A new approach to linking strategy formulation and strategy implementation: an example from the UK banking sector

Kevin Littler*, Phil Aisthorpe, Robert Hudson, Kevin Keasey

The International Institute of Banking and Financial Services, The University of Leeds, Leeds LS2 9JT, UK

Abstract

Broady-Preston and Hayward (1998) make the point that ‘the attempt by organisations to move away from purely top-down strategic formulation is in its infancy and different organisations favour different structures and models to ease the bottom-up flow of information’ (p. 285). They further suggested that the balanced scorecard (BSC) model might be one tool to help the bottom-up flow of information. This paper uses the experience of one of the major UK banks to illustrate how the BSC might be used as part of a strategy process which can capture bottom-up information. The conclusion to be derived from this experience is that the implementation role of BSCs needs to be supported by a defined strategy formulation process. The solution which has emerged is the linking, for the first time, of the strategic architecture formulation process of Hamel and Prahalad (1996a) with the BSC strategy implementation tool of Kaplan and Norton (1996a), the balance scorecard. Boston MA: Harvard Business School Press). © 2000 Elsevier Science Ltd. All rights reserved.

Keywords: Balanced scorecard; Strategy formulation; Strategic architecture; Retail banking

1. Introduction

Broady-Preston and Hayward (1998) make the important point that

the rapidity of change in the financial services market clearly has implications for strategic planning within the banking industry, both for the corporate centre of an organisation and its strategic business units (p. 78).
They also stress that success is limited when strategic planning is divorced from the reality of implementation (p. 280).

In the light of these arguments, this paper presents an approach to the integration of strategy formulation (planning) and implementation that has been developed from the experiences of one of the UK's major retail banks (for commercial reasons, the name of the bank has been withheld).

As a means of monitoring information on strategy implementation across the organisation, the bank initially explored using the balanced scorecard (BSC) by itself. The BSC is a performance measurement framework developed by Robert S. Kaplan and David P. Norton in the early 1990s. The BSC promotes the use of multiple financial and non-financial measures to monitor the progress of strategy implementation (Kaplan & Norton, 1992). In the most common form of the framework, the choice of performance measures is such that they are associated with four aspects of the business: Financial, Customer, Internal Business Processes, and Learning and Growth. By monitoring the measures within each of these four categories (or 'quadrants') and by maintaining a balance between all four, management is able to control the strategy implementation process, not just for the realisation of short-term financial outcomes but also for building long-term competitive capabilities.

While developing the measurement framework within their organisation, however, the bank swiftly realised that for the scorecard to meet its potential it would need to be very strongly connected to the organisation's strategic quest for future competitive success. Yet the BSC literature historically pays little attention to which actual technique should be used for the formulation of strategy content (Kaplan & Norton, 1996a, p. 37; Vitale, Marvinac & Hauser, 1994). What was required for the bank was a robust mechanism for formulating strategy which enabled its subsequent implementation to be described and managed successfully by the scorecard. Furthermore, this process would need to be sufficiently adaptive to cope with the changing environmental conditions of the financial services sector (Rousseau & Rousseau, 2000).

The solution to these issues lies in bridging the gap between strategy formulation and implementation; that is, the integration of the conceptualisation and communication of strategy with the information systems for monitoring its achievement. It is this integration which partially removes the distinction between top-down strategy and the flow of bottom-up information (Broady-Preston & Hayward, 1998). This paper demonstrates how this may be accomplished by constructing both the organisation's strategy for future success and its performance measurement system simultaneously from a common set of building blocks, which we refer to as 'strategy objects'. Using strategy objects, we demonstrate for the first time how to integrate the popular contemporary approach to strategy formulation of Hamel and Prahalad (1996a) with the implementation measurement system promoted by Kaplan and Norton (1996b).

