A Balanced Approach to Strategy Process

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Abstract

The aim of the paper is to demonstrate how business process based approach (PROPHESY) facilitates integration of resource-based and market-based approaches to strategy management. The paper begins by presenting resource-based and market-based strategy management approaches generally. It extends earlier research (Acur, 2001; Acur and Bititci, 2003) by examining the linkages between markets and resources as practised by three case study companies representing a cross-section of the manufacturing industry. It continues with a discussion on the reasons behind the choice of the criteria used for cross case analysis. Although the results are exploratory, they provide a comparative analysis of *how market-based strategies could relate and integrate with resource-based strategies through business processes*.

1. Introduction

The aim of the paper is to demonstrate how business process based approach (PROPHESY) facilitates integration of resource-based and market-based approaches to strategy management. PROPHESY (Process Oriented Performance Headed Strategy) is a strategy development and management tool, which was developed by Acur (2001) to adopt a business process perspective integrating financial and operational performance measures by embracing the organisation as the unit of analysis.

The paper is structured as follows: it begins by presenting resource based and market based strategy management approaches generally. It extends earlier research (Acur, 2001; Acur and Bititci, 2003) by examining the linkages between markets and resources as practised by three case study companies representing a cross-section of the manufacturing industry. It continues with a discussion on the reasons behind the choice of the criteria used for cross case analysis. Although the results are exploratory, they provide a comparative analysis of *how market-based strategies could relate and integrate with resource-based strategies through business processes*.

2. Methodology

The research methodology behind the work presented in this paper consists a theory-building phase, a theory-testing phase and a synthesis phase. With each phase having a number of stages:

- Theory-building
  - Identification of what is required
  - Development of the research instrument
  - Validation of the research instrument
- Theory-testing action research based experiments
  - Four in-depth case studies
  - Analysis of each case study
- Synthesis
  - Cross case analysis
  - Conclusions

Theory-building started with an in-depth review of literature covering strategy management, operations management, performance measurement and business process management. This review led to the development of a set of requirements for a Dynamic Strategy Management Formulation Process. It continued with a critical evaluation of the existing strategy management frameworks, models, methodologies, tools and techniques against these requirements. This evaluation concluded that although the approaches reviewed collectively met all the requirements, individually none of the approaches fulfilled all of these requirements. Based on these finding a new operations strategy management (formulation) process (i.e. the research instrument), namely PROPHESY, was developed by the researchers to fulfil the requirements identified. PROPHESY was documented in the form of a workbook. The research instrument was the validated through:

- A structured and close-ended questionnaire, which was completed by 22 managers from 17 organisations through detailed face-to-face interviews.
- Three workshops involving c.40 managers, in groups of 2 or 3, attempting to apply the research instrument (i.e. PROPHESY) in their own organisations.

The theory-testing phase of the research was designed around action research principles where application of PROPHESY was facilitated by the researchers in three different manufacturing companies. Data was gathered during and after the intervention. Case notes were carefully maintained ensuring that all relevant observations, discussions and comments were recorded. Post intervention analysis, using the case data, contained in the PROPHESY workbook and case notes, allowed the researchers to draw out the learning points pertinent to each case.

The synthesis phase involved cross analysis of the four case studies and the findings of each case study, which led us to develop a better understanding of:

- The effect of managing strategy through business processes
- Integration between markets-based and resource-based approaches for each of three companies
- PROPHESY in the context of market-based and resource-based strategy management paradigms.

3. Background

3.1. Resource-based v. market-based strategy

Since Skinner's seminal work on Manufacturing Strategy (1969), this field has now developed to include all types of operational areas, including manufacturing. An area that attracted particular interest is the relationship between Operations Strategy and Business Strategy (Fine and Hax 1985; Tunalv 1990; Hayes and Wheelwright 1979; Wheelwright 1984).

Market led / customer focused approach is achieved by means of identifying relevant product groups, order winners and order qualifiers for each product group, and aligning the operations, as necessary, to satisfy the customers (Voss, 1995; Greswell et al., 1998). Platts and Gregory (1996), Lynch (1997). Hull and Wu (1997), FOCUS (2000) presents that competitiveness of the company depends on its ability to make appropriate choices of corporate and operational objectives based on its market. Therefore, companies should focus in narrow and specific strategy with a comprehensive view in which strategy is at the heart of the company's specific market.

This approach is linked to business strategy in terms of customers and markets. Other researchers used Skinner's work as a starting point by adding competitive dimensions, such as cost, quality, dependability and flexibility (Hayes and Wheelwright, 1984; Wheelwright, 1984; De Meyer and Ferdows, 1987; Hill 1993). Hayes and Wheelwright (1984) in their systematic four-stage approach to Operations Strategy attempt to align capabilities to fulfil customer requirements within the market.

Resource based approaches to strategy development has gained more importance since Hayes (1985), Hayes and Pisano (1994) and Hayes and Upton (1998) used a resource-based framework in Operations Strategy development. Their view is that operations take a core role in competitive strategy and makes an important contribution to the competitive success of such an organisation.

Camphell and Luchs (1997) aimed to identify and develop core competencies for each Business Unit. On the other hand, other researchers, who focus on Operations Strategy, see the application of the resource-based framework across the organisation as a whole rather than in a hierarchical fashion (Long and Vickers-Kock, 1996; Hayes, 1985; Hayes and Upton 1998, Hayes and Pisano 1994).

In a series of articles from mid-1980s to mid 1990s Hamel and Prahalad widen the traditional conceptual strategy context by showing the importance of strategic intent and the importance of leveraging and stretching core competencies to provide a competitive advantages.

