

## Offshored Service Cost Model as a Key Post-Transition Challenge

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**Abstract.** Business process offshoring has been dynamically growing worldwide in the last few years, facilitated by the corporate need for operational expenses reduction, overcoming skilled workers shortage and the potential for operations optimization. At every stage of organizational changes, there are various challenges the service offshoring managerial community constantly struggles with. The paper presents the offshored service cost model that can be adjusted and applied for service budgeting, valuation and control, for it has been identified as the most common challenge affecting Polish service offshoring corporations in the post-transition period. The need for strengthening this area of knowledge was identified through empirical research and the case study conducted in this work serves for presenting the authors' insights on cost modelling for offshored business services.

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## INTRODUCTION

In the past few years, we observe the growing intensity of international service transfers in Central and Eastern Europe (CEE). Poland appears to be the regional leader in offshoring services, with the stable industry increase of around 20% annually (ABSL 2015). There are many aspects that have facilitated this dynamic development. Among others, organizations look for cost reduction, service optimization, quality increase, or the ability to focus on their strategic business goals (Campbell, 1995; Kakabadse and Kakabadse, 2002). Economic results are normally achieved through performing tasks by a smaller number of units servicing

global or regional entities located offshore, reengineering of business processes, and above all, by cutting operational expenses (Al-Turki, 2011). Business process outsourcing may increase company's competitive advantage and cost effectiveness (Garg and Deshmukh, 2006).

Companies try to implement best costing solutions that reflect sound balance between low costs and high service delivery quality. Effective business strategy needs to be embedded in the best cost modeling practices. There are various ways of limiting budgets while maintaining sound performance standards. Establishing ties between two business environments with the use of new information technology (IT) developments and innovative technologies needs to be incorporated in a modern business strategy (Bilan, 2008). Moreover, long-term cooperation with business partners shall be achieved and managed only through consideration of both parties involved: service provider and customer (Sinkkonen et al., 2013).

The aim of this work is to carry out a case study based on the cost model of a transferred service for the post-transition phase of offshoring organizational change. The need for strengthening this area of knowledge was identified based on the empirical data gathered from a number of interviews and email communication with the managerial crew of the offshoring companies located in Poland. During that process, it was noticed that a very common and critical post-transition challenge is the development of a consistent cost model. Thus, the following research questions shall be discussed and answered in this paper:

1. How can we identify and classify potential problems that might present themselves after the service is transferred, with specific regard to their frequency and importance?
2. How can we respond to the most challenging post-transition issue and develop an optimized offshored service cost model, enabling us balance the inevitable dichotomy of possibly lowest costs and high performance?

## THEORETICAL REVIEW

Business process offshoring is to be understood as moving some business tasks to a country different than a company's home country (Rilla, Squicciarini 2011). Those firms that obtain goods and services domestically are referred to as onshore, and those acquiring supplies from abroad take part in the offshore activities (OECD 2007). In the beginning on XXI century, it has become an important global strategy for most organizations worldwide (Aundhe, Mathew 2009). International service transfers to some offshore locations become a widely implemented trend and shall continue further in the future (Stringfellow, Teagarden, Nie 2008). There are many factors facilitating dynamic growth of the offshoring industry, like the reduction of trade barriers and transportation costs, so as the technological change (Bottini, Ernst, Luebker 2007). Most of the companies that consider such corporate transformation are encouraged by the reduced foreign costs; lower multinational transaction costs (resulting from globalization and enhanced technology), so as the improved governance and institutions in foreign destinations for outsourced business activities (Mankiw, Swagel 2006). The operational standardization and digitalization enable to reduce the duplication of some tasks executed in two locations and limit the number of employees, often referred to as full time equivalent (FTEs).

One of the key features of business process offshoring industry is the organizational change, executed through transition project. Project management gained a central role in the management of organizations in almost every field of human activity (Aubry, Müller, Hobbs, Blomquist 2010). According to UCCISA, every service transfer is coordinated under a few project steps and the scope of service transition includes the coordination of processes, functions and systems to package, design, test and deploy a release into service delivery, at the same time establishing the service defined in the service buyer and stakeholder require-

ments. Transition management is an integrated governance strategy to orient and organize transformation in complex networks in the context of broader societal transitions (Loorbach 2013). It not only highlights the multi-level dimension of this phenomenon, but also emphasizes the importance of interaction, coordination, and learning that are crucial in order to scale up its results (Marquardt 2015). Transitional project has often a number of phases, and we can define its completion at the cut-off/go-live day, when the service is successfully transferred to a partner organization located abroad, with the responsibility completely taken over by the new service delivery unit.

