

## CHAPTER SEVEN

### 7. DEMONSTRATING VALUE IN THE RETURN ON CAPITAL EMPLOYED

#### 7.1 Introduction

Chapter four described and reported on the Infospend study to test a data capture methodology. Infospend was able to determine with great accuracy the cost of developing and maintaining corporate library and information services. Efforts followed to leverage these results by developing cost-based measures of performance. Chapter six described the development of a time-keeping record to log the apportionment of labour in the operational activities that sustained library and information services. When the unit cost of labour was related to the time taken over a particular task, the potential was created for cost recovery and generation of profit.

Chapter seven reports on an exercise to determine whether cost recovery and potential generation of profit were appropriate measures of the value of corporate library and information services.



#### 7.2 Return on capital employed

##### 7.2.1 Introduction to the expressions return on investment (ROI) and return on capital employed (ROCE)

In the language of management accounting return on investment (ROI) was regarded as a precise financial measure relating to the dividend that an investor could expect on an investment (Who owns whom, 1988: 96). ROI was an expression that was often encountered in business literature. The over-use of this expression in the popular management press in the late 1990s obscured the precise meaning of the term as an expression of financial return and this researcher preferred to use the alternative expression, return on capital employed (ROCE). The term ROCE was the measure used to describe the financial dimension in the balanced scorecard (Kaplan & Norton, 1992: 72).

### 7.2.2 Distinction between "investment" and "capital employed"

Determination of the financial value of an investment was complicated by the recognition that enterprises calculated investment in different ways (Faul, Du Plessis, Van Vuuren, Niemand & Koch, 1997: 540) and that there was no general acceptance of what constituted the investment value of corporate information. Information costs in a law firm were typically expensed in the income statement in the year in which they were incurred (Dyke, 2001). This meant in effect that from the accounting perspective the information assets at the beginning of each new financial year were valued at zero. This was not a perception that was shared by information users, for whom the legacy information resources were extremely valuable. In instances where ROI was documented in information literature it was clearly the legacy resources and not the resources acquired during the year of account that were yielding a return.

This ambivalence in interpretation of investment value with regard to information services was important in considering the use of return on investment or return on capital employed as a basis for demonstration of value. Accounting practices that were evaluating return on the capital employed in a financial year were not the same as evaluation of a legacy resource.

It was not the intention in this research study to debate the merits of ROI or ROCE. The investigation of cost recovery proceeded from the recognition that in order to justify the existence of corporate support services there had to be demonstrable accountability for expenditure.

Data relating to input costs were routinely captured in many of the private law firms that were surveyed during 2000 and 2001. Before the Infospend study commenced in 2000 there was no evidence that South African information professionals in private law firms were capturing data in sufficient detail for purposes of ROCE. It was found, for example, that labour costs were seldom integrated into the data capture record. Regarding these costs as a human resources overhead expense rather than as a capital investment in the provision of library and information services effectively distorted the record of expenditure on the services. The exclusion of labour costs from the record of expenditure made no provision for the establishment of the real cost of the information service, and therefore precluded recovery of these costs when service units were sold to users.

The data capture methodology used in the Infospend exercise made provision for the determination of capital employed in the creation of the information service. This was enhanced by the practice of logging time as units of labour. Capital employed could be accurately determined; the determination of return on the capital employed in a financial year was more problematic.

### 7.2.3 Return on capital employed (ROCE) as an element of output

ROCE was understood to centre on the relationship between income produced by an activity and the monetary investment in that activity (Cram, 1995). Cooper (1999: 5) described this in terms of output which the customer received and for which he was willing to pay.

In the manufacturing and retail value chain, sales validated output. In a service environment it was important that the point of sale be similarly identified in order to validate service output. In library and information services it was proposed that the point of sale occurred when a transaction satisfied a customer's information requirement and could conceptually be billed to a client or passed on as a notional charge. A notional charge was understood to indicate how much money could have changed hands had the transaction been carried out in the open market (Dyke, 2001).

In the South African law libraries that were investigated during 2000 and 2001 there were certain services where the point of sale could be clearly identified. These generally occurred where there was direct engagement with the customer or information user. Obvious examples of direct services were reference and research requests, current awareness and practitioner training. These services were also often provided by information agencies and independent consultants as premium services. Less obvious examples of point of sale were resource management operations that were sometimes referred to as library housekeeping services. Maintenance of looseleaf manuals and annotation of law reports and statutes were housekeeping operations that could be outsourced to contractors for a fee and therefore represented examples of point of sale of a service. Both the premium client-based services and the standard library housekeeping services were investigated in this study as areas of cost recovery and potential profit generation.