In short, core competencies, resources and organisational capabilities are increasingly familiar concepts to managers, and the value of these ideas in strategic management is widely recognised. Empirical studies suggest that a stronger linkage between market based view resources based view should improve the strategy management process and thus the business performance.

Hill (1993), DeMeyer and Ferdows (1987) showed that improving the focus in market requirements is important whereas an operation is a competitive weapon to respond to market requirements. Similarly, resource-based approaches to operations strategy focus on technology, resources, process and core competencies within the operational systems to develop a learning system that facilitates improved competitiveness (Long and Vickers-Kock, 1996; Hayes, 1985; Hayes and Upton, 1998; Hayes and Pisano 1994). Much of the literature on resources based and market based approaches is still at the theoretical stage, with researchers only beginning to explore the validity of these approaches in practice. As both views (models) have advantages and disadvantages, both of them show two starting points for understanding the nature, scope and logic of operations strategy. The present study therefore focuses on the following research questions:

- How are market requirements linked to operations decisions (market-based view),
- How do company's core competences and capabilities of operations resources influence its market position (resource-based view)?
- What are the impacts of linking resource based view to market based view through business-process (Or we can use how could company relate and integrate its market-based strategies with resource-based strategies through business processes?

3.2. Evolution of PROPHESY

Literature on the market-based and resource-based approaches to strategy management has identified some key issues that may become the basis of 'dynamic strategy management process' (Acur, 2001). First, using a market-based view of strategy might help companies select one or two key competitive dimensions, and ask management to meet the appropriate order winners and qualifiers. Second, resource-based view of strategy might help to focus on developing, protecting, and leveraging a company's operational resources and advantages to shift the direction of competition. These two issues require active integration of learning and culture within operations. This is a two-way integration, where operating capabilities direct where strategy should go, with feedback from marketing driving as to what operations could do to sustain competitiveness.

Bititci et al. (1999) suggested that the Viable Systems Model (VSM) (Beer, 1985) provides a powerful application of systems theory for analysis and planning of businesses operations. Bititci went on to develop the Viable Business Structure, which integrates the CIM-OSA Business Process architecture (AMICE, 1989) with VSM thinking. Based on this discussion, it can be argued that, as business processes (operate and support) represent the operations of a business; therefore, they should also represent the unit of analysis from an Operations Strategy point of view.

Taking into account of above arguments, it could be further argued that an organisation's operations strategy should consist of consolidation of its operate and support process strategies after taking into account potential conflicts and trade-offs (Feurer et al.,1995; Platts et al. 1998).

Acur (2001) based on in-depth literature review and above argument developed 23 requirements for dynamic strategy management process. The research continued by critically evaluating the existing strategy management frameworks, models, methodologies, tools and techniques and compared it with identified requirements to see their limitations and strengths. Hence, to fulfill these requirements of a dynamic strategy management process, PROPHESY (Process Oriented Performance Headed Strategy) was developed which is documented in detail in a workbook format (Acur and Bititci, 2000, 2003; and Acur, 2001). Having defined the phases of the strategy management process, this research reviewed the relevant strategy and operations management concepts, methodologies tools and techniques from market-based as well as resource-based perspectives and selected the most appropriate ones to develop the detailed PROPHESY methodology. Table 1 summarises, for each stage of the PROPHESY process, the appropriate selection, the alternatives and the rationale for the final decision.

Stage			Adopted tools and techniques	Alternatives considered	Reasons for decision
Input		Mission statement	Ashridge's mission model	None	No step-by step alternative
Input		Business Unit definition	Order winning / order qualifier criteria Complexity / Uncertainty matrix Product process matrix	Focus Strategy Management business units based on competitive criteria	No alternative method to define business units in terms of products, markets and processes
Input		Financial statement	Profit and loss account	Balance sheet Cash flow statement	P&L is most commonly used by the target group companies
Input		Business objectives	Structured but open questions		
Input		Company's current and past strategy	Strategy chart	Experience curve	Provide rich source of learning
Formulation	Market Based View	Business unit analysis	Summary profit and loss account Market profiling Competitive positioning Product life cycle SWOT analysis	Shareholder value analysis TOWS analysis S curve Experience curve Porter's 5	Ease of use and convenience
Formulation	Market Based View	Business unit positioning	Extended gain v growth matrix	Market growth rate v market share Market growth rate v SBU rate Profits growth rate v % cash Business growth rate v RONA Business strength v industry attrac.	Alternatives were tested with potential users. Tools deemed most useful were selected.
Formulation	Resource Based	Business unit / processes perform. and value prop.	Combination of IPMS and QFD	Hoshin Cambridge University PM IPMS	Best fit
Formulation	Resource Based	Business unit's value proposi.	Treacy and Wiersema's value proposi.	Richardson, Miles &Snow, Miles &Roth	Best fit - from market perspective
Formulation	Resource Based	Business/business unit objectives deployment	Quality Function Deployment / Hoshin Planning Tools	Seven Management Tools (e.g. affinity diagram, tree diagram etc.)	Best fit, easy to use
Formulation	Resource Based	Business process definition	CIM-OSA architecture	Porter, Boing, IBM, PA business process models	Most comprehensive and generalisable and best fit
Strategy Implementation		Strategy implementation	Modification of Hrebiniak &Joyce's strategy implementation model	None	No alternative methods
Strategy Implementation		Strategy action planning	Hoshin planning techniques	Other strategic management process action plans' designs	Convince and easy to use
Strategy Implementation		Validation of objectives & actions	Objectives validation by connecting future profit and loss account	None	Developed by the researchers as no alternatives were available
Strategy Implementation		Trade-off and consolidation	Trade-off and consolidation matrix	None	No alternative method

