PERFORMANCE MEASUREMENT IN RETAILING

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This article is designed to develop the performance measurement in retail research. Performance measurement could be categorised into four types of data, which are financial indicators, operational indicators, direct/objective measures and indirect/subjective measure. Based on this categorised, a six-celled satisfactory scheme is developed. This scheme is useful for comparing and contrasting different measurement approaches that had been done by researchers in marketing and retailing area. In retailing area, the author suggest using both objective and subjective measure for financial indicators [Return on Capital Efficiency (ROCE), Return on Sales (ROS)] and operational indicators (labour productivity, space productivity, perceived service quality, customer satisfaction and customer loyalty).

INTRODUCTION

Performance measurement historically developed as a means of monitoring and maintaining the process of ensuring that a firm pursues strategies that lead to the achievement of overall goals and objectives. Traditional models of performance measurement focus on the achievement of a limited number of key financial measures (for example ROI, ROA or ROCE). On the other hand, some scholars criticise that the traditional performance measurement system fail to measure and monitor multiple dimensions of performance. In addition, firm's success depends not only on the achievement of financial measures, but also on how well firm adapts to the environment (cf. Brignall and Ballantine 1996, p. 6).

Moreover, researchers frequently encounter difficulty in obtaining accurate measures of financial performance, especially for privately-held firms (e.g. Dess and Robinson 1984; Venkatraman and Ramanujam 1986; Edgett and Snow 1996). For instance, Dess and Robinson (1984) addressed that there are two problems arouse in measuring objectively financial performance. First, access to financial performance data on privately-held firms is severely restricted as such information is not publicly available. Owners, very sensitive about releasing any financial performance-related data, are the sole gatekeepers to such information on individual firms. Secondly, even if access to such information is obtained with a sample of privately-held firms, there is greater risk of error attributable to varying accounting procedures in these firms (cf. Kusum et al. 1995, p. 41).

ASSESSING THE FIRM PERFORMANCE

Measuring firm performance has become an important component of empirical research in the field of strategic management or marketing strategy or retail strategy. Researchers frequently take the performance of firms into account when investigating the relationship between strategy and performance (e.g., Dess and Robinson 1984; Venkatraman and Ramanujam 1986; Capon et al. 1990; Narver and Slater 1990; Jaworski and Kohli 1993; Liu and Hong 1997). Two basic issues in measuring firm performance: (1) selection of a conceptual framework which to define firm performance, and (2) identification of accurate, available measures that operationalise firm performance (Dess and Robinson 1984).

Regarding to first issue, Venkatraman and Ramanujam (1986) classified performance measurement based on characteristics of data. Accordingly, there are four types of data, which are financial indicators, operational indicators, direct/objective measures and indirect/subjective measures. Financial indicators, which have been the domi-

nant model in empirical research (Capon et al. 1990), reflect the fulfilment of the economic goals of the firm. Typical of this approach would be to examine such indicators as profitability (reflected by ratios such as return on investment, return on equity, and return on sale), earning per share and so forth.

Operational indicators focus on those key operational success factors that might lead to financial performance. Under this framework, it would be logical to treat such measures as market-share, product/service quality, customer satisfaction, customer loyalty and new product success, and other measures within domain of firm performance (Venkatraman and Ramanujam 1986). For instance, customer satisfaction widely believes to be a determinant of profitability (Anderson and Sullivan 1993; Anderson and Lehman 1994) would be meaningful indicators of performance within this perspective.

While firm performance can be measured using the financial indicators, operational indicators, or both, a further issue in its operasionalisation is the type of data. The type of performance data either have been direct/objective (e.g. data collected directly from firm records or publicly available records or from customer) or indirect/subjective (e.g. data collected based on the perception of top management about both the current/past performance relative to the target or average industry) (Dess and Robinson 1984). Using the conceptualisation of firm performance (financial versus operational indicators) and types of data (direct/objective and indirect/subjective) as two basic but different concerns in the overall process of measuring firm performance, a six-celled classificatory scheme (shown in Figure 1) is developed.