The first section considers strategy formulation in terms of the Hamel and Prahalad (1996a) design for 'strategic architecture'. Section 2 introduces the use of Strategy Objects and an object orientation approach to strategy information systems. Section 3 describes how strategy objects can enable the communication of strategy and can capture bottom-up information by empowering a broader constituency of participants in the 'strategizing quest' (Hamel, 1996, p. 71). The fourth section deals with the simultaneous construction of the organisation's performance information...
system, inseparably integrated with the organisation’s strategy content. The penultimate section outlines some of the benefits to be gained from the integrated approach as evidenced by its application within one of the UK’s largest retail banking groups. The final part draws some conclusions.

2. Formulating strategy content and strategic architecture

2.1. Background

Although Kaplan and Norton (1996b) stress that the BSC is a strategic rather than a diagnostic information system (see Simons, 1995), they take the view that

The Balanced Scorecard is primarily a mechanism for strategy implementation, not for strategy formulation (Kaplan & Norton, 1996c, p. 78).

From the outset of strategic management as a discipline in its own right, debate has arisen as to the relationship between the formulation of strategy and its implementation (Chandler, 1962, p. 13). Since that time, the segregation between strategy content information (usually formulated by a small number of senior executives) and its implementation (by the whole organisation) has persisted as one of the defining characteristic of the prescriptive schools of strategic management thought (Mintzberg, 1990, p. 111). By contrast, the more descriptive perspectives on strategic management emphasise a greater overlap and interplay between strategy formation and the implementation process. Within such perspectives, the strategy actually achieved by an organisation is seen as emergent and adaptive over time, contemporaneous with its implementation (Mintzberg & Waters, 1985).

The strategic management literature of the 1990s promotes two important issues in the making of strategy. First, strategies need to be forward looking and dynamic (Hamel & Prahalad, 1996b; Prahalad & Hamel, 1994). It is no longer appropriate to compete simply on the basis of today’s markets and current resources, but rather organisations need to be continually pushing back and colonising their own competitive frontier. Second, strategy formation should not be confined to the top of the organisational pyramid, but should rather enjoy a much wider constituency of participants in order to maximise the creative and informational input (Simons, 1995; Hamel, 1996; Stacey, 1996; Stewart, 1997).

2.2. Strategic architecture

As modern corporations have to operate in increasingly dynamic and turbulent environments, strategy formulation needs to be forward looking and change orientated (Hamel & Prahalad, 1994). Organisations need to be not only responsive to changes within their current operating environments but also predictive of such changes, in order to identify and capture future opportunity share. Hamel and Prahalad (1989, 1993, 1996a) postulate a strategic management framework in which organisations pursue future competitive success through the re-invention of their markets and the deployment of ‘core competencies’ (Prahalad & Hamel, 1990). The formulation process
through which an organisation translates its current core competencies into future competitive success, they term 'strategic architecture' (Hamel & Prahalad, 1996a, p. 117).

Strategic architecture represents the information road map of the organisation’s progress towards its anticipated competitive ambitions, which may not be achieved for several years to come. Indeed, Hamel and Prahalad emphasise that strategic architecture is a broad opportunity approach plan. The question addressed by a strategic architecture is not what we must do to maximise our revenues or share in an existing product market, but what we must do today, in terms of competence acquisition, to prepare ourselves to capture a significant share of the future revenues in an emerging opportunity arena (1996a, p. 121).

The road map to future success not only emphasises the organisation’s destination but also informs about the route necessary to achieve it. (By way of example, Fig. 1, below, shows a formal extract from the strategic architecture of the bank.)

Whilst the appeal of capturing forward competitive success is compelling, Hamel and Prahalad's method for formulating strategy content presents certain difficulties. First, concepts which work...
well at a corporate level and generically between industries may be difficult to translate into actual resource allocations in specific organisations (Hamel & Prahalad, 1996a, p. 223). Managers must be able to encapsulate and ‘take hold of’ information about core competencies and future competitive ambitions in a tangible way if they are to be managed. Second, a method is required to communicate strategic architecture throughout the organisation in order for it to form the basis of a shared dialogue about strategy and to generate strategic alignment.

Again, the solution to these difficulties is to break down the barrier between formulation and implementation monitoring. The practical hurdles within Hamel and Prahalad’s strategy formulation approach may be addressed by constructing both a strategic architecture and a performance measurement system simultaneously from common building blocks of ‘strategy objects’. These strategy objects will contain informational components which record both their purpose within the strategy and their achievement within the implementation process.

