Abstract

The aim of this research is to identify and understand the contextual, customer and firm based factors that influence the adoption of certain marketing practice(s), and the transitions between practices in high technology industries. It is also intended that this research will give more detailed insight into and understanding of the nature of marketing practices in high technology industries. The work builds on the findings of the Contemporary Marketing Practice stream research, and develops further research gaps identified by Coviello, Brodie, Danaher and Johnston 2002.

The specific research questions to be addressed are:

1. How is marketing practice changing in the firms to be studied?
2. Why are these changes happening?
3. How does the internal and external environment influence the process of change in marketing practice?

A case study methodology has been selected in order to allow exploration of the phenomena under investigation in context. This is consistent with the purpose of the research, the nature of the research questions and the phenomena under study. Multiple holistic case studies will be used and work has been and will be conducted internationally. The paper describes the theoretical model underpinning the research together with findings from a pilot study.

Keywords: Contemporary marketing practice, change, high technology
Introduction

The purpose of the research is to investigate influences on marketing in high-technology companies and in particular to identify the drivers, enablers and inhibitors of change in marketing practice. It builds on the work of the Contemporary Marketing Practice group and responds to the opportunities for further research highlighted by Coviello, Brodie, Danaher and Johnston (2002). They identify the need for in-depth research in different sectors and further understanding of why different marketing approaches are adopted by companies. They speculate that this could be related to environmental issues such as competitive behaviour and customer requirements. In order to investigate these phenomena a theoretical model of change has been developed from the literature. A case study approach is adopted primarily using in-depth interviews as the main method of data collection. The paper starts by reviewing the literature to establish a theoretical model of change in marketing practice, to derive a list of drivers, enablers and inhibitors and to place the research in context. Then research questions are defined for this pilot study and a research methodology described. Findings from the analysis and their limitations are presented and discussed and conclusions drawn.

Literature Review

In order to investigate change in marketing practice a theoretical model of change has been built from the literature to guide research and to make obvious any theoretical assumptions prior to conducting field work.

A Theoretical Model of Change

Figure 1 shows a proposed theoretical model of change derived from a review of the change and marketing practices literature. It takes into account the influences of the firm’s internal and external environment on transitions in marketing practice. This model assumes that two distinct states, current and desired or future marketing practices, exist and the organisation moves from one to the other via a transitional state (Beckhard and Haris, 1977; 1987). Three models of the frequency and magnitude of organisational change are prominent in the literature (Burnes, 2000). All three are based on the proposition that organisational change is necessary to accommodate change in a firm’s external environment. The models are:

1. The incremental model of change – individual parts of an organisation deal incrementally and separately with one issue at a time, responding to pressures in their local and external environments, such that over time an organisation is transformed e.g. (Quinn, 1980; 1982).
2. The punctuated equilibrium model of change – “organisations evolve through long periods of stability (equilibrium periods) ….. punctuated by relatively short bursts of fundamental change (revolutionary periods)" which “install the basis for new equilibrium periods” (Romanelli and Tushman, 1994:1141). This approach is also supported by the work of Greiner (1972) and Gersick (1991).
3. The continuous transformation model of change – in order to survive, particularly in fast-moving sectors such as information technology (Brown and Eisenhardt, 1997), organisations must develop the ability to change themselves continuously in a fundamental manner.

No single model has conclusive empirical support. The theoretical model in figure 1 is consistent with the incremental and punctuated equilibrium models of change. The implication of reconciling it with the continuous transformation model of change is that current marketing practices are constantly changing at a fundamental level in an everlasting attempt to achieve the desired state and accommodate ongoing changes in the environment.
The change in marketing practices is triggered by drivers or forces for change arising from the environment external to the organisation. This fits with Sheth and Sisodia’s view that the nature and scope of marketing is context dependent (1999). Some authors (Huczynski and Buchanan, 2001; Johnson and Scholes, 1999; Paton and McCalman, 2000; Stewart, 1991) have identified internal sources or triggers for change. Most if not all of them can be seen as arising in response to external influences (Senior, 2002). However, if change is viewed as happening only in reaction to the external environment the possibility of proactive or spontaneous change is denied. One can envisage a change in marketing practice arising purely from the preferences of a new manager, to accommodate the form of marketing with which they are most comfortable from their past experiences. This would be difficult to type as an external driver for change. The change process is inhibited or enabled by other factors arising from the environment; this time principally from inside the organisation, such as the redesign of jobs, the means of communication of the change or the number of marketing people and their skills.

