

Topic: Shining a Light into the 'Black Box' of Payroll – Determining the Economics of Outsourcing

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Abstract

There are continuing pressures to improve administrative efficiency – 'payroll' and certain associated personnel administration tasks are seen as ideal candidates for outsourcing in order to drive costs down and thereby deliver efficiency. The uniform treatment of the diverse payroll activities in the literature does not, however, represent the reality of payroll.

The research described here concerns twenty case studies of UK-based organisations. The study identifies ten payroll related processes and analyses their costs in order to assess the economics of outsourcing. It emerged that firms that used external service providers had lower payroll costs. A further effect was a professionalisation of payroll which led to higher service quality.

Introduction

“Companies see the human resources department as gobbling up resources that do nothing to improve sales or profits. No wonder some wish it would disappear” (Anonymous 2001). This statement in “The Economist” points to the need for efficiency – assuming quality – in a difficult and highly competitive environment. Outsourcing HR activity, and especially routine, administrative tasks, is also often seen to have the potential to increase efficiency (Auguste et al 2002; Caster 2001; Csoko 1995).

The motivation to outsource administrative activities includes, amongst others, reduced costs and overheads, increased flexibility to manage the business and less distractions. This, it is argued in the professional and academic literature, allows management to focus on planning and growing the business, to use “best practices“, to save time, gather or combine expertise, to avoid technical and skill obsolescence, to improve service quality with a dedicated, expert resource, and to reduce business risks by involving knowledge experts (Lever 1997, Maurer and Mobley 1998).

Given the wealth of reasons for the use of external service providers, this raises the issue of how common it is. The European median of HR outsourcing costs as a percentage of total HR department costs was 9.7%, while the UK had a median percentage of 10.8% (Saratoga

2001:345-349). Prime candidates for outsourcing are functions that are administration heavy and time and staff intensive or need specialised knowledge and technical expertise (Maurer and Mobley 1998). One ideal candidate for outsourcing appears to be payroll and its associated personnel administration activities since these are strongly determined by local laws and information system needs and they need a high degree of payroll-specific knowledge and technical expertise. The CRANET 1999 data for the EU (Brewster et al 2001) as well as the BNA (2002) study for the US show that payroll is amongst the most outsourced activities. It seems that many organisations believe that giving work to an outside service provider is beneficial.

Unfortunately, too little is known about payroll costs and detailed payroll activities. The Saratoga survey provides the most comprehensive account of payroll administration costs. Saratoga (2001) showed that median payroll costs per employee in 22 European countries varied according to industry sector from about £40 (Retail) to about £220 (Chemicals), with an overall figure of about £75 payroll cost per employee. No payroll details about the different countries were available. Moreover, Saratoga, as with other surveys such as PricewaterhouseCoopers (PwC 2000), BNA (2002) or Cranet (2001), fails to distinguish between the different payroll activities. Thus, too little is known about distinct payroll tasks and processes that would give us insights into the costs of these and the implications for outsourcing decisions.

The process to outsource has been divided into four steps. The first, the “discovery phase”, may include a benchmark of internal service levels, an identification of future requirements and the compilation of a shortlist of vendors (Lever 1997). This is where poor understanding of payroll activities and costs creates a big difficulty – too little is known generally about service levels, actual processes and costs. A “negotiation phase” then follows. While the minutiae of service level agreements have to be defined and formalised, a number of broader questions have to be tackled. Issues such as learning, trust, control, future cooperation and contract terminations arise. The third stage is the “transition phase”. During this phase, computer applications are migrated to the vendor’s system, employees may be taken over by the service provider and some internal staff are given different tasks (Lever 1997). The last phase is the “assessment phase” in which the vendor’s performance is monitored and evaluated. Since this is an ongoing process, managing the vendor relationship during and after the transition phase is important for the outcomes. The four stages would need to be based on an in-depth understanding of work processes, associated costs and the optimization potential. Broadly speaking we focus herein on aspects of the “discovery phase”.