3. Strategy objects: getting to grips with strategy information

3.1. Object orientation

One way that management can identify and manipulate the key building blocks of strategy is by the application of an ‘object orientation’ approach. Object orientation is a computer software modelling and development discipline that enables the construction of complex systems from individual components (Khoshafian & Abnous, 1990). Object orientation is a systems development methodology that allows large complex programs to be assembled from a collection of reusable components called ‘objects’. By using objects, complex computer code can be referred to and identified using familiar terms. For example, pictorial icons of waste paper bins or a pair of scissors provide familiar metaphors to computer users as to the operation of some abstract software code. Using this principle in the design of complex strategic architecture provides greater tangibility to strategy theory; allowing management to take hold of abstract strategy concepts and to apply them in a pragmatic business context. ‘Strategy objects’ are the reusable components or building blocks used to construct an organisation’s strategy information. In order to formulate and communicate the organisation’s strategic architecture, management must identify and agree its component objects. The ‘bounded’ nature of the objects provides greater clarity as to what is being managed and what is being communicated for strategic ends. The strategy objects will possess three key informational aspects:

- the purpose or role of that object in the overall strategy;
- the interdependency of the objects;
- the attributes of the object which describe its successful implementation.

3.2. Information about a strategy object’s purpose or role

While there are a number of possible categorisations of strategy objects, eight classes of strategy objects seem to capture the main elements of modern strategic management theory and these,
Table 1
Strategy objects: the building blocks of strategy information

<table>
<thead>
<tr>
<th>Object</th>
<th>Definitions</th>
<th>Examples from Retail Banking</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Resource objects</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| **COMPETENCY**   | Competencies are defined in terms of the collective learning of an organisation (Prahalad & Hamel, 1990, p. 82). They constitute integrated bundles of skills and technologies which represent the sum of learning across individual skill sets and multiple organisational units (Hamel & Prahalad, 1996a). | Resource owned by the bank  
In the retail banking group, specific customer knowledge, multiple delivery channel technologies and disparate skills in customer service, asset and liability management, insurance underwriting, and equity investment may be bundled to form a competency in 'customer lifetime wealth management'. |
| **CAPABILITY**    | Capabilities are collective sets of business processes applied in a strategic manner (Stalk, Evans & Shulman, 1992, p. 62). They deal with active delivery rather than static potential.  
Capabilities are the activation of resident competencies which operate to deliver benefits to the customer (Stalk, 1992).                                                   | Combining telephone account administration with customer demographic analysis builds relationship opportunities for increased product take-up. |
| **STRATEGIC ASSET** | The resource based view of the firm emphasises the importance of a firm’s assets (Grant, 1991; Hall, 1993). Collis and Montgomery (1995) identify both the physical and intangible assets of firms as being able to play a key strategic role. | Physical: Branch network; call centre; computers; specific personnel.  
Virtual: Web gateway; on-line equity brokerage.  
Intangible: Corporate brand image. |
| **Action objects** |                                                                                                                                                                                                                                                                                                                                 |                                                                                  |
| **STRATEGIC INITIATIVE** | Strategy means deliberately choosing a different set of activities (Porter, 1996, p. 64). Strategic initiatives are those directives undertaken by management which ‘act upon’ and ‘cause change to’ other strategy objects. They represent that which needs to be undertaken to transform individual objects. | Action to be undertaken  
New training initiative in loan underwriting skills.  
Convert existing telephone call centre to internet enhanced call centre.  
Purchase fund management company and offer new collective investment products.  
Personal loan credit scoring.  
Telephone banking account administration.  
Derivatives trading. |
| **BUSINESS PROCESS** | Business processes consist of sequences of operational activities, including the active utilisation of strategic assets.  
These should either be different from those conducted by the firm’s rivals or performed in a superior way (Porter, 1996).                                                                                          |                                                                                  |
Table 1 (continued)