Table 1. Summary of Tools and Techniques

3.3. How PROPHESY Works

This section explains the evolution of the PROPHESY approach through its four stages, Inputs, Strategy Formulation, Strategy Implementation and Strategy Review. An overview of the PROPHESY process is shown in Figure 1. Each stage of the process can be summarised as follows:

The Input stage is concerned with the collection of relevant information to facilitate strategy formulation. Throughout the Input stage information is collected on company profile, products and market profiles to define the appropriate business units and corresponding competitive criteria (Business Unit Definition stage in Figure 1). Information on the past and present financial profile of the business is also collected in the form of profit and loss accounts, or in any other form such as EVA. This company-wide financial information is then broken down into Business Units' specific profit and loss accounts (Financial Profile stage in Figure 1). At this stage management is also asked to visualise a desired future (three years hence) profit and loss account as well as specifying measurable business objectives that would facilitate the achievement of the future desired profit and loss account (Business Objectives stage in Figure 1). This stage is completed by capturing the strategic history of each business unit using the strategy map similar to that developed by Mills and Platts (1998).

The Formulation stage starts with consolidation of all the key business unit data into a business unit fact sheet. This enables managers to assess and compare the past, current and potential future performance of each business unit together with its competitive position, product life-cycle positions and its strengths and weaknesses. Managers are asked to use Business Unit Gain / Market Share Growth matrix to position each business unit against other. This leads to a strategic decision on the future of each business units, such as invest, grow/buy, sell, milk, etc (Business Unit Strategy stage in Figure 1). This process also facilitates the identification/formulation of a value proposition for each business unit, which is embedded within the strategy statement for each business unit.

Example of a strategy statement may be ….

… has been unsuccessful dealing with profitability objectives because of currency exchange rates, poor quality and marketing. Location, design, innovation and technology are Business Units strengths. Dynamic environment and market has resulted in costly products.

… market is growing; its market share is growing which is 25 % of the total market. Although one product group (lab stainless) is considered mature its remaining life is10 years. Other product group (incubator) is still growing but it has 8 years to decline. With these products, Business Unit's contribution to the business profit is rated as average.

… differentiators reflect a product leadership strategy to reduce time to market, to

produce new design and style to product and improve customer support by providing skilled people who could customise the product and enhance responsiveness. It can be summarised that:

As a result the Company decided to adopt the following direction for this particular business unit:

The value proposition of this Business Unit is Product Leadership by introducing new products to existing markets (mainly incubators) by offering improved functionality and by improving customer support.

Up to this point the PROPHESY process is applied to the business as a whole. From this point onwards it is applied to each business unit to formulate strategies for the business processes within each business unit. Hoshin (Babich, 1999) techniques are used to deploy business unit objectives to business processes using operational performance measures and targets. Further analysis of each business process, in a similar manner to that for business units as described above, leads to a prioritised development plan for each business process (Business Process Strategies stage in Figure 1).

The strategies devised for each business process are then cross-checked to ensure that any potential conflicts are identified, prioritised and trade-off decisions are made. This leads to the development of a consolidated operations development plan, i.e. operations strategy for the business (Trade-off and Consolidation stage in Figure 1). However, before implementation, the selected strategy is tested against the desired future profit and loss account by linking operational performance measures to financial results by asking questions such as "*what % increase in market share will be expected as a result of improving delivery performance from 73% to 98%?"* (Validate Strategy stage in Figure 1). Although this is a qualitative linkage between operational performance measures and financial results, the researchers experience is that it is well received by the managers and promotes ownership of the chosen strategy.

As a result of this analysis, the chosen strategy is either accepted as it is or modified until a desired level of business performance is achieved. Once a particular strategy is accepted it is then implemented using project management practices.

The Learning and Review stage is concerned with the monitoring of the operational and financial performance and the impact of the chosen strategy on the selected performance measures. Leading indicators are used to provide early feedback on the performance / effect of the chosen strategy, allowing the PROPHESY process to restart if, and when, intervention is deemed necessary.

PROPHESY process is grounded in markets and combines the internal analysis within companies (i.e. competencies, capabilities) with external analysis of the industry and the competitive environment. The focal point in this approach to is to acquire, develop and control tangible and intangible resources within different markets to obtain two-way integration between the firm's resources and markets.