Idiosyncratic practices, uncertainty, firm size and cost pressures all seem to moderate the relationship between perceived benefits and the extent of outsourcing (Klaas, McClendon et al. 1999). For example, firms that had less idiosyncratic practices would benefit more from outsourcing since the service provider could reap economies of scale more easily.

Gaps in the Outsourcing and Payroll Literature

Issues of payroll costs are inevitably associated with questions that need to be answered in detail when considering outsourcing options. However, the larger surveys tend to concentrate on whether *any* activity in payroll is performed by an outside provider (BNA

2002; Brewster et al 2001). Therefore, finer details of what exactly is (or can be) outsourced and what quantifiable benefits may be generated are lacking. In fact, Saratoga (2001) provides the cost of payroll not even per country but rather on a Europe-wide basis. Second, whilst quantitative research has tested areas such as outsourcing motivation or perceived benefits (Lever 1997; Greer et al 1999), such research has generally failed to look in detail at the administrative costs of payroll activities. Third, qualitative information in professional publications tends to concentrate on big organisations and/or novel contract forms (c.f. Bates 2002). However, if smaller firms had a sufficient knowledge base about the costs, risks and competencies associated with a set of specific administrative activities, they would probably have a higher incentive than bigger firms to outsource. They would be likely to find that the economies of scale are smaller while the investments into expertise and information systems / software are higher. Surprisingly, small and medium-sized enterprises are relatively neglected in the payroll and outsourcing literature. These points account for the focus in this article on smaller organisations, their detailed payroll administration tasks and costs and the implications for outsourcing.

Methodology

One of the insights gained from the literature was that there is little formalised and systematised knowledge of the administrative costs of payroll activities. This led us to conduct research that necessarily had a strong exploratory element. It was decided therefore to conduct case studies with a semi-structured interview questionnaire that formalised the important issues to explore.

One way to increase the consistency of the answers was to define the administrative items carefully. Non-administrative activities – e.g. leadership or team management – may entail large amounts of discretion and creativity and often place the responsibility for the general outcome on the person who performs these. Administrative tasks, on the other hand, are typically more routine and normally leave little freedom for discretion and creativity in the way they are performed. The responsibility for the contents of these tasks lies often elsewhere while the responsibility for the quality of the administrative service delivery lies with the person who performs these activities.

In order to assess these specific payroll activities the research refined our understanding of the range of payroll tasks. In a workshop with British and French managers from a major payroll service company, ten key payroll processes were identified and mapped. The key activities are described in the appendix. The interviews in the sample organisations verified that respondents thought they described their key activities accurately. (Hence, these payroll processes provide a benchmarking template that might be used as a tool during any “discovery phase” of an outsourcing project.)

We focused on small and medium-sized enterprises (SMEs) and some moderately large organisations employing between 200 and 3,000 staff. These organisations may have the greatest benefit from reassessing alternative internal and external options on how to make their payroll processes more efficient (Maurer and Mobley 1998). They may, therefore, benefit substantially from advanced technical solutions or outsourcing of their payroll

activities or both.

Three hundred organisations that met the size requirement and were located in the UK were selected from the databases of the Human Resource Research Centre at Cranfield School of Management and the local Chamber of Commerce. Almost three times the required 20 case organisations volunteered to take part.

Table I:

Key descriptives of
the sample
companies

Company	Industry Sector	No of Employees (FTEs)	Total Payroll Staff Costs P.A. (in £ '000, excl. Overheads)	Total Payroll Administration Costs P.A. (in £ '000, excl. Overheads)	Percentage of Total Payroll Admin Costs to Total Payroll Staff Costs
Law 1	Prof. Services	1027 (1015)	57	45	79%
Accounting	Prof. Services	400 (393)	13	10	79%
Engineering	Manufacturing	247 (245)	8	5	63%
Construction	Construction	724 (719)	41	23	56%
Adhesives	Chemicals	1301 (1289)	98	64	65%
Housing 1	Not for Profit	2138 (1417)	112	91	81%
Education	Education	2700 (2200)	145	108	75%
Chilled Foods	Food	925 (925)	52	43	83%
Chemicals	Chemicals	550 (545)	37	23	62%
Estate Agency	Prof. Services	450 (375)	19	18	96%
Publishing	Publishing	230 (215)	15	12	79%
Law 2	Prof. Services	680 (646)	15	13	84%
Financial Services	Fin. Services	1890 (1737)	43	42	99%
Advertising	Advertising	180 (175)	4	3	73%
Edu-Publishing	Publishing	550 (550)	27	16	58%
Housing 2	Not for Profit	668 (570)	61	37	60%
Railways	Transport	2500 (2430)	295	273	93%
Electricity	Utilities	2551 (2534)	109	91	84%
Cars	Manufacturing	360 (358)	46	40	87%
Airport	Aviation	424 (414)	70	33	47%

We obtained therefore a wide range of industries, sizes, for profit/not for profit entities and regional locations that reflected – while not being totally representative – some of the main characteristics of the UK economy. We also ensured that cases covered both insourcing and outsourcing of the payroll function. The characteristics of the case organisations can be seen in Table I.

Twenty case studies were carried out between June and September 2002. The interview partners within the organisations were normally the heads of HR, the heads of payroll and/or functional specialists.

We found contextual factors were extremely important in terms of how much of their time payroll staff actually spent on payroll activities. Table I shows that the differences can be substantial. “Airport” devoted less than half of payroll costs to actual payroll activities while the payroll staff in “Financial Services” practically spend all their time on payroll tasks. Thus, the research distinguished between the staff costs of the payroll function and the lower costs of those activities devoted purely to specific payroll activities.

After each company visit, a report was compiled for each case which was then sent to the subject organisation. The contacts were asked to check whether there were any inconsistencies or misunderstandings in the data. Then, an analysis of all case studies in accordance with independent variables and cost models derived from the initial stage followed. To enable a tentative comparison many results were converted into ratios or full-time equivalent (FTE) employee numbers and overhead costs were disregarded. Although the size of overhead costs will clearly have a significant influence on an organisation’s decision to outsource, we needed to disregard these costs in order to enable better comparability.

Results

The Administrative Tasks of Payroll

Our review showed that the outsourcing literature and broad HR surveys generally treat payroll as one area without distinguishing the nuances and complexities of detailed activities. We clearly need better information about payroll processes and their associated costs in order to inform a potential discovery phase of outsourcing.

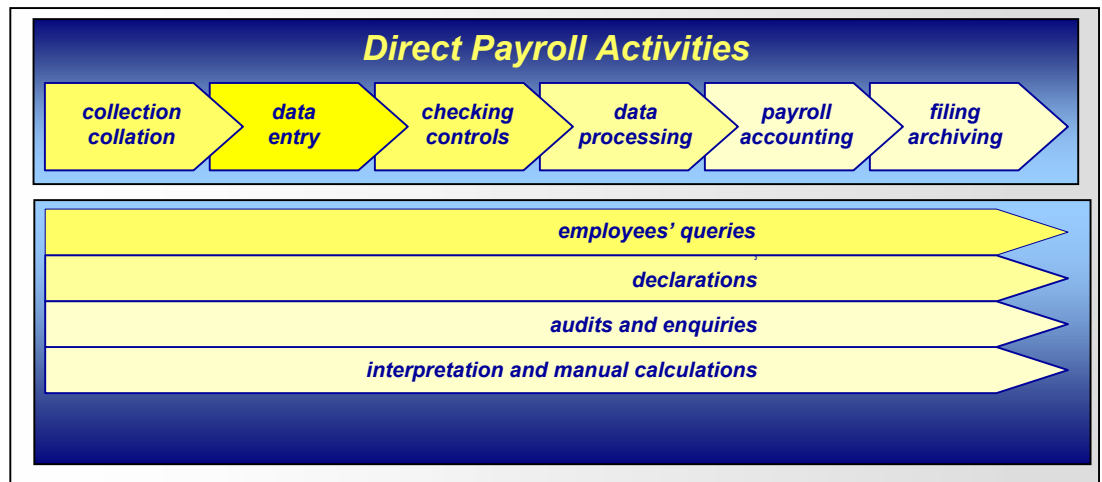
On average, the twenty organisations had a “service span” – the ratio of payroll staff to total workforce – of 1 to 555 and the average number of employees on the payroll was 969. Nine payroll transactions (payments plus deductions) would be found in a typical sample enterprise. All enterprises used monthly pay cycles. In addition, five used weekly payrolls for some employees.