<table>
<thead>
<tr>
<th>Object</th>
<th>Definitions</th>
<th>Examples from Retail Banking</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Intent objects</strong></td>
<td>Competitive success flows from the benefits which accrue to final customers. The value chain concept indicates how desired customer value is ‘imparted into’ or ‘routed through’ products, and is, in some form, reflected in their purchase price (Porter, 1985). A customer value proposition is the motivation behind the action of a customer to purchase.</td>
<td>Statement of intent To provide the convenience of an immediate decision on applications for personal loans. To protect customers through payment protection insurance. To enhance the purchasing power of customers.</td>
</tr>
<tr>
<td><strong>ECONOMIC VALUE PROPOSITION</strong></td>
<td>Stock companies are required to create maximum returns for shareholders (Stewart, 1991). Firms cannot only be concerned with product market share and growth but must also be concerned with delivering value for shareholders. Shareholder wealth is increased through dividends and the capital gains on equity holdings.</td>
<td>Increasing distributable profit from domestic activities through the reduction of branch network operating costs. Reducing the required provision for bad debt on our personal loan book by investing in more sophisticated credit management systems.</td>
</tr>
<tr>
<td><strong>STRATEGIC VALUE PROPOSITION</strong></td>
<td>Strategic value propositions summarise the current or aspired positioning of the firm within its competitive environment. They represent the deliverable interpretation of the firm’s strategic intent — its guiding theme and disproportionate competitive ambition (Hamel &amp; Prahalad, 1989).</td>
<td>To dominate the provision of retail financial services to the ‘n’ percentile most profitable UK personal customers by becoming the most trusted provider of wealth enhancing services, ensuring increased longevity of customer relationships and increased product take-up.</td>
</tr>
</tbody>
</table>

themselves, may be categorised into three main groupings: resource objects, action objects, and intent objects. (Table 1 shows the details of the eight different types of strategy objects). This classification of strategy objects is a form of information shorthand. The object type informs management as to the purpose or role of the object within the overall strategy.

3.2.1. Resource objects

The role of a resource object is to provide the organisation with the ability to operate in a strategic fashion. The strategic management literature contains a broad variety of approaches concerning those objects that enable a corporate body to function strategically.¹

¹ The internal strategic features of a organisation may include its distinctive competence (Selznick, 1957), its constituent resources (Penrose, 1959), its structure (Chandler, 1962), its strengths and weaknesses (Andrews, 1971). Contemporary strategic management theory includes: Porter’s (1985,1991) value chain drivers; the resource based view of the organisation (Wernerfelt, 1984; Grant, 1991; Collis & Montgomery, 1995); core competencies (Prahalad & Hamel, 1990), and the promotion of capabilities based competition (Stalk et al., 1992).
these objects have been seen as lying within the boundaries of the organisation, with managers being free to choose the internal perspectives of strategic management thought to be most useful for their individual organisation. Here, in line with contemporary strategic management theory, three types of resource objects — Competencies, Capabilities and Strategic Assets — are considered.

Competency objects are bounded collections of skills and technologies identified across the organisation which represent the collective learning of the organisation (Hamel & Prahalad, 1996a). For example, Prahalad and Hamel applaud NEC for developing competencies in the convergence of computing and communications, such that these competencies become both ‘the glue that binds existing businesses’ and ‘the engine for new business development’ (1990, p. 82). A retail bank, for example, may cultivate a differentiating combination of customer handling skills and information technologies which provides a future gateway into the regular exchange of information between a customer and the bank; moving the customer relationship away from a transaction/sales basis towards one based on a customer’s recognition of his/her own financial needs. This combination of skills and technologies would be defined as a single, bounded competency object. Once defined, the object can be consistently identified and managed.

Stalk et al. (1992) draw a distinction between an organisation’s competencies and its capabilities. They define a capability as ‘a set of business processes strategically understood’ (p. 62). Capabilities are the combinations of processes, activities or undertakings which contribute to the organisation’s strategy. For example, Stalk et al. (1992, p. 58) interpret Wal-Mart’s success as due to making inventory replenishment logistics the heart of its competitive strategy. A retail bank, for example, may combine the national outbound telephone calling activity of a call centre with the activities of local, branch-based personal financial advisors to provide focused sales opportunities for investment products to targeted customer groups.