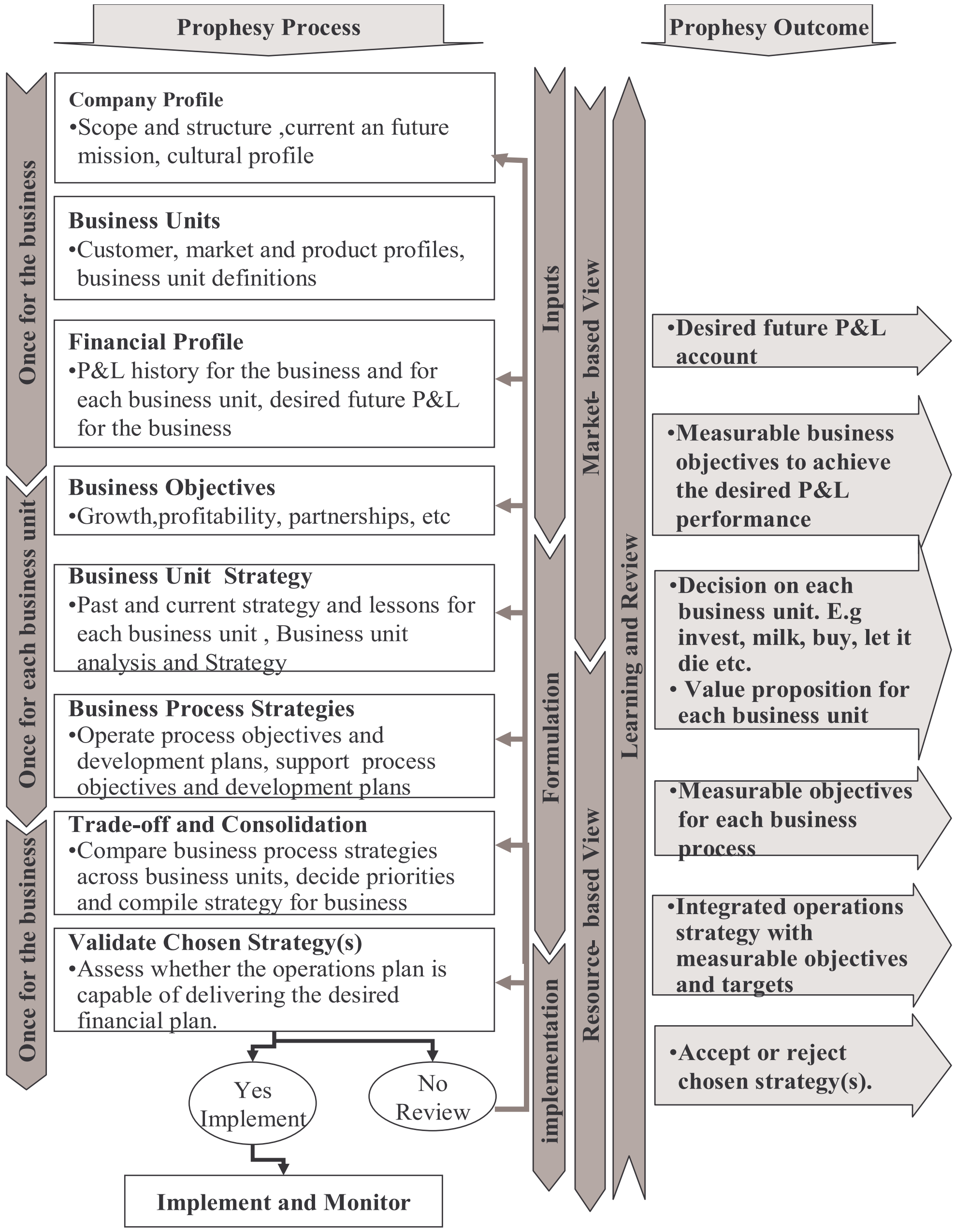

Figure 1. PROPHESY process

4. Case Studies

The following section describes the summary of operations strategy process for each of the three firms.

Firm 1: Sheet metal and enclosure manufacturers

SCF was founded in 1947 and is one of the UK's leading sheet metal and enclosure manufacturers. Located in Scotland, they currently supply products to companies in over 40 countries throughout the world. SCF offers the complete service right from design through to the delivery. The mission of SCF's is: *'To continue to be the leading provider of high quality products in the life science industry'*

Products and services: The SCF's products and services can be defined as follows:

- Manufacture of CO2 Incubators and Provision of Sub-Contract Sheet Metal
- Fabrications for electrical, instrumentation and other industries in UK
- Manufacture of post office boxes for export to countries where there is no home delivery service
- Manufacture of laboratory cubicles and enclosures
- Storage and distribution of laboratory consumables

Market Requirements: The qualifiers for the company are: quality, customer support, and delivery leadtime. Order winners are: low cost, design/style, and customised product.

Background: Historically, SCF was unsuccessful in achieving its profitability objectives because of currency movements, poor quality and lack of market focus. Location, design, innovation and technology were considered to be SCF's strengths. However, the dynamic environment and unpredictable market has led development of products that are costly to manufacture.

SCF's strategy before PROPHESY:

- To grow rapidly by introducing new products and by focusing on internal resources i.e. competencies and capabilities.
- The managers felt that the Company offered product design capability using skilled people it could deliver value to customers. The value proposition, therefore, had to emphasise "customer support by skilled people".

SCF's Strategy after taking part in PROPHESY:

- To move beyond a pure design product to a more 'added value' customer relationship that leveraged the value of the technology, expertise and design services it provides. The strategy is to expand revenue, mainly through growth, and through introduction of “innovative new products” and “improved functionality”.

- However the management team recognised that obtaining better information on market/customers requirements would maximise new product development opportunities, as well as allow for inclusion of new technologies within the product. To support this new product development and functionality improvement objective, the management team considers it essential that the capability of its manufacturing and test equipment is upgraded.

It can be concluded that SFC had previously taken a resource based view by focusing on its resources and competencies but largely ignoring its market. However, after going through the PROPHESY process, they were better able to match their resources and capabilities with the requirements of the market. Now they intend to adopt a more balanced approach to their strategy by focusing on requirements of their markets and ensuring that their resources and capabilities are developed to support the competitive forces in their chosen markets.

Firm 2: Machine manufacturers

M&B is a Swiss company, which manufactures machines that are in demand wherever maximum precision is at a premium, in communications and computer technology, in the engineering and optical industries, in power generation and space travel. The Company’s products and services can be defined as follows: design, sales, marketing, manufacture and product support. M&B’s main markets are 40 % EU, 40% USA, 20 % Asia and Pacific.

