The Balanced Scorecard and Beyond – Applying Theories of Performance Measurement, Employment and Rewards in Management Accounting Education

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The Balanced Scorecard and Beyond–Applying Theories of Performance Measurement, Employment and Rewards in Management Accounting Education

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ABSTRACT: This study applies the prevailing scholarly theories of strategic management, employment decisions, cost accounting and share reward schemes to a panel of questions raised by Colin Drury (2012) in the case study of the fictitious company Integrated Technology Services (UK) Ltd., ITS (UK). The paper provides model answers which can be used when working with the case study at institutions of higher education. The merit of the work lies in three areas. First, it provides an overview of theories accepted by the academia that can be utilized for further research. Second, it contrasts pro and contra arguments. Thus it shows the limitations of the very theories when applied to scenarios inspired by practical problems. Third, it develops an innovative Balanced Scorecard for ITS (UK). The scorecard can be used as an example when working with Drury’s case study. But it is also suitable for real life situations of business entities faced with oppressive overheads and deteriorating net margins, building on highly skilled workforce and trying to preserve its differentiated profile.

Keywords: Balanced Scorecard, Recruiting and Outsourcing, Target Costing, Hierarchy of Needs, Hygiene Factors and Motivators, Building Block Model.

INTRODUCTION

The balanced scorecard

The balanced scorecard (BSC) incorporates financial and non-financial measures in order to assess company performance. This approach goes back to the research of Kaplan and Norton (1992), which used to group the measures into four perspectives:

– Customer Perspective
– Internal Business Perspective
– Innovation and Learning Perspective
– Financial Perspective

These four perspectives link the company performance against its strategic goals (Braam & Nijssen, 2004). The goals may differ widely among different organisations, but they gravitate towards meeting customer demand,
optimising internal processes, developing products and services to remain competitive and finally achieving financial rewards, i.e. the four perspectives (Atrill & McLaney, 2009).

The adoption of the non-financial perspectives broadens the information used for decision making by management and thus enables the management to find better solutions compared to a focus on financial data only (Kaplan & Norton, 1996a). Moreover, the easy availability of measures on a scorecard can encourage their use and thus facilitate the decision making process (Tversky & Kahneman, 1973).

The measures can be chosen by the very company to address its special needs. However, when using BSC it is crucial to focus on the key performance drivers and on their very outcome measures. The key drivers are those that match with the overall company strategy (Lipe & Saltarino, 2000).

Also, there has to be a cause-and-effect relationship between the drivers and the outcomes. Otherwise, false assumptions about the interrelationship of metrics can mislead the management (Nørreklit, 2000).

Through the cause- and-effect link, a BSC can be used not only to assess corporate performance, but also managerial achievement. Thus shareholders can create incentive schemes based on the realisation of BSC targets (Khan et al., 2010; Pollanen & Xi, 2011).

The translation of strategy into operational metrics through BSC is only possible if staff and management are both committed to the strategic requirements and try to improve the metrics under evaluation. However, research shows that low level employees are rarely dedicated to strategic ambitions of the board, whereas management tend to ignore non -financial measures (Pessanha & Prochnik, 2006). However, this is rather drawback of management than of BSC. Hopwood (1974) shows that managerial styles that take account of subordinates’ concerns and non-financial metrics can be more suitable.

Especially the customer perspective must not be ignored by management. Gupta and Zeithaml (2006) indicate that improved customer satisfaction increases profitability. Ittner and Larcker (1998) and Anderson et al. (2004) find out that minor growth of customer satisfaction can result in millions of dollars of increased firm value, i.e. stock returns.

Furthermore, research conducted by Huber (1991) and Lapre and Tsikritktsis (2006) indicate that management evaluated by non- financial measures allocate their efforts and intensify their learning in order to influence these metrics positively. This, in turn, can have a positive effect on the overall company performance (Campbell, 2008).

Having said that, BSC is just a tool to implement strategy. Therefore, the strategy itself has to be actionable and correspond to the corporate goals (Al-Baidhani, 2013).

**Recruiting and outsourcing of accounting personnel**

Accounting services can be obtained either through recruiting an accountant or by the way of outsourcing, i.e. using an accounting service provider.

There are different tasks that can be performed by an accountant, i.e. financial, management or forensic accounting, internal or external audits (ACCA, 2011a). These roles come along with diverse capacities that can influence the recruit/outsource decision. So, a management accountant needs a thorough understanding of production processes whereas a financial accountant must be an expert of accounting standards (Bhimani et al., 2013).

One of the perceived advantages of outsourcing is cost reduction. Besides saving on salary, ITS (UK) could save training costs and office space rentals (Wienskowska & Stronka, 2005). This is important given ITS (UK)’s deteriorating net margin.

