporary regional labour market in the Czech Republic. E+M Ekonomie a Management. 2016;19(3):4-19

- [28] Řezáč J. 2009. Moderní management: Manažer pro 21. století. Brno: Computer Press; 2009. ISBN 978-80-251-1959-4
- [29] Simply Clean [Online]. 2013-12-14. Available at: http://www.simplyclean.cz/uklidovevoziky/4406-uklidovy-vozik-plastovy-amigo-1x35l.html
- [30] Habra [Online]. 2013-12-14. Available at: http://www.habra.cz/clarol-uklidovy-vozikeastmop-dvoukbelikovy
- [31] Simply Clean [Online]. 2013-12-14. Available at: http://www.simplyclean.cz/73-drzakymopumopy
- [32] B2B Partner [online]. [2013-12-14]. Available at: http://www.b2bpartner.cz/products/10002197/147048/?utm\_source=heureka&utm\_medium=shopbot&utm\_campaign= heureka147048
- [33] Škodová Parmová D. Central European economies competitiveness based on the Services for Entrepreneurs. The 10th MIBES' Conference – Larisa, Greece, October 15th–17th Larisa, Greece 2015; 2015. pp. 421-429
- [34] Habra [Online]. 2013-12-14. Available at: http://www.habra.cz/vysavac-karcher-nt-27-1-professional-prumyslovy
- [35] Tatrachema [Online]. 2013-12-14. Available at: http://eshop.tatrachema.com/tekute-cistiace-prostriedky-page-2.html
- [36] Techdraw [Online]. 2013-12-14. Available at: http://www.techdraw.cz/Pracovnipomucky-a-drogerie/Cistici-prostredky/Clin-na-okna.html
- [37] B2B Partner [Online]. 2013-12-14. Available at: http://www.b2bpartner.cz/products/ 10000622/403032/
- [38] Z. 134/2016 Sb. Zákon o zadávání veřejných zakázek
- [39] Heureka [Online]. Feeling. 2013-12-14. Available at: http://www.heureka.cz/
- [40] Zenit [Online]. 2013-12-14. Available at: http://www.zeniteshop.cz/podlahy-aomyvateln%C3%A9-plochy/42-hit-universal-jablko-500-g-8594004374103.html
- [41] Urbánek V. 10 největších rizik pro akciové trhy v roce 2015; 2014. Kurzy cz [Online], 12/2014 [2015-02-03]. Available at: http://www.kurzy.cz/zpravy/374385-10-nejvetsichrizik-pro-akciove-trhy-v-r-2015/
- [42] Plane CV, Green AN. Buyer-supplier collaboration: The aim of FM procurement? Facilities. 2012;30(3-4):152-163
- [43] Tradetex [Online]. 2013-12-14. Available at: http://www.tradetex-servis.cz/produkt/cisticiprostredky/na-nabytek/diversey-pronto-multi-surface-cleaner-spray-400-ml-15033.htm
- [44] Gartner. Forecast Overview: IT Outsourcing. 2017. Available at: https://www.gartner. com/doc/3761863/forecast-overview-it-outsourcing