Products and services: Machines for photovoltaic and semiconductor industry.

Market Requirements: The qualifiers for the company are: brand, value for money, and quality (precision). Order winners are: innovative and customised products.

Background: M&B showed a remarkable history of innovations, where many products have become a worldwide standard (especially in the Photovoltaic industry). The innovative efforts were directed towards meeting the requirements of its customers' production processes. In M&B's view, high quality products yielded high efficiency gains on the customers' side and were therefore critical for achieving sustained competitive advantage.

M&B's strategy before PROPHESY:

- The product development process was the most important process in the Company because of rapidly changing technology and subsidiary product, which dictates the rest of the activities. Therefore, the M&B had difficulty to determine the size of its market.
- The managers felt that as long as it offered reliable machines and quality of precision, it could deliver value to its customers. The value proposition, therefore, had to

emphasise 'providing the precision and remaining within the tolerances required by the industry'

M&B's Strategy after taking part in PROPHESY:

- To enter new markets quickly by offering a complete solution (more functionality e.g. washing, dying, cleaning, polishing, etc.). This solutions demands a big effort in product development with different partners. Hence, the major strategic decision involved was how to best focus the resources of the company. To support this strategy, the management team considered introducing simultaneous activities in production and working with its customers more collaboratively than before.
- After distinguishing M&B's basic market requirements and needs, M&B wanted to improve its brand image in the market. In order to do this, the management team considered building a stronger knowledge base concerning its new technology throughout co-operation with the research institutes and company sales agencies. Managers realised that establishing good co-operation with suppliers and outsourcers would provide full solutions through multidisciplinary involvement within the supply chain. Furthermore, the management team considered communicating the potential of its products with respect to total cost, time and quality improvements, along the complete value chain from the suppliers to the customers.
- To start taking important procedures and product characteristics that offer highest efficiency in the manufacturing processes of its customer and in the shipment process from M&B to its customers' production facilities into consideration.

It can be concluded that M&B had previously taken a market-based view by focusing mainly on its market characteristics, but not paying enough attention to its resources and capacities. After taking part in PROPHESY process, they focused on a combination of technology, resources and markets, to become more flexible and responsive to changing market demands, thus achieving a better balance between market based and resourced based approaches to their strategy.

Firm 3: Construction Company

AC Ltd. Builds quality homes in Scotland. Over the years, they have built an enviable reputation for creating highly desirable homes.

Products and services: Design, construction and sale of luxury houses.

Market Requirements: The qualifiers for the company are: delivery time, flexibility, and customer support. Order winners are: style/ design, quality.

Background: The commitment to individually design each development to suit its surroundings and to improve the overall quality of an area is one of the main reasons for AC's continued success. Commitment to traditional values and consistently exceeding the most stringent planning and building requirements provides a home with unique standards.

AC's strategy before PROPHESY:

- AC's strategy was to continue to be the leading provider of design, construction and sales of luxury residential properties. Therefore, AC had valuable local knowledge on customers' requirements based on anecdotal information. Although AC's location is an advantage (located in Edinburgh for fifteen years), AC was unsuccessful in dealing with high production cost and price fluctuations in the market.
- Although land acquisition was identified as a key competitive factor AC's flat structure together with lack of sufficient capital sometimes resulted in an expensive deals or lost opportunities..

AC' Strategy after taking part in PROPHESY:

- The management team realised, in order to maximise their marketing opportunities, the necessity for developing a capability in market analysis to better understand customer requirements, location choices, life styles, ages and other personal information.
- The need for developing better capabilities to facilitate strategic land acquisition was identified and actions were put in place to acquire this capability
- Greater focus on improving existing services (e.g. energy efficiency, supplying internet connection, better acoustics). To support this strategy, the management team identified the need for developing capabilities in areas such as energy management, sound isolation, IT systems and facilities.

It can be concluded that AC had previously taken a market based view which was determined by the personal profile (e.g. age, education, occupation, marital status etc.) of the clients. After undergoing the PROPHESY process, they were able to strength its market based view strategy and focusing development of their key capabilities to underpin this approach. As a result they have a more balanced approach to their strategy by focusing on its resources and capabilities.

5. Cross Case Analysis

The aim of this section is to pull together the conditions, which occur, in the individual cases and to look for similarities. It is therefore important to select the correct criteria for cross case comparison. Our choice was very much inspired by the literature and our experience with the case study companies.

5.1. The Choice of Comparison Criteria

In total, seven criteria were selected. These are:

1. The managers, who were involved in the research, had a different strategic views (i.e. market based view, resource based view) at the beginning of the case studies. Furthermore, some managers already had clear objectives and direction about where they want to see their company in the future before getting involved in the research. Others, they had some uncertainty about their objectives, and were not clear about how to reach their undefined objectives. Therefore, managers' starting position in the beginning of the process (i.e. market based view v. resource based view and clarity of their objectives, strategies ..etc.) has been used as one of the analysis criteria.

2. People's involvement and commitment to a balanced approach to strategy development were identified as an important issue. Bourgeois and Brodwin (1983) group the strategy management approaches into five categories, as shown in Table 2. Managers' choice to develop their company's strategy is an important issue to implement selected strategy successfully in terms of their company's culture, structure, resources, capabilities and market conditions. Therefore, '*managers' choice to PROPHESY implementation in the company'* was considered for each case study.

3. Problems occurred during the facilitation process and analysis of the observations of experienced has increased methods competitiveness by avoiding repeating mistakes, and enabling solutions to be generated faster. Observation of problems and solutions together with interview and literature are used to support how companies could relate and integrate resource-based strategies to market-based strategies. Hence, problems that occurred during the facilitation process were also included as a criteria.