#### 7.2.4 Claims for return on capital employed in information services

Griffiths and King (1993: 28) suggested that information services provided by so-called special libraries enhanced practitioner performance in three operational areas: increased productivity, enhanced performance of work and quality, and improved speed. Griffiths and King made impressive claims for the cost effectiveness of corporate library and information services. Their calculations included the presumption of the cost of not maintaining corporate information services. They suggested that it would cost on average 2.9 times more for (scientific) practitioners to obtain information from sources other than from a corporate library (Griffiths & King, 1993: 27). The provision of corporate library and information services to practitioners in their view represented therefore an effective rate of return of at least 100%, higher when the waste of practitioner time was included in the calculations (Griffiths & King, 1993: 27).

Cram (1995; 2001) claimed an average return ratio of eight to one when the Corporate Library in Education, Queensland, Australia used a methodology to measure performance at the point of transaction of every reference and research question.

Other anecdotal evidence, while strongly in support of the positive benefit of the corporate investment, was more cautious in its determination of monetary return. Factiva, a Dow Jones and Reuters company developed a survey questionnaire in 1998 that attempted to evaluate the return on investment when a practitioner subscriber made use of its online product, Dow Jones Interactive. The questionnaire attempted to plot patterns of use with regard to frequency and duration of searches (Sykes, 1999). It also tried to determine return on investment with reference to savings in time, elimination of duplication, response to competitive threats, improved customer focus, and improved decision making. The Factiva survey provided anecdotal evidence of customer satisfaction with the service. It also, however, recognised the limitations with regard to assigning a precise monetary value to information or to the information service (Sykes, 1999).

Cram (2001) noted that the value of information to a user was determined by his requirements and by his capacity to make use of the information. Value theories of supply and demand were pertinent to the determination of value of information services, but they were disregarded in this study of cost recovered. The study

described below limited its scope to the identification of those operational activities where labour costs in the provision of certain services could be recovered.

#### 7.2.5 Labour costs and billable hours

The investment in labour was shown to represent a significant percentage of capital employed in the maintenance of corporate library and information services. Labour costs in the seven South African law firms that contributed data to the Infospend study ranged from 30% to 54% of their library and information expenses for the financial year 2000 / 2001. The time keeping procedure described in Chapter six attempted to account for the capital employed in maintaining the corporate library and information service. In so doing it made provision also for the capture of data relating to billable items.

Legal practitioners typically billed their clients by time and in a law practice it was common for practitioners to have a target of billable time in the order of 5.5 hours per day or 1100 hours per year (Faris, 2001: 21). He recommended that professional and support staff should also have targets of billable time:

As the salary cost in a law firm is the single largest expense, the failure to include a charge for time spent by professional and support staff will materially erode the practitioner's own hourly rate charge and substantially reduce profits.

Faris 2001: 21

It appeared from the collegial communication on listservs that many information professionals in the United States of America were expected to log billable hours for their professional services. There was no evidence to suggest that South African law librarians were required to account for billable hours. The study related below was a feasibility study that was designed to test whether there was merit in recording billable hours.

### 7.3 Development of procedures to measure ROCE in a corporate library

#### 7.3.1 Rationale for the study

This researcher developed a procedure to measure value of the corporate investment in library and information services by demonstrating potential return on

the capital employed during the course of the financial year. This was both an exercise to justify the existence of the library in the organisation and also an attempt to account for the labour costs and their allocation. The exercise to apply a cost value to operational activities depended on the findings of the earlier research studies reported in chapters four to six. Infospend defined the unit cost of labour and the time log identified the labour component in operational activities. The cost recovery exercise investigated the merit of cost recovery as a measure of value of corporate library and information services.

### 7.3.2 Assumptions

- Where library services could be costed they could be assigned a cost recovery figure. An exercise of this nature provided also for recovery of development costs.
- Amounts could be charged to individuals or to specific departments with regard to the cost of labour in providing the service.
- The cost of general library support operations could be recovered by levying a charge on information users on a *pro-rata* basis.
- A fee could be charged for the fulfillment of a special request from a practitioner on behalf of a client. The option of billing the client would, however, rest with the practitioner.
- Charges could be levied at variable rates.