Cost is a money measurement of the efforts that a company has to make to achieve its goals and cost centres/pools are such locations with which expenses can be efficiently associated for the aim of product or service costing (Glautier, Underdown 2011, p. 828-836). The function of the cost category is similar to the function of the accounts chart in general ledger (they might have direct cost amounts associated with them, and must have primary, secondary and service costs assigned to them) (Microsoft 2016). Cost item can be used as a measure for one of the business functions in the value chain (Horngren, Datar, Rajan 2009, p. 18). A cost driver is a variable, such as volume or level of activity that affects costs over a given time period. An activity is a task, unit of work or event with a specified purpose (Horngren, Datar, Rajan 2009, p. 32).

In traditional costing systems, cost centres consist of departments, and sometimes they were further divided into smaller segments (e.g. separate work centres within a department), at the same time assuming direct labour or manufacturing hours to have significant long-run influence on overhead expenditures (Drury 2012, p. 78,79). Nowadays, more and more organizations shift to the activity-based costing model (ABC) that enables significant systematic improvements, by allocating overheads with the use of multiple rates for tracking indirect costs by activities consuming those costs (Williams et al. 2010, p. 779). It can be a better method for service or product costing, based on the use of resources needed for producing product or service (Alleyne, Weekes-Marshall 2011). As stated by Ayvaz & Pehlivanli, activity-based budgeting (ABB) is “the budgeting of sources according to target activities” (2011, p. 150). It starts with collecting all costs engaged in the process (including time, materials, overheads etc.) and moves to the comprehensive and precise allocation of expenses. It aims on presenting a full breakdown of the expected costs (that might take a form of master budget compiled of a number of cash budgets for some budgeting period) (Alleyne, Weekes-Marshall 2011). Budgeting can be used for control and planning that forces decision makers to look ahead and translate strategy into plans, to communicate, coordinate and provide a benchmark for solid performance evaluation (Horngren, Datar, Rajan 2009, p. 47).

Multinational financial management causes some challenges when comparing to a single-country operating company, like currency denominations, legal conditions and economic ramifications, language and cultural differences, role of governments and politics. Schemes concentrating on business environment improvement and financial activities enhancement tended to focus on the removal of international trade and business barriers (Bilan 2009). Most of the offshoring business organizations are multinational, or global, understood as ones operating in an integrated fashion in many of countries (Brigham, Houston; 2012). In real managerial cases, one can frequently encounter problems where the total cost is used in constructing the common platform for an organization, and so it needs to be shared by all the units within this organization (Du, Cook, Liang, Zhu 2014). Flexible budgeting in any business environment results from customers that often expect service providers to modify ways of financial resources allocation (Rudawska, Renko, Bilan 2011, p. 20). Business process offshoring can also comprise some hidden issues, including the cost of selecting a service vendor, transition project costs, layoff and ramping-up costs (Overby, 2003). In the current economic situation, with persisting elements of economic crisis in some locations, managerial community requires the exact information about a financial situation of their organization. They need reliable data not only about their business in general, but also about the individual departments, units and

activities. Aiming for the profit or loss evaluation, it is necessary to spot all the qualitative and quantitative parameters (Maryska, Doucek 2015). Budget management risks result from uncertainties about requirements and resources (Madhuchhanda, Sji 2009). It is very important to estimate the costs with the highest possible precision, for any estimation error may lead to the detrimental consequences for the performance of processes transferred abroad (Larsen 2015).

## RESEARCH PROCESS

The research focuses on practical issues of transferred service budgeting and cost modelling in the post-transition phase of an offshoring organizational change. It was decided that the empirical approach shall be assumed in gathering the data, which has taken part in between March 2015 and January 2016, during a number of personal interviews and extensive email exchange with managers of the service offshoring corporations' located in Poland. The target group represented 48 companies from the business sectors of Banking (Account Operations and Payments), IT (Service Desk and Remote Infrastructure Management) and Accounting (Accounts Receivable, Account Payable and General Ledger). The offshoring corporations located in Poland are mostly the well-renowned, foreign companies, originating from the regions of the European Union, the United States of America, and Asia. The insights were gathered from 62 managers responsible for People Management (Team Leaders/Coordinators), Transition Management (Transition/Migration Managers) and Senior Management (Operations/Service Delivery Managers). Each manager has been personally interviewed one, two or three times, and after the work was completed, all the interlocutors received the ready paper version with a kind request for feedback and necessary adjustments.