4. Link to market: In general, it is necessary for operations strategy should be reactive to marketing strategy since an external analysis of both competitors and customers, as provided by marketing. Therefore, relation to market is considered to illustrate how operations strategy is closely tied to market requirements.

5. Link to resources: Resources and capabilities is an essential for establishing operations strategy efficiently and effectively in the short and long term. Hence, relationship between resources, capabilities and operations strategy were considered as a criteria.

6. The aim of the paper was to examine how market based approach to strategy links and integrates with a resource-based strategy, therefore, the application of it in the company was chosen as comparison criteria.

Approach	The Chief Executive Officer (CEO)'s Strategic Questions	CEO's Role	Key characteristics
Commander Approach	How do I formulate the optimal strategy?	Master planner	Concentrate on formulating strategies, giving little thought to how the plan will be carried
Change Approach	I have a strategy in mind- now how do I implement it?	Architect of implementation	After formulating strategy, consider how to put plan into action by redesigning the organisation structure, personnel assignments, information systems, and compensation scheme
Collaborative Approach	How do I involve top management in planning so they will be committed to strategies from the start?	Coordinator	Extends strategic decision making to the organisation's top management team
Cultural Approach	How do I involve the whole organisation in implementation?	Coach	Extend collaborative approach to involve people at middle and sometimes lower levels of the organisation during the formulation and implementation stage. This would lead to change in management style; it will involve much more interaction where subordinates will be seen as planners.
Crescive Approach	How do I encourage managers to come forward as champions of sound strategies?	Premise setter and judge	Addresses strategy planning and implementation simultaneously. Instead of strategy being delivered downward by top management or a planning department, it moves upward from the doers (salespeople, engineers, production workers etc.) and lower middle level managers.

Table 2. Five ways companies implement strategy

	Firm 1: SCF	*Firm 2: M&B*	*Firm 3: AC*
1. Managers' starting point	• Resource based view • Have clear objectives, mission and vision • Have rough idea about how to reach their objectives • Almost clear performance measures • No thought about company's business units and business processes	• Market based view • Have fairly clear objectives • Do not know how to reach these objectives (no previous thought) • No thought about performance measures • Distinguish company's business units depending on their product range, no thought about their processes	• Market based view • Unclear objectives • Do not know where the company was going • Clear definition their business processes, • No thoughts on their business units • Unclear performance measures
2. Problem encountered	• Obtaining detailed (BU level) profit and loss accounts • In the beginning, defining some business unit objectives as a business objective (e.g. improve quality), there is a tendency to rely on other Business Units to clarify the same objective • Some objectives about customer satisfaction, people and knowledge, partnership development and resources are not appropriate for the whole company	• Facilitating the process because of English interview (the managers' mother language is Swiss German) • The managing director joined the company 4 months before the interviews. Lack of in depth knowledge about the company	• Defining the company's business process as the company is in construction business • Finding common language/terminology
3. Implementation Approach	Collaborative approach	Cultural approach- the general manager had joined the company 4 months before. He wants to change their management style and Company's structure from functional to process.	Commander approach- managers do not have a clear thought about how the selected strategies will be carried out in terms of time scales.
4. Relation to market	Supports marketing through product leadership (innovation) and solution of customers' problem	Better market information on customer requirements maximised new machine's development's opportunity and adopt to the market very quickly.	Approach the market by determining the personal profile (e.g. age, education, occupation etc.) of the client approach being used to build credibility with the larger, more professional buyers.

	Firm 1: SCF	*Firm 2: M&B*	*Firm 3: AC*
5. Relation to resources and capabilities	• Re-organise the manufacturing process and use additional equipment • Develop standard product and identify right sources for parts of the product and the right costs • Improvement on set-up time • Better material utilisation • Automation to reduce cost	• Setting up a new supply chain that produce efficiency in supply and distribution as well as expand import opportunities • Establishing a partnership with company's suppliers to offer a complete solution to it's customers. • Introduce simultaneous processes/ activities to improve material flows	• Negotiation to the acquire strategic land • Reaching the expenditure in line with the planned expenditure within the planned timescales (Low expenditure = slow down on the building programme)
6. Integration of Company's markets and resources through its business process	• Reducing the cost by increasing volume through reducing sales price by outsourcing sub-assemblies for Enclosures and Cubicles • Although Enclosures and Cubicles business unit seems unattractive, this situation was resolved by milking Enclosures and Cubicles, because SC wants to use this business unit as a learning point to improve other business unit's profitability and efficiency. • Fabrications business unit is exposed as the most outstanding one for the business unit's gain, but they have a very vulnerable position in terms of growth and market share. This suggests keeping an eye on this business unit (in terms of cost base) by cutting fixed costs and avoiding investment.	• Concentrate investment and build selectively on strengths for Photovoltaic business unit • Keep an eye on Semiconductor business unit by cutting fixed cost and avoiding big investment • Move beyond a pure design product strategy to more value added customer relationships that leverage the value of the technology, expertise and the customer involvement in the product design provided • The strength of the design and open policy with respect to the Photovoltaic business unit's customers require to keep a total traceability, quality precision on the machine and on its components through its life cycle.	• Improving margin by improving quality-specifications and improving delivery time, house location and specification for City Range Business Unit (BU) • Increasing market share by improving delivery time, houses location and specification for Villa Range BU • As AC believes that 'As people buy houses rarely, people have no brand loyalty. People want to see good facilities in their house'. Therefore, AC is targeting investment in soft issues (e.g. brand loyalty).