### 7.3.3 Motivation for variable rates

Operational activities that maintained the information resources required by practitioners were sometimes known as housekeeping activities. These routine activities provided for the acquisition, organisation and maintenance of information resources and services for the information users. Certain housekeeping services were outsourced to professional support organisations or to independent contractors in order to free the information professional for client-based services such as research, current awareness and practitioner training. The library housekeeping services most frequently outsourced were maintenance of the collection of looseleaf publications and physical annotation of law reports. Seventy five percent of respondents in the OSALL Salary Survey, 2000 worked in law firms where looseleaf

updating was outsourced to independent contractors. The corresponding percentages relating to outsourcing the annotation of law reports and statutes were 43% and 21% respectively (OSALL, 2000).

Notwithstanding warnings against distinguishing between high- and low-value services (Cram, 1995) it was proposed in this feasibility study that the rate of cost recovery on different types of services might be variable. The evidence that independent consultants charged variable fees for outsourced services supported this decision.

In the 2000 OSALL Salary Survey independent contractors in South African law firms indicated that they applied variable rates according to the nature of the service provided.

**Table 6 Average hourly rates of independent contract workers, 2000**

Library housekeeping services		Research services	
Minimum hourly rate*	Maximum hourly rate*	Minimum hourly rate*	Maximum hourly rate*
50	159	100	249

\*Amounts in South African Rands to the nearest Rand

Source: Adapted from OSALL 2000

The principle of variable rates was applied in the development of a cost recovery strategy in a Cape Town law firm. For the feasibility study the nominated rates did not correspond with the rates levied by independent consultants.

In order to illustrate the application of variable rates to information services the standard rate on operational activities or services was determined to be the cost of labour to perform those services. The unit cost of labour was deemed to be the cost to the organisation of one minute of information professional or consultant time for performing that activity or service. Library housekeeping services were billed at the standard rate.

The designated billable rate on client-based services was three times the unit cost of labour. It was suggested that this was in line with standard business practice in

professional service firms (Dyke, 2001). It also made provision for the recovery of costs incurred in the development of products and services that could not be charged to any other account.

#### 7.3.4 Calculation of notional cost recovery

A spreadsheet record was created as an adjunct to the time log in order to calculate billable time, where billable time was understood to be that part of professional time that could be charged to a client account, a user account or a departmental account. The time logged in respect of library and information services was captured either as a standard or a premium service. The formulae that were applied to these fields automatically calculated subtotals at the designated cost recovery rates. These were notional charges and the results corresponded to potential income for various activities. When the totals were compared with the cost to the law firm of providing serviced library and information facilities it was theoretically possible to establish a return on capital employed with regard to the provision of library and information services.



#### 7.4 Findings of the cost-recovery feasibility exercise

The study was conducted from January to June 2001. Total billable time was calculated as a percentage of the minutes available. For the purposes of this study minutes available were determined as 400 minutes per working day. The results were tabulated as follows (Table 7).

**Table 7 Billable time as percentages of minutes available: January – June 2001**

	Total billable time	Standard services	Premium services
January	52%	24%	28%
February	66%	22%	44%
March	67%	23%	44%
April	53%	14%	39%
May	61%	14%	47%
June	63%	21%	42%

Standard services were determined to be library housekeeping activities and premium services were client-based services that included research, current

awareness and practitioner training. Professional development and evaluation, new product development, and personal matters could not be billed to an account.

Total billable time for the period January to June 2001 ranged from 51% to 65%. The lowest figure relating to billable time was recorded in January 2001, and this low reading was attributed to seasonal fluctuation. The percentage of time devoted to client-based services was particularly low in relation to data for the other months.

The rates in respect of standard and premium services were embedded as formulae in the spreadsheet record. The rate for standard services for this feasibility study was nominated as the actual cost of labour; the premium rate was nominated as three times the actual cost of labour. The results of these calculations indicated the notional recovered amounts in respect of standard and premium services (Table 8).

**Table 8 Notional cost recovery January – June 2001**

	Standard Recoverable *	Premium Recoverable*	Total recoverable*	Actual cost of labour*	Value added*
January	1762	6167	7929	7850	79
February	1699	10239	11939	7870	4089
March	1686	9409	11095	8200	2895
April	1143	9179	10322	8200	2122
May	1034	10673	11708	8200	3508
June	1640	9982	11623	8200	3423

\*Amounts in South African Rands to the nearest Rand

Since the standard rate of recovery was nominated as the actual cost of labour, it was only when premium services were transacted that value was perceived to be added to corporate library and information services.