As Figure 1 indicates, six approaches are conceptualised within a particular cell. For example, in Cell 1, the conceptualising scheme for firm performance uses financial performance data obtained from indicator/subjective measures (e.g. Capon 1990; Diamantopoulos and Hart 1993), while Cell 4 focuses on eliciting financial data from the perception of top management (e.g. Dess and Robinson 1984; Narver and Slater 1990; Jaworski and Kohli 1993). Cells 2 and 5 on operational indicators collected from direct/objective measures (e.g. Buzzell and Wirsema 1981; Conant et al. 1993) and subjective measures (e.g. Golden 1992; Edgett and Snow 1996), respectively. It is readily apparent that these four approaches have a narrow perspective on firm performance (Venkatraman and Ramanujam 1986). Alternatively, combining financial indicators and operational indicators (Cell 3 and 6) can broaden it (e.g. Brignall et al. 1991; Fitzgerald et al. 1991; Brignall and Ballantine 1996).

PERFORMANCE MEASUREMENT IN THE RETAIL SECTOR

Retail industry is one of the most difficult service sectors to measure: the precise product is difficult to define and, in particular, the problem of quality measurement is almost insuperable. There are two dimensions to the retail product: the number actually sold and the depth of service that accompanies the sale. This second service element is critical and includes such things as the extent of self-service, the proximity of the shop to the customer, customer amenities, and the range and choice of goods (Bradley and Taylor 1992, p. 111). Regarding these diffi-

Figure 1
A Scheme for Classifying Alternate Approaches for Measuring Firm Performance

Types of Data	Conceptualisation of Firm Performance: Financial Indicators	Operational Indicators	Both Indicators
Direct/ Objective	1	2	3
Indirect/ Subjective	4	5	6

culties, retail scholars' cope with using varies method for measuring retail performance. For instance Ingene (1982) and Lusch (1979) used variously indicators as measures of performance, which are unit sold, number of transactions, dollar sales, and value added. In addition to this, several authors (e.g. Ingene 1982; Liu and Davies1997; Magi and Julander 1996) have also suggested using both customer satisfaction and customer loyalty as the performance outcomes of the retailing.

a. Financial Indicators

The type of financial indicators should be used in measuring retail performance which is still on debate, whether it is gross margin, or operating margin, or pre or post-tax margin or return on assets or capital employed or return on sales (see cf. Burt and Sparks 1997, p. 136; Kusum et al. 1995). Some researchers have noted that these indicators may suffer from differences in accounting practice. Unfortunately, they do not provide a solution to the problem, and the debate over the extent to which accounting profits can be used as indicators of financial indicators continues (cf. Kusum et al. 1995, p. 41).

Dess and Robinson (1984) used indirect/subjective measures to cope the problem of varying accountancy practice and the absence objective measures. Accordingly, subjective perceptions of relative improvement were strongly correlated with objective measures of the absolute changes in return on assets and sales over the same period.

The two most common indices used are gross margin and rates of return (Bradley and Taylor 1992). Gross margin is the difference between the net sales revenue and the net direct acquisition cost of the merchandise sold, based on the cost of purchase, adjusted to changes in inventory holdings. It reflects the difference between average buying and average selling prices including any price discounting (O'Riordan 1993, p. 33). Rates of return is measured as an interest return on owners' investment, calculated at the best net interest rate they could earn elsewhere (Kusum et al. 1995).

In addition, Ingene (1984, p. 24) stated that gross margin has been favoured as a valid measure of retail performance. She argued that "the best measure of retail output from the viewpoint of management is gross margin. It adjust sales for the cost of merchandise and nothing else." Further, gross margin could be treated as a measure of the efficiency of the retail firms (O'Riordan 1995).

On the contrary, a number of analyst and retailers argue that margin analysis is not the best measure. Any reported firm margin figure will disguise different margins across product ranges and between retailer and manufacturer brand (cf. Burt and Sparks 1997). For this reason, they use rate of return as a performance measurement. For instance, Lewis and Thomas (1990), examining the relationship between retail strategy and performance in UK grocery stores, used ROS (return on sales) and ROCE (return on capital employee) as a financial measurement. Accordingly, the first indicator is relevant in the retail sector, where trading margin is small, and ROCE is a commonly employed measure of capital efficiency in the retail industry. Moreover, ROCE probably is the best overall measure of retail performance under circumstances that retail firms require much levels of investment owing to high capital costs in terms of land, building, information technology, etc. (OXIRM 1994; Burt and Sparks 1997).