Table 3. Cross Case Analysis

5.2. The Cross Case Analysis

Table 3. compares the characteristics of the three case study companies using the seven criteria identified in the previous section.

The lessons learnt from two cases (SCF, AC) is quite similar. Both these companies are a clear examples of trade-offs and consolidation of capabilities, capacities, competencies and resources. The cross case analysis suggests that processes like PROPHESY should be used for all Business Units of the organisation in full detail, because the complementary or conflicting nature of selected business units, strategies/ actions do not become clear, until the whole process is applied to the company. At the beginning of the process, SCF managers defined four different business units, namely Fabrication and Repeat, Specification, Inter Company and Enclosures and Cubicles. After comparing each business unit's resources, capabilities and competencies, SCF realised that Fabrication and Enclosure and Cubicles business units have similar capabilities and competencies. On the other hand, after comparing business process objectives, AC recognised that when they improve one business process's capabilities and competencies, this would enhance other process capabilities and competencies in a more efficient and effective way. The AC case raised two important questions:

- Whether there is a need to define a business unit or focus on different markets (necessity of market based view for different kinds of industries) or
- Whether strategy management approaches like PROPHESY in linking market based view to resource based view needs to focus only on resources, capabilities in business processes analysis for companies within different industries.

All cases are compared in an internal business processes matrix illustrated in Figure 2, which was proposed by Kaplan and Norton (2001). This Figure shows that the same company i.e. SCF used market based view to define product leadership as well as resource based view to define operational excellence. Although both view points are important for the whole company, each business unit within the company must excel at one process to maximise impact on its customer value proposition by linking market based view to resource based view.

A common value proposition for a business unit of both SCF and M&B is product leadership. M&B case is mainly focused on exploitation (speed to market) strategy together with solution development. SCF's case is focused on the new inventions to tune the R&D activities to the company's strategy.

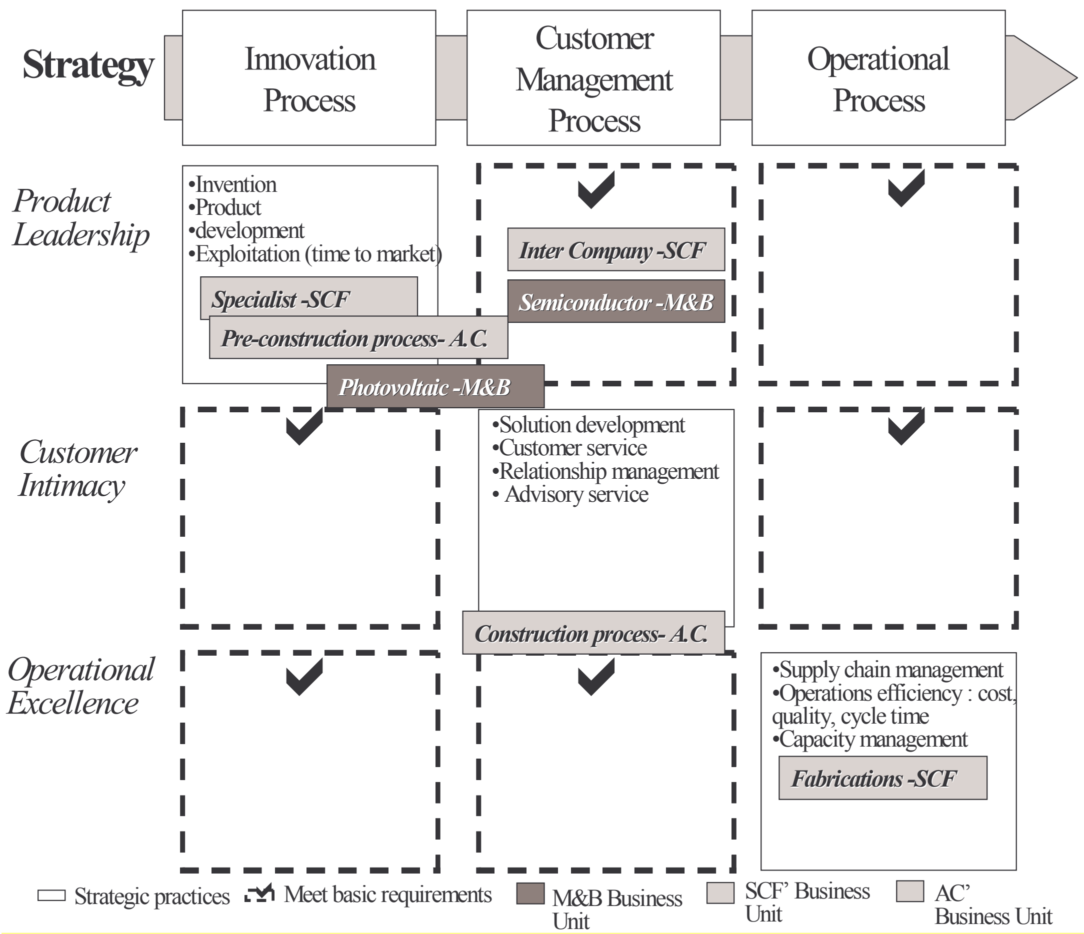

Figure 2 Company's Value Propositions (Kaplan and Norton, 2001)

6. Cross Case Analysis Findings

In this section we will summarise the findings and conclusions of this research based on:

- Results of the validation interviews and workshops
- Individual conclusions of the three detailed case studies - namely M&B in Switzerland, AC, and SFC in Scotland.
- Conclusions of the cross case analysis conducted on the findings of the each case

However, before outlining the final conclusions and findings of this research it would be prudent to discuss some of the limitations of the research.