Premium services were identified as client-based services like reference and research and the amount of time spent on these operational activities was very dependent on practitioner demand. January was acknowledged to be a quiet time of the year when many practitioners took leave. It was therefore also a time when billable hours were low and added value was minimal. The higher notional recoveries in subsequent months reflected more time spent on value-added services.

## 7.5 Discussion

The results of the feasibility study suggested that notional billing of information professional time within an organisation was an effective demonstration of the value of the library and information services to the organisation. The ratio of billable time to total time available was an indication of service utilisation; over time the data would also indicate seasonal fluctuation in demand for services. The distinction between standard and premium services was perceived to be useful for determining whether standard services were being fulfilled at the expense of premium services. It was suggested that this might indicate the merit of outsourcing certain standard services in order to concentrate on premium services. The maintenance of operational data was seen to be critical in any decisions that might be required with regard to outsourcing operational activities.

The figures suggested that corporate library and information services were potentially profitable if the notional charges were to be converted to actual monetary levies. The views of colleagues on the subject were less reassuring. There was no evidence that information professionals in South African law firms were expected to account for billable time. There was, however, some discussion in the professional communications regarding the merits of charging when the provision of research and reference services, for example, involved the copying of copyright-protected resources.

It was standard practice in the South African law firm to recover general disbursements for telephone, photocopy and fax costs. It was clearly illegal, however, to levy a charge for copying material where the effect of this service was to deprive a legitimate copyright holder of royalty fees. This was a legal and ethical issue that exceeded the scope of this feasibility study but it created serious doubts about the merit of implementing monetary billing *per se*.

Reservations about the practical value of cost recovery were confirmed by collegial responses to an invitation posted by this researcher on the SLA-LAW discussion listserv in June 2001 (Appendix 10). One information professional suggested that far from validating the existence of corporate library, the principle of fair payment for fair use resulted in the reduction in demand for service and consequent review of service value.

The few examples I do know of internal billing of departments ended in the diminution of the library. For example, B. which had one of the best business libraries in the US, began to bill internally for their services. Various departments began to buy their own books and software and do their own research because they thought they could do it better, faster or cheaper than the library. In a year's time the library statistics of requests plummeted. The forces wanting to get rid of the library had the ammunition they needed.

See, nobody's using it.

A few years ago, C. tried to make their library a profit center by charging for services inside and outside the library. The bank charged the library rent for the space it occupied. The library ended up trashing hundreds of business books because they couldn't pay the rent. A disaster. They were forced to bill for every little directional request, and guess what? People stopped using the library. They have since abandoned this model.

Yes, we are money out of the lawyers' pockets, but it is money well spent. And they know it.

Toth, 2001

Another colleague iterated the view that library and information services existed to serve the firm and the clients and not create a separate billing practice.

We are also not here to be a business in our own right, we are here to serve the firm and it's clients.



Hodgson, 2001

## 7.6 Conclusion

The methodology to record billable time as a notional charge was an effective management practice. The claims by Griffiths and King, Cram and others regarding ROCE on library and information resources were validated with some qualifications. The practice of billing at three times the cost for certain premium information services indicated the extent to which the information services added value to the organisation and this was construed to indicate return on capital employed.

There was, however, no support for notional billing to be converted to actual cost recovery practices.

- It was seen that cost recovery and generation of income were not core-operating objectives of the library and information services in a law firm.
- Collegial comment suggested that billing of service time to practitioners and departments might even reduce the demand for library services.

- There were legal and ethical difficulties with billing for services that involved copying material that enjoyed copyright protection.

## 7.7 Summary

Chapter seven introduced the business concept return on capital employed (ROCE) as a means to demonstrate value of corporate library and information services.

An exercise was conducted in conjunction with the time-keeping procedure to log time that was spent on billable services. The feasibility of charging differential rates was investigated to distinguish standard from premium services. Calculations were automatically performed in order to record the total amount that could be billed each month to information users and to compare this with the cost of supplying the service by way of labour costs.

Difficulties with implementing the practice of billing for services did not detract from the value of notional billing as a means to measure service effectiveness and cost-effectiveness.

Chapter eight reports on recognised practices of corporate accountability and their relevance to the library and information services in the South African law firm.