Who performs what payroll activities?

We were interested in who was performing which of the 10 key payroll activities depicted in Figure 1. The results were no big surprise: payroll managers chose to concentrate on those tasks that they perceived as especially important (checking and controls, declarations as well as queries from directors / senior managers). Some tasks, such as collection and collation of data, data entry, queries of non-managerial employees, filing and archiving, were overwhelmingly performed by payroll officers / clerks. The remaining tasks were conducted by either party.

Figure 1:

Ten Distinct Payroll
Activities



It is interesting to note that apart from checking and controls the key payroll workflow activities were mostly handled by payroll officers while the payroll manager was engaged in all accompanying activities. It is those tasks that were predictable to a lesser degree (supplementary payroll activity) which occupied much of the time of the head of payroll. These supplementary activities may have delivered less value to the organisation but may have been crucial to the perception of the service orientation of the payroll function.

The sample organisations only used 'piecemeal' outsourcing of data processing and payroll accounting. Subsequently, the main reduction in working tasks and times occurred at the level of payroll officers rather than in management. Business process outsourcing (BPO) has the potential, however, to affect the service provision activities and roles of managers and staff in the payroll department. It is crucial, however, to consider the full costs of payroll activities, both direct and indirect, when determining effective ways towards payroll efficiency and quality.

The Internal and External Costs of Payroll

Across the sample companies, the annual cost of direct administrative payroll activities (excluding overheads) was £49 per Full Time Employee (FTE). Comparing these results with Saratoga (2001) payroll data the sum of the costs of payroll activities in our sample is near the bottom of the Saratoga range¹.

Table II: Annual Cost per Internal / External Payroll Service Provision

Payroll Administration	Average Cost Internal Service Provision (per FTE in £, excluding Overheads) N=12	Average Costs External Service Provision (per FTE, in £, excluding Overheads) N=8
<i>Direct Payroll Activities</i>		
1. Collection and Collation	5.2	7.7
2. Interpretation and Manual Calculations	4.8	3.5
3. Data Entry	9.6	7.9
4. Checking and Controls	6.7	3.9
5. Data Processing	4.1	9.5*
6. Payroll Accounting	4.6	10.3*
7. Employee Queries	4.8	2.5
8. Declarations	2.4	1.3
9. Statutory Audits and Enquiries	2.8	0.9
10. Filing and Archiving	3.6	2.1
<i>Sum Direct Payroll Costs</i>	<i>48.6</i>	<i>49.6</i>
<i>Indirect Activities</i>		
11. Consumables and Minor Outside Services	1.3	2.1
12. Payroll Software & Maintenance	19.0	11.2
13. Fines and Late Payments	0.1	0.1
14. Professional Payroll Advice	0.6	1.3
<i>Sum Indirect Payroll Costs</i>	<i>21.0</i>	<i>14.7</i>
Sum Direct and Indirect Payroll Costs	69.6	64.3

N = 20 Sample Companies.

* Only six of the eight companies specified their outsourcing costs, the other two provided their costs for data processing and payroll accounting.

Table II lists direct and indirect costs of payroll administration of those twelve sample companies that carry out their entire payroll processes internally and those eight firms that use a service provider for data processing and accounting. None of the sample firms used a full BPO service for payroll, which allowed us to draw up a clearer contrast of internal payroll administration compared to the use of limited external services in payroll.