During the interviews, the managers were inquired about the challenges with which they had been struggling, together with their experiences and cases in real business context, at the stage after the process transfer is completed and the responsibility for service delivery is handed over to the service vendor company. After the data has been collected, the authors analysed and discussed the results, so that the research questions could have been solidly evaluated and responded. Next, the problems had been classified into 5 categories. The first group (FREQUENCY) corresponds to the number of the managers interviewed, reflecting how many of them have mentioned a given problem (whether it was only one person, or all 62 of them). For this categorization, the authors implemented the following scale: only 1 manager (individual), 2-19 managers (few), 20-31 (many), 32-45 (majority), 46-62 (vast majority). The second category (MODEL) addresses the question, whether a given problem is characteristic of only one of the two most popular operational models of offshoring that are: business process outsourcing (BPO) or in-house (captive). Another class (SECTOR) corresponds to the sector in which a given problem can be found, i.e. Accounting, IT or Banking. The next category (SIDE) defines in which of the two major sides of the transitional change (service buyer or service vendor) a given problem is more likely to occur. Another group of problems (TYPE) aims for answering the question if a given function applies merely to the outsourcing business (so a service transfer to a different company located in the same country), or to its offshoring variant (when the vendor company is located abroad). The results are presented in Table 1 below.

Table 1

Common post-transition problems in the offshoring industry

#	FREQUENCY	MODEL	SECTOR	SIDE	TYPE	PROBLEM
1	Majority	BPO/ in-house	All	Vendor/Buyer	Outsourcing/ Offshoring	Stakeholder communication issues
2	Few	BPO/ in-house	All	Vendor	Outsourcing/ Offshoring	Vendor company unable to provide the required service level due to a serious accident affecting one location
3	Few	BPO/ in-house	All	Vendor	Outsourcing/ Offshoring	Vendor company fails to meet SLA predefined performance levels
4	Only one	BPO/ in-house	IT	Buyer	Outsourcing/ Offshoring	PC User Community may not accept to use the new service, and remain dissatisfied with the provider and organizational changes
5	Many	BPO/ in-house	All	Vendor	Offshoring	Service cost in participating countries higher than expected
6	Few	BPO/ in-house	Banking	Buyer	Outsourcing/ Offshoring	Wrong calculation of the planned incoming transaction volumes and workforce capacity demand schedule
7	Many	BPO	All	Vendor/Buyer	Offshoring	Faulty cooperation with the third parties (located locally)
8	Many	BPO/ in-house	All	Vendor	Outsourcing/ Offshoring	Invalid processes of executing operational tasks
9	Few	BPO/ in-house	All	Vendor/Buyer	Outsourcing/ Offshoring	Wrong business continuity procedure (BCP) and recovery capacity objectives (RCO's)
10	Majority	BPO	Accounting	Vendor/Buyer	Outsourcing/ Offshoring	Disclosing confidential accounting information to a third party provider
11	Many	BPO	All	Vendor	Outsourcing/ Offshoring	Planned investment budget exceeding the predefined tolerance
12	Few	BPO/ in-house	All	Vendor/Buyer	Outsourcing/ Offshoring	Incorrect pricing for each of the service functionality
13	Few	BPO/ in-house	IT	Vendor	Offshoring	Low-profile office space with the poor IT infrastructure abroad affecting service delivery stability
14	Few	BPO/ in-house	All	Vendor/Buyer	Outsourcing/ Offshoring	Unclear operational risk categorization
15	Many	BPO/ in-house	All	Vendor	Outsourcing/ Offshoring	Loyalty-contracts keeping employees effectively only for some period of time
16	Majority	BPO/ in-house	All	Vendor	Outsourcing/ Offshoring	Motivation falls down across the time, the 'hurray beginning' effect passes by
17	Majority	BPO/ in-house	All	Vendor	Outsourcing/ Offshoring	Leadership issues, employees not feeling led by management
18	Many	BPO/ in-house	All	Vendor	Offshoring	Cultural barriers (inconvenience of the incumbent delivery unit- reduction or even total termination)
19	Few	BPO/ in-house	IT	Vendor	Outsourcing/ Offshoring	Too much abandoned calls, resulting from the users who immediately hang up, due to the mistake (calls <5s)