Despite relevance to retail performance, a change of calculation in accountancy practice would have a major impact on financial ratios (e.g. ROI and ROCE) (Burt and Sparks 1997). Thus, there is a greater risk to lay on financial ratios, if the firms that are trying to compare have different accountancy practice (Varadarajan and Ramanujam 1990). In addition, access to financial data, especially privately-held firms, is severely restricted (Dess and Robinson 1984). Dess and Robinson (1984) used indirect/subjective measures to cope the problem of varying accountancy practice and the absence objective measures. Accordingly, subjective perceptions of relative improvement were strongly correlated with objective measures of the absolute changes in return on assets and sales over the same period. Hence, the TMT's (top management team) perception of how well their firm ha performed was consistent with how the firm actually performed vis-à-vis return on assets and growth in sales. Based on their findings, some researchers in marketing and retailing use the indirect/subjective measures in their research (e.g. Conant et al. 1989; Egeren and O'Connor 1998; Liu and Davies 1997; Narver and Slater 1990; Orvice 1996).

b. Operational Indicators

As was discussed earlier that operational indicators focus on those key operational success factors that might lead to financial performance. Brignall etc. (1991) postulated that operational indicators in service businesses could be grouped into two different categories: (1) 'results' reflect the success of the chosen strategy; and (2) 'means' or 'determinants' are factors that determine competitive success. Table 1 shows examples of measures for each dimension.

Table 1
Operational Indicator Measurement

Dimension of Performance	Types of Measure
Results	Relative Market Share Labour Productivity Space Productivity
Determinants	Perceived Service Quality Customer Satisfaction Customer Loyalty

Source: adapted from Fitzgerald et al. (1991)

Relative market share is one of the operational indicators that have been frequently used in marketing and retailing research (e.g. Buzzell et al. 1975; Cronin and Skinner 1984; Hooley et al. 1990; Deng and Dart 1994; Liu and Davies 1997). In the survey of 379 CEOs from a wide cross section of consumer, industrial and service organization, Doyle and Hooley (1992) found that market share is the most important measure of performance. The positive impact of market share on profitability is well established (Shoeffer et al. 1974; Buzzell et al. 1975; Buzzell and Wiersma 1981). The leading market share can enhance a market power – their size permits them to bargain more effectively with the supplier (Buzzell et al. 1975). As a result, they get more benefit than other competitors such as: merchandise cost, terms of payment and merchandise support.

On the contrary, Doyle (1995, p. 27) addressed at least three problems regarding to use relative market share as performance measurement. First, the relevant market is always ambiguous and subjective. Second, market share can always be bought by sacrificing margins or acquiring competitors, thus it is not related to the quality of the company and the competitive strategy it pursues. Third, share can also be a result of inherited advantage rather than current competitiveness.

A number of studies have undertaken to investigate retail productivity as a measure of performance (cf. Serpkenci 1984). Productivity is measured as a single input factor to an output measure, other inputs assumed constant (Goodman 1985). There are two types of productivity commonly used in measuring retailers outcome namely labour productivity and space productivity (e.g. Ingene 1982; 1984; Cronin and Skinner 1984; Goodman 1985; OXIRMís 1994). Labour productivity is the ratio of total output to the amount of laboured employed to create that output, usually using net sales per employee to measure it (Ingene 1982; Cronin and Skinner 1984; Magi and Julander 1996). The later type is measured through net sales per square foot of selling space (Cronin and Skinner 1984). Space productivity has been identified as an important determinant of retailer's profitability (Rosenbloom 1981).

Recently, several retail authors have suggested using customer perception or behaviour as a basis for measuring performance output of the retailing, which are perceived service quality, customer satisfaction and customer loyalty (Spreng and Mackoy 1996; Magi and Julander 1996). The concept of perceived service quality has been developed in the service marketing. Building upon the work of Parasuraman et al. (1985; 1988), perceived service quality is frequently referred to as the comparison between the customer's expectations and his/her perceptions of the service provider's performance. They suggested that service quality consist of five generic dimensions: tangibles, reliability, responsiveness, assurance, and empathy. The generalisability of the five suggested service quality dimensions has not remained unquestioned (cf. Magi and Julander 1996).