A key argument by the proponents of outsourcing is that it can reap economies of scale so that firms have lower payroll costs. This is also true for the sample – total cost was lower for those companies that used outsourcing providers (£64.30 versus £69.60). A superficial glance at the data, however, would seem to indicate that this was not the case in the sample organisations in respect some of the direct cost components. Those areas that were formally outsourced – data processing and payroll accounting – were seen as substantially more expensive. On the other hand, some payroll activities were much less expensive in the outsourcing firms. Overall, the total direct unit costs of payroll activities were similar between outsourcing and non-outsourcing firms (£49.60 versus £48.60).

However, a more sophisticated assessment of direct cost of payroll activities also needs to take account of other, more hidden, factors. The analysis identified five primary factors. First, there are risks that companies incur that have lesser sophistication in payroll. An HR director ('Construction') stated:

'Paying staff has to work without any major hiccups. You make a serious mistake and, bang, you lose the confidence of the directors.'

Second, 'sloppy' payroll practices may lead to penalties. Third, firms with small payroll departments may have the choice of hiring another person (thereby increasing their average FTE costs significantly) or enter into arrangements with external service providers that may give them more flexibility. Fourth, there are opportunity costs in devoting much of management time on payroll issues rather than on the new HR roles of change agent and business partner (Ulrich 1997). Fifth, the annual training investment in payroll managers and staff may be substantial. Overall, these costs are likely to be less for a firm that uses outsourcing providers. Thus, while the direct costs are similar, quality, flexibility and risk factors point to the benefits of using an outsourcing provider.

A broader view into other payroll costs, moreover, indicated that organisation who outsource had substantially lower indirect costs. For instance, software and maintenance costs for outsourcing companies were much lower. This fits well to the literature that has identified the lesser need to invest and update specialised software and to avoid technical obsolescence as key reasons to use service providers (Mauer and Mobley 1998). Overall, the identified differences accounted for a cost differential of about eight percent between payroll administration in companies that outsource and those firms that conduct the whole payroll process internally. As implied from the above, however, a purely technical solution – e.g. in the form of an Application Service Provider – was not seen as sufficient by the researched companies since the benefits of quality and reduced risks would not accrue.

Non-financial reasons to outsource - quality impacts and other considerations

The interviewees in the organisations who outsourced often pointed to a higher quality of service as one argument for the decision to use a service provider. Moreover, the respondents explained that the very act of employing an external service provider had led to a professionalisation of their work. They attributed the lower costs in interpretation and manual calculation to a higher standardisation. Further, they would receive help with declarations and statutory enquiries from experts employed by the service provider enabling

their own ongoing investments in skills maintenance to be lower. The sample firms had, next to cost reasons, effectiveness and quality motivations for using service providers in payroll.

None of the eight sample companies that outsourced had bought data entry and checking and controls services thereby they did not venture into BPO. The motivation for using outsourcing providers was not, however, entirely rational. Only one company had a clear overview over the specific costs of HR and payroll processes. All other organisations simply worked on an historical basis, never seriously evaluated (further) payroll outsourcing options, or had a perceived 'need for in-house control' (HR director "Engineering"). Refining our views of payroll work from a "black box" to ten distinct direct activities makes it possible to analyse these activities in more detail and to take informed decisions about whether to outsource specific activities or the whole payroll process. This would bring clarity and objectivity to the whole decision making process and may enable, for instance, measures of 'internal control' to be correctly weighed.

Discussion and Conclusions

The starting point for this research was an interesting gap in the literature that has academic and practical implications. While "payroll" and the associated personnel administration are seen as prime candidates for outsourcing, the function and its diverse activities are often treated as one uniform mass of equally administrative tasks. The aim of the research was to improve the understanding of this "black box" in terms of work processes and associated costs.