1	2	3	4	5	6	7
20	Majority	BPO/ in-house	All	Vendor	Outsourcing/ Offshoring	High workforce rotation
21	Few	BPO/ in-house	All	Vendor	Outsourcing/ Offshoring	No replacements for the key special-ists in the team in case they terminate their work (sickness or injury)
22	Many	BPO/ in-house	All	Vendor	Outsourcing/ Offshoring	Goals setup unclear and impossible to achieve
23	Few	BPO	All	Vendor/Buyer	Outsourcing/ Offshoring	People transferred to the buyer company are not allowed to work at its premises after transfer
24	Majority	BPO/ in-house	All	Vendor/Buyer	Outsourcing/ Offshoring	Fresh employees without experi-ence, trained but not ready for the live-service
25	Only one	BPO	All	Vendor	Outsourcing/ Offshoring	Naive, fresh employees exposed to making mistakes, and disclos-ing some fragile information to the service buyer
26	Only one	BPO	IT	Buyer	Offshoring	Physical attacks on the servers with personal data and confidential information from the parties in other countries (especially in Linux, but also Windows environment)
27	Vast majority	BPO/ in-house	All	Vendor/Buyer	Outsourcing/ Offshoring	Problems with establishing best practises for service budgeting and valuation
28	Majority	BPO/ in-house	All	Vendor	Outsourcing/ Offshoring	Problems with positive relations between employees, generation gap
29	Many	BPO/ in-house	IT	Vendor/Buyer	Outsourcing/ Offshoring	Need for cooperating with the direct competition (Microsoft and Apple)
30	Many	BPO/ in-house	Accounting	Vendor	Offshoring	Failing to safely archive documents, and sending them abroad (signifi-cantly shortening task delivery time)
31	Vast majority	BPO/ in-house	All	Vendor/Buyer	Outsourcing/ Offshoring	Lack of sustainable cost model
32	Few	BPO/ in-house	All	Vendor/Buyer	Outsourcing/ Offshoring	Process improvement/ optimization improperly conducted, resulting in lowering service quality
33	Many	BPO	Accounting	Vendor	Outsourcing/ Offshoring	Depersonalized service, each part of transition handled by different outsourced parties
34	Majority	BPO/ in-house	All	Vendor	Outsourcing/ Offshoring	Problems with hiring the experi-enced, native-speaking workforce in a price that the buyer is able to pay

Source: self-study.

## CASE STUDY

After the empirical data has been collected, and the problems analysed, it has been discovered that the key post-transition challenge, mentioned by the vast majority of the managers interviewed (points 27 and 31 in Table 1) is ‘Problems with establishing best practises for service budgeting and valuation’ and ‘Lack of sus-tainable cost model’. It has been decided to develop a model that would enable the audience to understand

and balance low operational costs with high performance of a transferred service, by engaging some of the interviewees in a case study in real business context. Out of 27 requests sent, only two managers responded positively, and invited one of the researchers to join small project groups (3-5 people) as a consultant, to facilitate the development of optimized cost model, based on the budgeting approaches and materials used internally by these organizations in the past. The companies represented both the outsourced (3-rd party vendor) and in-house (captive) types of offshoring activity, from the sectors of IT Helpdesk and Banking Account Operations. The work groups acted in January- February 2016, and developed solutions deeply rooted in their business contexts, by applying similar business research methods, given the time dimension that influences offshoring investments. In each business instance, the periodic and long-term costs impact the return on investments ratios (ROI), so the annual cost models will not display the whole picture about investment's benefits or shortcomings. For such reason, cost life-cycle or total cost of ownership (TCO) would need to be applied. The model is presented in Figure 1, composed of 3 cost categories and 28 cost items. It responds to the primary need for balancing high service performance with possibly lowest cost that was the main focus of the project groups engaged in this case study. Then, its detailed written explanation is provided, and in Table 2, some typical sample values for its tangible illustration are presented.