The resource based view of the firm (RBV) (Penrose, 1959; Wernerfelt, 1984) considers organisations to be collections of resources and seeks to identify how these resources drive competitive success. Contributions to the RBV frequently emphasise the role played by individual physical or intangible assets (Hall, 1992, 1993; Grant, 1991; Barney, 1991). Collis and Montgomery (1995) identify both physical and intangible assets as being able to play a key strategic role. An example of a physical strategic asset in a retail banking context might be a specific branch location which enables competitively distinct performance. By contrast, competitive advantage might be assisted by the possession of an intangible asset such as a particular brand name and an associated level of customer trust.

3.2.2. Action objects

Porter takes the view that, ‘corporate strategy is about being different. It means deliberately choosing a different set of activities’ (1996, p. 64). The actions undertaken by management to cultivate strategic outcomes and the organisation’s individual operational activities are key to making strategy work. We term these actions ‘strategic initiatives’ and ‘business processes’ respectively (see Table 1 given earlier).

Strategic initiatives are new projects which are specifically undertaken for the purpose of making the strategy work (Porter, 1991, p. 105). In object orientation terminology, the new strategic initiative ‘operates’ on an existing object to modify it. For example, management may conduct an initiative to obtain a new skill or technology which is complementary
to an existing competence. In a retail banking context, a bank may conduct an initiative to develop a new IT system, or an initiative to buy-in trained staff, such that the addition of these technologies and skills improves a specific competence within the bank.

Business processes are the operational undertakings through which resources are leveraged to deliver customer benefits. Business processes consist of sequences of individual activities which build customer value chains (Porter, 1985). To achieve competitive advantage, these activities must either be different from those conducted by the organisation’s rivals or performed in a superior way (Porter, 1996). A retail bank performs many business processes, from arranging a simple personal loan to managing multi-million pound roll-over commitments in the wholesale money markets.

3.2.3. Intent objects

Intent objects represent the desired outcomes of an organisation’s strategic architecture. These outcomes we express in terms of three types of value propositions: Customer, Economic and Strategic (see Table 1).

The design of strategic architecture must deal with the benefits which will finally accrue to the customer. Contemporary strategic management theory is familiar with the concept of desired customer value being created and ‘imparted into’ or ‘routed through’ products and services, and being, in some form, reflected in their purchase price (Porter, 1985). For the purpose of strategic architecture design, it is necessary to determine what benefits the customer will actually be paying for. A customer value proposition is the motivation behind the action of customers to purchase. For example, a retail banking group may provide its customers with certainty in their future stream of mortgage payments by offering a 10-year term, 10-year fixed rate, repayment mortgage product. Conversely, the bank may offer its customers the opportunity to manage their own investment risk/return profile by offering an execution only share brokerage service.

Stock companies are required not only to deliver customer value but also to create maximum returns for shareholders. An economic value proposition is a specified desired outcome which will increase the wealth of the organisation’s owners. One example from retail banking might be the realisation of economies of scope through the related acquisition of an insurance company.

Hamel and Prahalad (1989) promote the concept of organisations having a ‘strategic intent’. Strategic intent is the expression of the organisation’s disproportionate competitive ambition which pervades the organisational culture and operates as a motivating factor behind its strategy. Strategic value proposition objects are deliverable outcomes which express a organisation’s strategic intent. For example, a retail bank may express its strategic intent as outperforming a specific rival bank in terms of the growth of its corporate loan business. Alternatively, its intent may be expressed in terms of dominating provision of financial services to a specific customer base (see Table 1).

3.3. Information about the interdependencies within the strategy

It will be apparent from the definitions and examples above that an individual strategy object cannot describe the route to future competitive success. Rather it is the combination and
interdependency of these objects which enables the construction of an achievable strategic architecture. An example of an interdependency would be to consider the role of the bank’s brand image (an intangible asset) in strengthening relationships with its corporate customer base (i.e. capability enhancing). Section 4, below, outlines how management can use strategy objects to build and communicate a robust strategic architecture.