The study identified direct cost of payroll activities – distinct from the cost of payroll departments – of £49 per FTE in the UK. There are few data sources for a meaningful comparison. However, the figure seems to fall into the range of European payroll activity costs identified by Saratoga (2001) and provides a first indication of a country-specific cost. Moreover, the research shows that payroll is not one uniform process but consists of ten distinct activities which can be separately assessed in terms of costs and, therefore, can be individually considered for outsourcing. In fact, eight sample firms made a distinction and selectively outsourced data processing and payroll accounting. The presented data here is to the knowledge of the author unique in its specificity and can be used to inform the "discovery phase" of payroll outsourcing decisions.

A number of points stood out which gave valuable information for decisions about the economics of outsourcing. First, the direct payroll costs of firms that use external service providers are similar to those that conduct their entire payroll work internally. This, however, only gave us a limited picture that would potentially lead to wrong conclusions. First, taking account of both direct and indirect costs showed that companies that outsourced had substantially lower costs (£64.3 versus £ 69.6 per FTE). Second, other hidden costs may be substantially lower when an outsourcing model is deployed. The principal benefits can be expressed in terms of lesser risks, higher quality and fewer distractions for management. Third, those organisations that did outsource argued that their own internal payroll skills and processes had professionalised as a result of the cooperation with the service provider and that the quality of payroll services had increased. Thus, outsourcing solutions incurred lower

cost and were associated with higher quality in the sample. Moreover, the saved effort led to an improved ability to focus on the business.

In tune with much of the professional literature (c.f. Johnson 2001) almost all companies stated that they wished to gain efficiency advantages from the introduction of sophisticated and highly integrated payroll and personnel software. In itself, this is seen to offer savings due to less duplication, faster response times and higher quality of payroll services. However, implementing new software without a process analysis may not deliver the planned savings, and hence gives rise to the need to acquire process management tools and change management skills. Freeing management from their administrative chores may allow them to concentrate on these areas with more energy and time at hand.

Assessing whether an outside organisation can carry out cost intensive activities – such as pre-processing payroll or the whole of the payroll administration function end-to-end – is a process requiring a solid view of existing costs in order to measure potential savings. This assessment of the merits of outsourcing will need to address a number of difficult contractual and other issues (confidentiality, trust, control, learning, penalties for non-achievement or lack of quality). However, since this research indicates outsourcing carries a good potential for improvements on several fronts (costs, quality and risk) there would appear to be significant merit in the investment of time and energy to investigate. A range of innovative outsourcing solutions is beginning to emerge on the market consisting of a blend of modern web-based technologies, good practice capabilities, employee self service options and service intensities ranging from simple ASP through to full BPO of the payroll and personnel administration functions. Such solutions may be a way forward towards cost efficiency and higher quality.

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Appendix: A Sample of Descriptions of Payroll Administration Activities

Area	Example of Activities
Collection and collation of payroll data	Receiving and collating raw data; including forms, facsimiles, electronic files.
Interpretation and manual calculations	Interpreting and checking raw data and performing manual calculations; accuracy, applicability, signature, HR review, out of cycle pays, absence adjusts, (prep and send to TPP)
Data entry	Input data into system; check interfaced data (variable/permanent record changes)
Checking and controls	Running gross to net trials, checking calculations and accuracy of data input, authorisation of pay run.
Data processing	Final pay run; printing Payroll management reports; transmit payee BACS, print, seal and distribute payslips, create Finance extract or report.
Payroll accounting	Payroll reconciliation, BACS reconciliation, disbursement reconciliation. Transmission of third party disbursements via BACS, cheques for third party disbursements.
Employee queries	Responding to enquiries connected with payslips i.e. calculations; payments, deductions, accruals, omissions.
Declarations	Control/completion of returns for Tax, Social Security, Court Orders, IR and Court Order Payments (P46, P45, P35 working sheet TCO1/02). EOY returns P14, Employee Statement P60, Employees in this employment P35.
Audits and enquiries	Placing and responding to statutory third party queries (IR, Social Security, Courts etc). ID and DSS payroll audits.
Filing and archiving	Input and output documents, individual and collective (declarations)

i The Saratoga measure is slightly broader than the definition of our activities as it includes items such as mortgage enquiries.