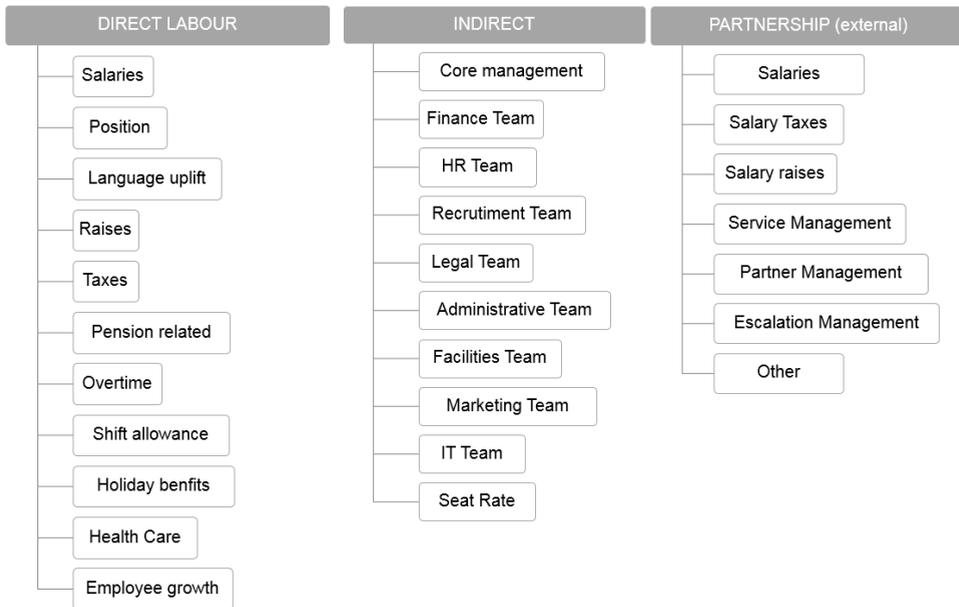


Figure 1. Offshored service cost categories and items

Source: case study.

In the cost model proposed hereto, there are two core kinds of expenses: internal (in-house) and external (extraneous), further divided into 3 cost categories and 28 cost items. Internal costs should be understood as the Direct Labour and Indirect costs, and external are Partnership Costs. What is crucial, while performing service valuation, one needs to take into consideration for how long the contract shall be signed. Fixed costs shall remain constant in a given time period despite changes in activity volume, whereas variable costs will vary in proportion to the level of activity (Hornrgren, Datar, Rajan 2009, p. 30). In every cost category,

there will be costs to be covered only at the beginning, during the transition project period (mainly related to the first month/year of operations). The one-time costs are often related to the recruitment and training of a worker, so as the transitional/project management effort. From the other hand, there shall naturally occur the reoccurring, fixed costs connected to the standard service maintenance. Firstly, the internal costs shall be described, divided into two categories: Direct Labour and Indirect costs.

Direct Labour costs shall cover all the expenses specifically linked to the person of employee (Drury 2012, p. 24). The most important constituent of the Labour Costs is always Salary, understood as the standard amount of money paid and calculated either per hour of service or some particular task. There are many factors that impact the amount of salary, like the employee's position, required skills or job market supply. In this case study, the positions are divided into three kinds: operational workers (accountants, associates, agents, analysts, etc.), team leaders or coordinators (who manage operational workers), and senior managers (leaders' supervisors: service delivery/operations managers). Before the recruitment starts, the required skills of a desired employee need to be determined (like specific university degree, certification, or language skills). Usually, it is the crucial element of the candidate's profile, especially when considering some niche skills, not broadly available on the market. Salary Uplifts are to be understood as the permanent addition to the basic salary. Moreover, Salary Raises need to be aligned (including standard contributions required by the law of a given country). The same approach is to be applied for Taxes and possible tax allowances (given particular country's jurisdictions). Moreover, there are costs related to Pensions, such as golden handshake or super-annuation (pension programme launched by a firm for the benefit of its employees). Another important element is the Overtime Uplifts that have to be paid for working outside of standard office hours, as well as Shift Allowances (collected monthly, if not part of the standard hourly rate). Every renowned corporation shall assume some amount of money for Holiday Benefits, the Health Care Package, so as the Employee Growth costs related to education and trainings, such as language courses, professional knowledge courses or degree studies subsidy.