3.4. Information about an object’s successful contribution to the strategy

Under object orientation, objects carry associated ‘attributes’ which inform an observer as to the nature or status of the object. Attributes provide a description of the object, which may change over time and which, crucially, may be measured. The degree of success of a strategy may be represented within the measurable attributes of strategy objects. These measurable attributes of strategy objects, we will term ‘critical success factors’ (CSFs). For example, a retail bank may define a bundle of product knowledge skills and call centre technologies as part of a competency object in delivery channel flexibility. One factor critical to the success of this competency would be ‘the extent to which staff have appropriate product training’. Section 5, below, will demonstrate the application of object attributes to monitoring strategy implementation.

4. Generating a graphical strategic architecture dialogue

4.1. Building the informational route map to future competitive success

With a set of strategy objects defined, an organisation’s strategic architecture may be constructed and displayed graphically. As we have seen, the purpose of strategic architecture design is to create a route map which leads from the organisation’s current internal competencies to the external value propositions it wishes to deliver in future markets (Hamel & Prahalad, 1996a).

Consider, for example, the retail bank which envisions its future market position (strategic value proposition) to be increasingly focused upon higher net worth, technology friendly customers. To this end, it postulates a customer value proposition of ‘24 hour internet banking’ and, as a consequence, an economic value proposition of saving money through closing expensive branches. However, upon reflection, the bank identifies that its current collection of skills and technologies (competencies) revolve around branch access and cash handling. Using strategy objects, the bank can map out the transition it needs to make from its current position to its achieving its postulated strategic success (Timewell & Young, 1999a). Fig. 1 shows an extract of the strategic architecture of the bank. The example strategy objects used in this strategic architecture include those referred to above or given in Table 1.

In this example, a new competency would need to be cultivated in the field of channel management. To this end a strategic initiative might be undertaken to head-hunt the skills of a known channel developer. The enhanced competency would feed into the bank’s capability to actively transact its services through the internet. This capability could only be achieved through the creation of new business processes, the purchase of computers (tangible assets) and the development of a new brand (intangible asset).
4.2. Capturing bottom-up information

One key advantage of using component building blocks for strategic architecture is that, for any given strategy object, the object and its interrelationships can be defined by employees most familiar with managing that object. For example, the manager of a mortgage application department within a retail bank may define the business process objects conducted by that department. They should then work with others to establish what competencies and assets are utilised by these business processes and/or which capabilities and customer benefits are dependent upon these processes being performed well. The staff of the mortgage application department will then know exactly how they contribute to the organisation’s strategy; indeed, they will have defined their contribution on their own behalf. Object orientation allows the interpretation of abstract strategy concepts into defined, visible representations to which employees at each organisational level may relate. In this way the objects begin to capture bottom-up information based on the experiences of managers at all levels. Using an objects based strategy ‘tool-kit’ enables creative thinkers at all levels of an organisation to be involved in strategy formation.

5. Building a balanced scorecard information system simultaneously

As we noted at the end of Section 3, strategy objects can hold information not just about the object’s purpose in the strategy and its interdependencies, but also about the success of its implementation. As object relationships are identified within the architectural blueprint, the object attributes which describe the implementational success of each object can be defined. These critical success factors (CSFs) will act as the milestones by which the organisation will judge its journey towards its desired future competitive position.

The success attributes of strategy objects are the series of goals which it is necessary to achieve or maximise in order to optimise the contribution of the strategy object to the overall architecture. For example, a bank may have an intangible strategic asset object of ‘brand image’ (see Table 1). The contribution of the brand to the bank’s strategic success may be critically dependent upon it ‘being thought of as dynamic by higher-earners aged 25–35’. This could be one example CSF of the object.

It is these measurable attributes of the building blocks which enable the construction of a performance information system which is wholly integrated to the organisation’s strategy. A scorecard can be constructed directly from the object attributes. As each CSF is defined, it may be associated with one of the scorecard quadrants: financial, customer, internal business processes or learning and growth. To continue the example given at the end of Section 3, a retail bank may define a competency object in delivery channel flexibility. This object may have a CSF of ‘the extent to which staff have appropriate product training’. This attribute would be associated with the learning and growth quadrant of the BSC. Fig. 2 shows how object CSFs can be associated with BSC perspectives.