Although the PROPHESY approach was applied in full in all three interventions to link market-based approach to resource-based approach, the learning and review cycle remains relatively untested. In short, the use of the PROPHESY process was not monitored over medium to long term due to time limitations. However during the interventions, the process captured emergent strategies from the companies' history and used this information to facilitate creation of future strategies. It may be argued that this in itself is a test of the learning and review phase. In order to test how business process-oriented approaches to strategy management impact in the medium to long-term, research programmes of longitudinal nature extending over 3 to 5 years are required.

It would not be correct to argue that the findings of the research are generalisable based on three interventions (experiments). However, we would argue that findings are valid for the three case studies included in the research; therefore they are likely to be valid for other organisation.

The findings and conclusions of ***impacts of linking resource based view to market based view through business-process*** are presented as follows:

- It became apparent, through the validation interviews and workshops, and through the three interventions, that managers and companies would be willing to relate and integrate market based strategies to resource-based strategies through business processes.

- All three companies, from previous interventions, already had developed strategic objectives in terms of market or resources view. In all four cases the process-based approach, i.e. the focus on business processes, has provided a new insights, which has highlighted a number of issues and led to development of new objectives, resources and capabilities and changes to existing one. Hence, this experience suggests that integrating markets to resources through business processes assists in the development of more relevant and complete strategic decisions, objectives and performance measures, in comparison to only market based view or resource based view oriented approaches.

- Business process-oriented approach facilitates integration between the resource based approach and market based approach to strategy management as illustrated in Figure 3. Each number as shown in Figure 6 is explained as follows:
    1. Identify priorities for each business unit
    2. Each business unit is prioritised according to contribution to business objectives
    3. Deploy business unit objectives to business process with performance measures but no firm decisions are made with what to do within each business unit
    4. Integrate the various strategies of business processes and business units and

identify conflicts and complements
5. Decide trade-offs for each business unit and process

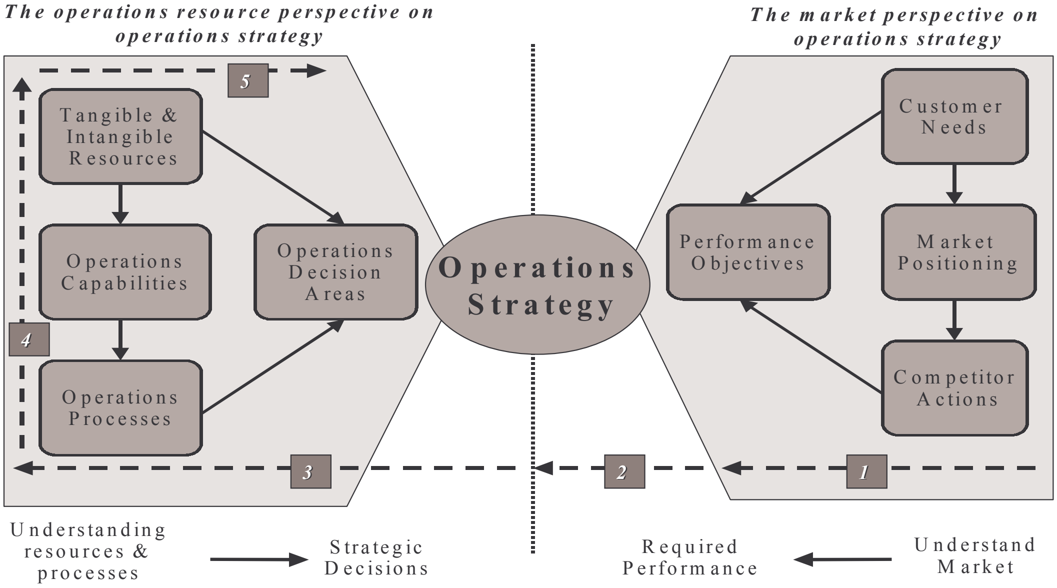

Figure 3. Operations Strategy Process (Adopted from Slack, Lewis, 2002)

7. Conclusion

This paper has proposed and demonstrated an approach for linking market and resource based strategies through business processes. The research approach was based on action research by using stakeholders, business units, business processes analysis as well as combination of market based and resource based approaches to strategy development. This research aimed at developing

- awareness,
- feasibility (the strategy must neither overtax resources nor create un-solvable sub problems),
- consistency over time,
- comprehensive with sufficient detail,
- credibility (regarded as achievable) within the company.

This paper has presented a business process based approach to the strategy management which facilitate integration between companies markets (competitive forces, environment) to the their resources (competencies and capabilities). Three cases presented in this paper were shown how companies could benefit by linking their core competencies to their resources by focusing on their business processes.

The process based strategy management approach has been used as the basic technique for both understanding and exploiting the experience and wisdom of managers to link companies resources to its markets. Hence, companies may consider how, through the use of the methodology suggested here, they can build on their existing capabilities to develop strategies, including:

- building on existing distinctive competencies
- recognising the competitive factors in the market
- defining and prioritising processes for radical changes as well as improvement that could positively impact performance on dimensions critical to competitiveness
- defining efficient resources usage

This paper has also demonstrated that Strategy Management Process is more than the long-term deployment of resources and processes. Strategy should focus on creating value that is independent for each market. Consequently developing horizontal parallel strategies that have objectives of co-ordinating business processes and developing objectives that encourage the sharing of resources and skills.

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