Indirect costs are only partially linked to the actual service delivery and cannot be identified specifically with a given cost object (Drury 2012, p. 25). Especially at the beginning of the project, when there is a good potential for service expansion, one needs to take into consideration core management (group core management, delivery centre' head etc.) and other Support Teams: finance, HR, recruitment (including external agencies and recruitment advertising), legal team, administration team, facilities team, marketing, IT (internal operations, software, application development, virtualization and maintenance). The Seat Rate equally defined for every company's employee, is to be composed of the costs of acquiring and maintaining physical facilities, necessary for operational tasks execution. First of all, offshoring companies need to make a strategic decision on either building or renting the office space (taking property taxes into consideration). In general, building offices would be more reasonable for the long term, captive ventures, but it is far more popular among the outsourcing offshore corporations to rent the office space for a shorter period of not more than a few years. Utilities and maintenance should be understood as permanent costs for cleaning office space and general security, energy, water, heating, postage etc. Assets and Artefacts costs correspond to the furniture for a single employee (chair, desk, locker etc.), mobile phones and their monthly bills, PC costs (including depreciation), costs of projectors/ notebooks (including the depreciation and warranty), so as the printing costs (toners, paper etc.). Other Benefits will contain some social bonuses for every employee (e.g. Christmas/summer events, coffee/lunch vouchers, awards). Furniture is to be understood as any physical asset for common use that falls under depreciation. The Network and Infrastructure are the costs for preserving the network within a building (WAN/LAN) and within the whole company (GWAN), so as all the charges for data network support and security (server protection). Company Car Costs shall be composed of lease, fuel, wash, insurance and repair.

Table 2

Offshored service cost model with typical sample values (in PLN, gross)

UNIT	CATEGORYAND ITEM	TRANSITION period	Y1 M1	Y1 M2
INTERNAL	DIRECT LABOUR			
	1. Salary base (total)	48000	65000	65000
	2. Position uplift			
	Operational workers	1000		
	Leaders/Coordinators	12000	12000	12000
	Senior Management	8000	4000	4000
	3. Language uplift			
	Language 1 (French)	4000	4000	8000
	Language 2 (German)	5300		
	Language 3 (Finnish)	6000	7000	7000
	4. Raises			
	5. Taxes	8000	8000	8000
	6. Pension related expenses		1000	1000
	7. Overtime		4000	
	8. Shift allowance			1700
	9. Holiday benefits	200	200	200
	10. Health care	1600	1600	1600
	11. Employee growth	12000	300	800
	INDIRECT			
	12. Core management	1200	1200	1200
	13. Finance team costs	1000	1000	1000
	14. HR team costs	5000	5000	5000
	15. Recruitment team costs	16000	1800	3000
	16. Legal team costs	27000	2000	
	17. Administration team costs	3000	3000	3000
	18. Facilities team costs	1000	1000	1000
	19. Marketing Sales	12000		
	20. IT Team costs	7000	7000	7000
	21. Seat Rate			
	Building / rental	300	300	300
	Utilities + maintenance	200	200	200
Assets and Artefacts	2700	2700	2700	
Furniture	6000			
Network and Infrastructure	1700	1700	1700	
Desk phones		1890	1890	
Car + maintenance	4900	700	700	
PARTNERSHIP				
EXTERNAL	22. Salaries	18000	6000	6000
	23. Salary taxes (including legally required contributions)	5600	2100	2100
	24. Salary raises			
	25. Service Management	400	400	400
	26. Partner Management	750	1250	750
	27. Escalation Management		8000	1290
	28. Other	22000	15000	3000

Source: case study.

External Costs are defined as Partnership costs, related to business cooperation and divided into 7 items (corresponding to the ones mentioned in the internal part of our model). Partner Salaries should be calculated in a similar way as internal ones (taking into account the position, expertise and niche skills). Tax Values need to be aligned to the taxation system of a service buyer country. Salary Raises have to reflect all the planned cost allowances in the fiscal year respective to the previous year. Service Management Costs are to cover all the activities of the service vendor company involved in the management of relations with the service buyer located offshore. Some part of domestic services has to be applied to cover the delivery coordination of the external partners, like contacting offshored service buyer or SLA fulfilment-fail penalties. Moreover, Partner Management costs need to regulate such aspects as annual review of service quality, signing the programme and particular project terms, forecasting service capability and capacity. Escalation Management Costs need to be assumed in a cost model as well, defined by the margin uplift, if not separately agreed and valued.