Recently, Gronroos (1990) proposed two dimensions of service: technical quality (what is delivered) and functional quality (how is delivered). Magi and Julander (1996) suggest that Gronroos' model more relevant in retail business than Parasuraman' et al. model. Accordingly, the previous one puts more weight on the tangible part of the offering. In fact, merchandise and technical part (in the case of grocery retailing the goods bought in the store) is the core component of the retail offer (Magi and Julander 1996, p.34). Despite technical quality is an important contributor to value perception, functional quality influences technical quality, in that perceptions of the manner in which the serviced is delivered. Therefore functional quality has an indirect influence on value perception (Sweeney et al. 1997).

Magi and Julander (1996), conducting study of 320 stores in Swedish retail chain, identified that perceived service quality and customer satisfaction have a strong positive links. In addition, Spreng and Mackoy (1996) found that there is a positive relation between overall service quality and overall satisfaction. The viewpoint taken here is that perceived service quality is an antecedent of customer satisfaction. However, the causal link between perceived service quality and customer satisfaction is still on debate (Cronin and Taylor 1992; Parasuraman 1994). This debate emanates largely from differences in how the two constructs are defined (Magi and Julander 1996). For example, at least there are two different major models in measuring service quality: Parasuraman's et al. model and Gronroos's model.

Customer satisfaction is considered to be a basic determinant of firm success, one that has considerable effect on profitability (Athanassopoulos 1997). Customer satisfaction is defined as a function of the customer's expectations and perception of performance (Anderson and Sullivan 1993). Further, customer satisfaction is the result of a customer's perception of the value received in a transaction or relationship (where value equals perceived service quality relative to price and customer acquisition costs relative to the value expected from transactions or relationships with competitors) (cf. Hallowell 1996). Thus, satisfaction (or dissatisfaction) is resulted from experiencing a service quality encounter and comparing that encounter with what expected (Oliver 1980).

The relationship between customer satisfaction and customer loyalty has been addressed in several studies (Taylor and Baker 1994; Magi and Julander 1996; Hallowell 1996). In addition, customer satisfaction is considered as a necessary condition for customer loyalty and therefore it helps in achieving financial objectives like turnover and revenue (Reichheld 1996). Hallowell (1996) used regression analysis to examine a customer satisfaction and customer loyalty relationship. He found that customer satisfaction is responsible for as much as 37 per cent of variance in customer loyalty levels. Furthermore, the magnitude of customer satisfaction plays an important role. For instance, 'completely satisfied' customers are much loyal than merely 'satisfied' customers (Stauss and Neuhaus 1997).

Customer loyalty can be defined in two different approaches. The first defines loyalty as an attitude, which creates an individual's overall attachment to product, service, or organisation. The second definition of loyalty is behavioural that customer purchase from the same supplier, increasing the magnitude of relationship, or the act of recommendation (cf. Hallowell 1996). According to Reynolds (1995), the first definition is the most difficult, intractable and intangible of the loyalty definition (p. 33).

Apart from the sole concentration on the customer perception, it needs to take into consideration all other participants and not to rely on exclusively on customers' view. The view of involving all parties concerned with the service process due to the evolved phenomenon of neglecting the cross lines between consumers and service providers. Hence, the paradigm of customers' expectations versus performances may be insufficient to capture the full potential of the service experience (cf. Athanassopoulos 1997, p. 265). With respect to this, Schneider and Brown (1980; 1985) revealed that employee's perception about the level of quality delivered is positively related to customers' perception. Based on the Schneider and Brownís, and Dess and Robinson's findings, several studies in marketing and retailing use indirect measures of perceive service quality, customer satisfaction and customer loyalty (Hooley et al. 1990; Doyle and Hooley 1992; Deng and Dart 1994; Deshpande and Farley 1996; Fritz 1996; Pelham 1997; Langerak 1997; Liu and Davies).

As it was mentioned earlier that measuring firm performance is a multidimensional phenomenon (Steers 1975; Venkatraman and Ramanujam 1986). Firm performance is therefore measured both by means of financial and operational indicators. It provides a more comprehensive operationalisation of firm performance and enables one to examine the relationship between financial and operational aspects of performance (Venkatraman and Ramanujam 1986). Further, for practical and convenience reasons, some scholars in strategy management, marketing and retailing use indirect/subjective measures for measuring financial and operational indicators (e.g.Conant et al. 1993; Helms et al. 1993; Lusch and Laczniak 1989). Therefore, in this study, the author will use both the indirect/subjective financial and operational indicators. There are return on sales (ROS), return on capital employee (ROCE), labour productivity, space productivity, perceived service quality, customer satisfaction and customer loyalty.

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