Using an outside expert can free in-house capacity that can be using otherwise (Gómez Conde, 2015). This is certainly an issue for ITS (UK) with its budget control heavily relying on manpower.

Sub-contractors are less vulnerable to a sudden absence due to personal reasons (illness, unexpected family commitments). In case of being prevented just another expert can be assigned to the task (Wienskowska & Stronka, 2005).

Furthermore, sub-contractors can react more flexible to the company’s changing needs. They possess a wide spread expertise as compared to an in-house accountant. They also use sophisticated professional hard- and software thus reducing or eliminating the need of investment at ITS (UK). The usage of such resources allows the sub-contractor to provide tailored high quality services. The benefits of the economies of scale can be shared with ITS (UK) via a favourable price (Wienskowska & Stronka, 2005).

Finally, in case of poor service and dispute an accounting service provider is usually covered by an insurance policy which can account for ITS (UK)’s financial damage (Wienskowska & Stronka, 2005). This is not the case with employees which can be fired, but rarely have enough resources to account for corporate losses.
Loss of control can occur if no in-house experts are available. However, this risk can be reduced through appropriate contract terms (Cuganesan et al., 2006).

The workforce actually employed in accounting at ITS (UK) can put up resistance against outsourcing, especially if they are at risk of redundancy (ACCA, 2011b). From the viewpoint of ITS (UK), freeing manpower or making clerical staff redundant can help mitigate overhead costs.

Confidentiality can be at risk if a sub-contractor provides similar services to ITS (UK)’s competitors (Robertson et al., 2004). Though, a financial damage can be covered by the sub-contractor’s insurance policy.

**Target costing**

Acc. to Hertenstein and Platt (1998) 80% of production costs are “locked in” at the development stage, when major decisions are made about the quality and features of the product. The number of the (standard) parts used is made at this point of time (Swenson & Everater, 2014). Once decided, it can prove expensive to implement major changes later. Therefore, to cap the costs from the beginning on, a profit margin is deducted from a competitive price to arrive at target costs (ACCA, 2011c).

Target costs are to be compared with projected costs to estimate the target cost gap (Hematfar et al., 2013). The gap can be closed using various redesigning processes like using less or other parts or materials, train workers to benefit from learning curve effects or replace expensive employees with cheaper personnel. These options can be discussed with the customer prior to beginning of the production process (ACCA, 2011b). Further actions can be planned even if they are to be realised at a later stage of the product life cycle (Yazdifar & Askarany, 2011).

**Employee motivation and reward**

*Theories of employee motivation*

Maslow (1954) develops a hierarchy of needs starting with the most fundamental ones like food and housing (psychological needs) and leading to the need to develop oneself acc. to one’s interests and attitudes (self-actualisation). As soon as the most basic needs are satisfied, the person turns to a higher layer of the hierarchy; the lower layers lose their motivational effects (Jerome, 2013). In case of share schemes, this means that after a certain level of monetary reward is achieved, employees do not react with higher motivation.

Herzberg (1964) creates a two-factor theory that differs between hygiene factors (job title, salary, fringe benefits) and motivators (self-realisation at the job, feel of responsibility, challenging work). In his opinion, hygiene factors only provide a background, whereas real motivation originates from psychological factors influenced by motivators (Sauermann & Cohen, 2010; Mohanan et al., 2012). Therefore, share schemes can only play a minor role in motivating employees.

*Theories on employee rewards*

Acc. to the building block model of Fitzgerald and Moon (1996) employees should be rewarded for performance controllable by them. This is not necessarily the case with share schemes: the share price can rise or fall independent of the employees’ performance. Also, if there is a time lag between allocation of shares and the right to use them, the deferral and the uncertainty of the benefits can further reduce the employees’ feeling of controlling their reward (ACCA, 2011c).

Hyman and Mason (1995) emphasise that subordinate employees usually receive too few shares to develop a feel of owning the company that is connected with rewards by shares.

Contrary to low level employees, senior management can try to control and influence share prices through their management and governance decisions. However, if they try to push the share prices through short-term actions and misleading accounting policy to the detriment of the overall company strategy, such a “motivation” can be rather damaging for the organisation (Ryan, 2013).
DISCUSSION

The strategic background of ITS (UK)

A BSC can only be used reasonably if its performance measures are aligned with the overall strategy of the organization (Kaplan, 2010). ITS (UK) is specialized in providing computing and telecommunicating outsourcing support, especially for the gas and oil industry. High quality service is especially valued by customers who demand a mass of variations and ad-hoc changes to contracts. This is a differentiation strategy which allows meeting very special customer needs (Porter, 1998). Thus it should be possible to charge a price premium for outstanding services (Porter, 2004) which should help ITS (UK) to improve its margin.