Throughout the process, the groups were encouraged to communicate openly and commit to reach the consensus, together with clear responsibility for a solution achieved to be taken by an engaged stakeholder. In March 2016, the proposed model undergone testing process in a new project of the Banking sector company and the managerial board involved made a decision on its wider implementation in the fourth quarter (Q4) of 2016. The managers justified it by the observed improvement of relations with their client and overall service performance. In the second company, the working idea is still in the testing phase. The proposed model may be adjusted to different business contexts of multinational offshoring organizations located in Europe, and can be used for planning, operations delivery and control purposes. After the work had been completed, all the 62 interlocutors received the ready paper text with a call for feedback, so that the final modifications could be implemented in this study.

## CONCLUSIONS

In this work, the concept of service cost modelling, in the post-transition phase of the business process offshoring industry was addressed. After the operational tasks are already transferred to some different location and the responsibility is taken over by the new service provider, managers responsible for different components of this business need to constantly face various types of challenges and problems.

The first research question was responded by identifying such issues and classifying them into several categories. The focus was put on possible problems that may affect successful service delivery after the responsibility is already taken over from the incumbent service provider. The empirical data was gathered during a number of interviews and intensive email exchange with managerial crew of the service offshoring corporations located in Poland. The companies involved represented business sectors of Accounting, IT and Banking. Potential problems that pose a risk of disrupting or even blocking the efficient service delivery after the service is transferred offshore, were identified and divided into five problem classes (frequency, model, sector, side and type). Thereafter, it has been discovered that one of the critical problems of the offshoring industry's post transition phase is the development of a consistent and well-structured cost model. It has been explicitly mentioned by the vast majority of the managers interviewed. Thus, it has been decided to develop the desired offshored service cost model, and arrange real business case study in small project groups that focused on the optimized cost model development. The solution based on the banking company's optimized budgeting practise is composed of 2 general categories of internal and external costs, subdivided into 3 cost categories and 28 cost items. It allows for the responsible service budgeting resulting from the deep

understanding of a project's structure that shall help the offshoring managerial crew in consolidation and facilitation their business performance and strengthening of business outcomes.

This solution was tested in real business practise and it has been confirmed by the managers involved to bring profitable results, which shall result in its wider implementation in Q4 2016. As for the limitations, the empirical data was gathered only from a number of interlocutors and the proposed solution is a subjective approach developed by the project group, but it needs to be emphasized that every budgeting scheme has to be adjusted to particular company's corporate strategy and business conditions. Generally, it has been noted that this aspect is an interesting and crucial element of the business process offshoring industry and the need for such investigations shall be growing in the future.