Once object attributes are associated with BSC quadrants, the performance information system is constructed inside the scorecard framework along the familiar lines of Kaplan and Norton (1996a). The distinction here, however, is that it is no longer necessary to identify lead and lag indicators in an attempt to estimate the cause and effect relationships between measures (Kaplan
Fig. 2. How architecture relates to balanced scorecard perspectives.

& Norton, 1996a, p. 149). The contribution of each measure to the organisation’s future success is already defined inside the strategic architecture.

Each CSF is given a set of one or more ‘key performance indicators’ (KPIs). Continuing our CSF example of ‘appropriate product training’, the performance measure used to report on this skill
acquisition attribute might be ‘the percentage of staff having undergone our training course in customer handling’. Fig. 2 demonstrates the link between the use of CSFs as descriptions of strategy objects and their value measurement KPIs. CSFs are objectives which need to be monitored through to achievement. KPIs are the actual value measures used in the organisation’s performance measurement system. A given KPI need not be used exclusively by one critical success factor. A given measure which is to be recorded within the organisation might provide insight as to the achievement of more than one CSF. This enables the definition and computational formula for any given KPI to be consistent throughout the entire organisation. Each KPI is therefore defined only once in the organisation (see Fig. 2). For each key performance indicator, one or more target values may then be defined. The proximity of the actual measured and reported value of the performance indicator to these target values provides a measure of the achievement of the critical success factor.

Once the success factors have been defined for each strategy object and each success factor linked to a set of key performance indicators, the BSC construction has been completed logically and inseparably from the strategic architecture. Furthermore, if the graphical mapping of strategic architecture has been conducted for each strategic business unit or department, then each unit or department will automatically arrive at its own associated scorecard.

6. Advantages of integrating formulation and implementation information

The above approach to the joint formulation and implementation of strategy was developed within one of the largest UK retail banks. The purpose of the present section is to describe briefly the initial advantages identified within the bank in introducing this strategy information tool.

6.1. Managerial overview

Part of the purpose of introducing an object orientation approach was to provide a clearer focus on the areas of managerial control which will lead directly to successful strategy implementation. The process of graphical strategic architectural design seems to have enhanced the clarity of the associated strategy implementation. Because the interdependency between strategy objects has been defined in the graphical maps, managers have seen the benefit of exercising control over a complete, visible chain of interdependent objects within the architecture, irrespective of the business function, product line or organisational level to which they belong.

6.2. Resourcing stretch targets

Using a strategic architecture blueprint to deliver competitive success over a 5–10 year time frame, implies the target setting mechanisms must incorporate ‘stretch’ (Hamel & Prahalad, 1993). The targets associated with certain key performance indicators can be used to represent a discontinuity in the improvement of business unit performance. Kaplan and Norton, however,
specifically highlight the danger in proposing stretch targets where management fails to provide its employees with the means to meet such ambitious goals (1996a, p. 226). Using interdependent strategy objects as the basis of the BSC construction, however, implies that the success factors of desired outcomes (intents) are already known to be dependent on the operation and success of named actions and resources.

6.3. Strategic and operational emphases within the bank

The association between strategy objects and the BSC quadrants, as shown in Fig. 2, has proved to be important in enabling the bank to identify areas of strategic and operational control. Overall financial success of the organisation is judged at a corporate level. Financial targets will be at their most meaningful at the level where they express board and shareholder aspirations. Similarly, using object orientation, the learning and growth quadrant is associated with the development of the organisation’s competencies, which are bundles of skills and technologies across the whole organisation. It is therefore the financial and learning quadrants which provide the fullest information at a corporate level (see Fig. 3).