However, expanding into new markets and heavily relying on sub-contractors can hinder differentiation and impair quality. It can prove difficult for ITS (UK) to provide distinct services for clients as different as an oil company and a public organization and at the same time to try to save on costs. Thus ITS (UK) could become “stuck in the middle” (Johnson et al., 2011).

The implementation and adoption of a balances scorecard at ITS (UK)

Kaplan and Norton (1996b) suggest that BSC should be used on a business unit level. The IT Outsourcing service is the core business activity of ITS (UK) which earns the most revenue for the company and attracts the most client contracts. The Consulting business division is a small unit. Although it has a separate client base, it also conducts services for IT Outsourcing. The Staff service division provides services for the other two units. It does not have outside customers at all. With IT Outsourcing being the major division at ITS (UK), it is reasonable to focus on it when developing BSC.

Research conducted by Slovic and MacPhillamy (1974) shows that management prefers to rely on common measures instead of making decisions on the basis of a variety of metrics, which differ among business units. This again points towards a joint BSC.

In order to develop and to implement BSC, Kootanace et al (2013) suggest to start with examining the organisational environment, for example using the Strength -Weakness-Opportunities-Threats (SWOT) Framework. The measures of the four perspectives should be aligned to the organisational strategy and an automated reporting system established to provide up-to-date information.

After the initial implementation, operations and activities should be linked to the performance measures and become subject of steady communication between management and staff (Cooper et al., 2011) so that BSC can be adopted successfully.

It takes from two to four months to establish a BSC, which depends on the organisation size and the availability of trained staff. The scorecard should be adjusted to environmental changes semi-annually (Kootanace et al., 2013). A critical evaluation of meeting the BSC goals should take place on a regular basis (Malina & Selto, 2001).

For the Customer Perspective Kaplan and Norton (1992) suggest using the following metrics:
- Time
- Quality and Performance
- Cost

Time is very important for ITS (UK) as it strives to be able to respond to customer needs immediately. Evaluation of communication protocols with customers and time sheets can be used to track customer waiting time per query.

Quality and performance expectations can put ITS (UK) under pressure. Its oil industry clients want to limit the number of sub-contractors. This makes ITS (UK) as a general contractor providing services which are not its core competence. The qualification of sub-contractors should be assessed at a pre-contractual stage using questionnaires.

Cost is a hot topic at the company. Currently the poor allocations of IT staff time to contracts results in customers paying not appropriate amounts. Customer complaints due to cost deviations from budget should be assessed via interviews of client managers.

The Internal Business Perspective can be measured using the following criteria (Kaplan & Norton, 1992; Campbell et al., 2002):
- Employee skills
- Productivity
- Differentiation
The availability of technically skilled IT staff is crucial for the company. Expenditure on job advertisement and job fair in relation to sales has to be evaluated using data from the accounting department.

The productivity at ITS (UK) is hampered by poor automated control systems calling for individual monitoring. This increases overhead costs and the possibility of human error. Also, there is a lack of standard contract terms. Standard data sheets and standardized contract settings have to be developed and the number of deviations from standard analysed through internal controls.

The company has a long-standing history of serving gas and oil industry. Now it expands into other industries and provides outsourcing support for the public sector. In order to sustain its differentiated profile a pre-contractual customer analysis should be performed.

For the Innovation and Learning Perspective Mistry and Nandram (2005) suggest the following criteria for IT businesses:

- Research and development (R&D) expenditure
- Employee training
- Innovative environment

The parent company ITSI encourages high R&D spending. The number of new product launches or patents can be an indicator of successful R&D programmes.

ITS (UK) should have a sufficient number of skilled IT staff. This can be measured through training expenditure per employee using data from accounting department.

To assess the innovative capacity staff interviews should be conducted to find out whether improvement and optimising suggestions are encouraged throughout ITS (UK).

Regarding the Financial Perspective, the net margin of ITS (UK) is currently eroded through increasing overheads. Therefore, the overhead ratio=total overheads./.sales should be observed (Gaughan, 2009). Moreover, debtors (33.5£m) make over 41% of sales (80.5£m) showing that ITS (UK) has a very generous debtor policy, especially considering its low cash-at-hand position of 2.1£m. The control of the accounts receivable turnover ratio=credit sales./.average accounts receivable should help to change this policy and free cash for important business tasks like R&D or hiring/training of IT professionals. The information needed can be obtained from the accounting department. The BSC chart can be developed as follows:

**The Balanced Scorecard for ITS(UK)**

<table>
<thead>
<tr>
<th>Customer Perspective</th>
<th>Innovation and Learning Perspective</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Driver measure</strong></td>
<td><strong>Objective</strong></td>
</tr>
<tr>
<td>Time</td>
<td>Reduce time to respond to customers</td>
</tr>
<tr>
<td>Quality and Performance</td>
<td>Use qualified sub-contractors</td>
</tr>
<tr>
<td>Costs</td>
<td>Allocate IT staff time property</td>
</tr>
<tr>
<td></td>
<td>R&amp;D expenditure</td>
</tr>
<tr>
<td></td>
<td>Employee training</td>
</tr>
<tr>
<td></td>
<td>Innovative environment</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Internal Business Perspective</strong></th>
<th><strong>Financial Perspective</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Driver measure</strong></td>
<td><strong>Objective</strong></td>
</tr>
<tr>
<td>Employee skills</td>
<td>Employ more skilled IT staff</td>
</tr>
<tr>
<td>Productivity</td>
<td>Standardize control systems / contract terms</td>
</tr>
<tr>
<td>Differentiation</td>
<td>Sustain differentiated profile</td>
</tr>
<tr>
<td>Net margin</td>
<td>Increase net profit</td>
</tr>
<tr>
<td>Overhead ratio</td>
<td>Reduce overheads</td>
</tr>
</tbody>
</table>

The BSC chart can be developed as follows:
Recommendation on recruiting and outsourcing of accounting personnel

Acc. to the Harmon’s process- strategy matrix accounting services can be seen as being either of high or low complexity. But in both cases they are not core competences of ITS (UK) and therefore of only a low strategic importance. As such, they should be outsourced to a specialist service provider instead of tying up company in-house resources (ACCA, 2015).

Implications of target costing for the achievement of a target net margin

ITS (UK) is engaged in IT outsourcing services. Its main cost drivers are not materials and product components, but labour and staff overhead costs. Under ITS (UK) target contract terms the margin is payable regardless of actual costs. But in reality the company struggles to control costs so that its margin per contract is misleading.

This is even truer for its flexed contracts and reimbursable contracts. ITS (UK) groups the costs at departmental level and then charges these costs to the single contract. But due to the ever-changing customer requirements it hast to assign its IT staff to varying tasks. This makes it previous attempts to budget the costs largely useless.

These problems would intensify if ITS (UK) was to apply TC more widely. TC calls for a stable environment and a manageable range of customer needs (Dyson, 2010; Terdpaopong & Visedsun, 2013).

Atrill and McLaney (2010) show that service businesses should use activity based costing (ABC) instead. Using ABC, costs are assigned to products/services out of predetermined cost pools acc. to the activities consumed by the very product/service (Searcy & Roberts, 2007).

ITS (UK) earns a gross margin of 20.99% on average. There are contracts that fail to earn a positive margin at all (Exoil Refinery E-Mail). They need a thorough review. The company’s policy to accept loss leading contracts for the sake of future business has not proved profitable yet – ITS (UK) is still losing on that contracts.

The overhead costs account for 16.03% of sales, resulting in a net margin before tax of 20.99 - 16.03 = 4.96 instead of the required 6%. If ITS (UK) fails to increase its gross margin, for example through a reduction of cost of sales, it should reduce overhead costs.

Practical considerations on employee share schemes

Despite of a rather negative view on share schemes in theory, they are widely used in practice to the benefit of corporate performance.

Crush (2009) reports that a vast majority of share scheme participants under survey increased their working efforts and supported supervisor control of their colleagues. They also reduced their absence. Almost half of them followed the company’s financial performance on a weekly or a more often basis. Thomas (2012) shows that loyalty and commitment to the employer significantly increase among the participating employees, as does their attitude towards quality work.

Given the different assessment of share schemes in theory and practice ITS (UK) should consider a reward scheme that would allow the employee to choose between shares and cash. Acc. to Hyman and Mason (1995) such schemes are highly valued by employees. Nevertheless, this should not replace training and promotional schemes to address personal attitudes of employees (Neckermann et al., 2009) and thus to motivate staff even more.

CONCLUSION

This work deals with the case study of ITS (UK) developed for the purposes of higher education by Colin Drury (2012). The paper analyses the Balanced Scorecard principles on the background of ITS (UK) and develops an innovative Balanced Scorecard in order to address the company strategy. Furthermore, the paper deals with decision making regarding recruiting and outsourcing accounting personnel at ITS (UK). Target Costing in use at ITS (UK) is evaluated against the company’s failure to achieve its net margin. Finally, the company’s share scheme is reviewed in connection with theories on employee motivation and reward. The work shows that diverse responses to the imposed research questions can be supported by academic literature and previous research, depending on company strategic goals and managerial assumptions.
Conflict of interest

The authors declare no conflict of interest.

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