## REFERENCES

- Al-Turki, U. (2011) 'A framework for strategic planning in maintenance', *Journal of Quality in Maintenance Engineering*, 17(2), pp. 150-162
- Association of Business Service Leaders ABSL 2015, 'Business Services in Central & Eastern Europe 2015, in support from McKinsey & Company'. Available from: <https://www.absl.pl/web/guest/home/>. [15 March 2016]
- Alleyne P., Weekes-Marshall D. (2011) 'An Exploratory Study of Management Accounting Practices in Manufacturing Companies in Barbados', *International Journal of Business and Social Science*, 2(10), pp. 49-58
- Aubry M., Müller R., Hobbs B., Blomquist T. (2010) 'Project management offices in transition', *International Journal of Project Management*, 28(8), pp. 766-778
- Ayvaz, E., Pehlivanli, D. (2011) 'The use of time driven activity based costing and analytic hierarchy process method in the balanced scorecard implementation', *International Journal of Business and Management*, 6(3), pp. 146-158
- Bilan Y. (2008) 'Analysis of Entrepreneurship – an International Survey of Full-Time University Students in Ukraine', *Journal of International Studies*, 1(1), pp. 79-92
- Bilan Y. (2009) 'Increase diversification through strengthened enabling environment for entrepreneurship: a focus on skill endowments and export orientation (example of Hungary and Poland)', *Economics and Sociology*, 2(2), pp. 106-115
- Brigham E. F., J. F. 2012, 'Fundamentals of Financial Management (13th edition)', Houston: Cengage Learning
- Bottini N., Ernst Ch., Luebker M. (2007) 'Offshoring and the Labour Market: What Are the Issues?', *International Labour Office, Employment Analysis and Research Unit, Economic and Labour Market Analysis Department*, Geneva, 2007(11), pp. 1-63
- Campbell, J.D. (1995) 'Outsourcing in maintenance management: a valid alternative to selfprovision', *Journal of Quality in Maintenance Engineering*, 1(3), pp. 18-24
- Du J., Cook W.D., Liang Liang, Joe Zhu (2014) 'Fixed cost and resource allocation based on DEA cross-efficiency', *European Journal of Operational Research*, 235(1), pp. 206-214
- Drury C. 2012, 'Management and Cost Accounting (8th edition)', Hampshire, the United Kingdom: Cengage Learning
- Garg, A., Deshmukh, S.G. (2006) 'Maintenance management: literature review and directions', *Journal of Quality in Maintenance Engineering*, 12(3), pp.205-238
- Glautier M.W.E., Underdown B. (2001) 'Accounting Theory and Practice', Harlow: Financial Times Prentice Hall books, Pearson Education
- Horngren, C.T., Datar, S., G., Rajan, (2009) 'Cost Accounting: A Managerial Emphasis (13th edition)', Upper Saddle River: Prentice Hall
- Kakabadse, A., Kakabadse, N. (2002) 'Trends in outsourcing: contrasting USA and Europe', *European Management Journal*, 20(2), pp. 189-198

- Larsen M. M. (2015) 'Failing to estimate the costs of offshoring: A study on process performance', *International Business Review*, 25(1), pp. 307-318
- Loorbach D. (2013) 'Business transition management: exploring a new role for business in sustainability transitions', *Journal of Cleaner Production*, 45, pp. 20-28
- Madhuchhanda D. A., Sji K. M. (2009) 'Risks in offshore IT outsourcing: A service provider perspective', *European Management Journal*, 27(6), pp. 418-428
- Mankiw G. N., Swagel P. (2006) 'The politics and economics of offshore outsourcing', *Journal of Monetary Economics*, 53(5), pp. 1027-1056
- Marquardt J. (2015) 'How transition management can inform development aid', *Environmental Innovation and Societal Transitions*, 14, pp. 182-185
- Maryska M., Doucek P. (2015) 'Reference Model of Cost Allocation and Profitability for Efficient Management of Corporate ICT', *Procedia Economics and Finance*, 23, pp. 1009-1016
- Microsoft Developer Network, 'About cost categories', Available from: <https://msdn.microsoft.com/en-us/library/>. [14 February 2016]
- Organization for Economic Co-operation and Development OECD 2007, 'Offshoring and Employment: Trends and Impacts', Available from: <http://www.oecd.org/sti/ind/>. [11 January 2016]
- Overby, S. (2003) 'The hidden costs of offshore outsourcing. CIO Magazine', Available from: <http://www.cio.com/article/2442089/offshoring/the-hidden-costs-of-offshore-outsourcing.html/> [25 January 2016]
- Universities and Colleges Information Systems Association UCISA (2016) 'ITIL – Introducing service transition', Available from: <https://www.ucisa.ac.uk/representation/activities/ITIL> [9 February 2016]
- Rilla, N. and Squicciarini, M. (2011) 'R&D (Re)location and Offshore Outsourcing: A Management Perspective', *International Journal of Management Reviews*, 13(4), pp. 393-413
- Rudawska E., Renko S., Bilan Y. (2011) 'A discussion of the concept of sustainable development – examples of Polish, Croatian and Ukrainian markets', Ternopil: KrokBooks
- Sinkkonen, T., Marttonen, S., Tynninen, L. and Kärrä, T. (2013) 'Modelling costs in maintenance networks', *Journal of Quality in Maintenance Engineering*, 19(3), pp. 330-344
- Stringfellow A, Teagarden M.B, Nie W. (2009) 'Invisible costs in offshoring services work', *Journal of Operations Management*, 26(2), pp. 164-179
- Williams, J., Haka, S., Bettner, M., & Carcello, J. (2010) 'Financial & managerial accounting: The basis for business decisions (15th edition)', Boston: McGraw-Hill.