By contrast the internal business process and customer quadrants of the BSC come into their own at a much more operational level. They provide the fullest information about individual business functions and products. Departmental or business function information provides most guidance where it is specific to that department or function. It has been identified that internal business process information, particularly non-financial information, is difficult to integrate upwards to a meaningful corporate level. Similarly, customer information provides the fullest guidance at the level of individual targeted customer segment or product range. It is difficult to associate customer benefits to higher levels of the organisation. At the corporate level, any expression of the collective benefit received by the organisation’s entire customer base appears to be nebulous at best and less helpful to strategic managers.

Fig. 3. Monitoring strategic and operational levels in organisations.
6.4. Bottom-up strategy formation

As indicated in the introduction, a schism exists in the field of strategic management thought between the prescriptive, deliberate, rational planning approaches to strategy formation and those which are more descriptive, process-orientated, fluid and emergent in character (see Mintzberg, 1990). The use of object orientation to integrate strategy design, communication, and monitoring partially removes these distinctions. The integrated information approach both formally ‘states’ rational, deliberate strategy in the form of the strategic architecture map and continually ‘describes’ the emergent, realised strategy (Mintzberg & Waters, 1985) in the form of the BSC measures. Feedback from the reporting system can be used to both manage individual strategy objects and also to challenge the assumptions behind the strategic architecture design (see Fig. 4).

The IS data centre at the bank, for example, elected to join the loop described in Fig. 4 initially by reviewing its existing performance measures (i.e. a bottom-up approach). The first expression of
the department’s strategy, therefore, was in terms of KPIs only. This constituted a descriptive expression of the data centre’s emergent strategy to date. This strategy was later formalised through the use of strategic centre mapping and aligned with the overall strategy of the bank. By integrating strategy formulation and continuous implementation monitoring, object-orientated strategic management eliminates the problems associated with the rational ‘top-down’ planning approach. Operational line-management are no longer distant and removed from the strategy formation process. They are integrated into the process along with the strategy objects which they monitor and control through the BSC.

7. Conclusions

Broady-Preston and Hayward (1998) highlighted the need to more fully integrate strategy formulation and implementation information in the retail banking sector. From the experiences of one of the UK’s largest retail banks, this paper has introduced a new approach to integrating strategy formulation with strategy implementation measurement. Specifically it has outlined how the strategic architecture formulation proposals of Hamel and Prahalad (1996a) may be implemented and measured through the simultaneous construction of a balanced scorecard framework (Kaplan & Norton, 1996a). Using defined ‘strategy objects’ as the building blocks of both strategic architecture and a BSC framework enables the construction of an architecture driven, initiative responsive information system.

Resource, action and intent strategy objects carry information about the role and purpose of each object. The interdependencies of these strategy building blocks within organisations enables the construction of a strategic architecture. The graphical representation of this architecture, communicated throughout the organisation, forms the basis of a coherent strategy dialogue in pursuit of future competitive success. The identifiable success attributes of strategy objects (CSFs) may be associated with quadrants of the BSC and performance measures (KPIs) defined for each CSF. These KPIs monitor the success of the individual strategy objects and, thereby, the success of the architecture as a whole.

This combination of strategy objects, graphical strategic architecture design and the balanced scorecard provides a pragmatic, implementable strategic information framework. The framework promotes the communication and consensus of the organisation’s strategy and forces the alignment of business function goals. Additionally, it provides a useful implementation distinction between the reporting emphases at corporate level and that required for individual business units and processes. Initial indications from the use of this objects based approach in a major UK retail bank suggest that a number of these potential benefits are realised in practice. For example, individual business functions see the process of graphically mapping out their strategic architecture design as enhancing clarity of overview and involvement.

In conclusion, this paper has for the first time used an object orientation approach to bring together the strategy formulation perspective of Hamel and Prahalad and the strategy implementation method of Kaplan and Norton. This merging of formulation and implementation information offers a powerful new way forward for businesses seeking to gain competitive advantage through strategic means.
References


Kevin Keasey is Professor of Financial Services and Director of the International Institute of Banking and Financial Services at Leeds University Business School, Leeds, England. Robert Hudson and Kevin Littler are Senior Research Fellows at the Institute. Phil Aisthorpe is CIMA Research Fellow in Balance Scorecard Performance Management at the Institute.