Marketing Practices

Coviello, Brodie and Munro (1997) outlined four different approaches to marketing practice in their definition of the CMP framework: Transaction, Database, Interaction and Network Marketing. A fifth type of marketing, e-marketing, has been proposed (Coviello, Milley and Marcolin, 2001) but remains the subject of debate and further research. For the purposes of this research only the four original types of marketing will be included. This classification scheme has been refined and empirically validated across a wide range of industries and countries (Brodie, Coviello, Brookes and Little, 1997; Coviello, Brodie et al, 2002; Brady, 2003; Pels, Brodie and Johnston, 2004; Brady, Palmer and Winklhofer, 2004; Palmer and Wilson, forthcoming).

The CMP model allows for multiple types of marketing, transactional and relational, to be practised simultaneously. Empirical work using cluster analysis of the results from the CMP questionnaire has shown that organisations tend to employ a combination of types of marketing (Coviello, Brodie et al, 2002; Pels, Brodie et al, 2004; Brookes and Palmer, 2004).

Drivers, Inhibitors and Enablers of Change in Marketing Practice

Many aspects of marketing practice are facilitated by the use of IT so the literature describing the adoption of IT systems can be useful to a study of transitions in marketing practice. A review of this literature reveals 3 major categories of barriers to successful implementation (Beatty and Gordon, 1988; Ernst, 1989; Galliers, 1991):

1. Human – psychological problems, uncertainty avoidance, resistance to loss of power, need for job redefinition, resistance to change
2. Organizational - communications, authority flows, planning systems, how an organisation traditionally does things, information and work flows, identification of
strategic information needs, attitude, commitment and involvement of managers, ability to measure and justify benefits of strategic information systems, integration of information systems into the business strategy.

3. Technical – compatibility and flexibility of systems, information handling capacity, sophistication of current information systems.

In a series of papers Desai, Fletcher and Wright (2001) investigated the adoption of database marketing in the financial services and other industries using a list of barriers and enablers derived from the literature on the adoption of IT systems. The first of these papers (Fletcher and Wright, 1995) studied the barriers to successful implementation of database marketing (DBM) in the financial services industry using a list of 11 factors. They found that the dominant barriers perceived by their respondents were technical, led by the high cost of development. A second major grouping of organizational factors (lack of marketing orientation, fragmented organizations, lack of DBM strategy and direct marketing specialists) was found but at a lower level of importance. This appeared to contradict previous literature on the adoption of IT interventions, “The overall conclusion from the literature is that organizational barriers are more significant than technical barriers but our respondents do not perceive that to be the case” (Fletcher and Wright, 1995:124).

Fletcher, Wright and Desai (1996) also examined the effect of organisational factors on the adoption and sophistication of database marketing systems. They found that size, structure (style of decision making - more willing to make jumps in IT investment decisions), high marketing and information orientations, greater organisational slack and lower levels of control on marketing resources were positively related to the adoption of DBM. Complexity (extent of formal qualifications in marketing, IT and DM), structure (formalisation, centralisation and direct marketing power) and the extent of formal or informal networks were not.

As the proposed research project concentrates on change in marketing practice in the context of high-tech industries Brown and Eisenhardt’s work (1997) is also relevant. They sought to identify the major factors influencing a firm’s capability to successfully implement continuous change through the investigation of product innovation in the computer industry. They concluded that the key properties of successful organisations were ‘semistructures’ (neither too rigid or too loose but with ‘clear responsibilities and priorities with extensive communication and freedom’), ‘links in time’ (not just planning or reacting but the creation of links between the past, present and future by managers through focusing on current projects while developing a sense of where to go next through future probing - testing with a variety of low-cost experiments) and ‘sequenced steps’ (linking ‘current projects to future ones using predictable product intervals and choreographed transition procedures’).

Palmer and Wilson (forthcoming) conducted a case study of marketing practice in one organisation in the UK, Bryant Homes, in order to test and enrich the CMP framework and to identify drivers of transition between practices as well as enabling and inhibiting factors. They identified business performance as a driving factor for change: “An important driver of change is the vision of enhancing revenue in the longer term and margins in the more immediate future.” They also identified a number of factors affecting the successful adoption of new marketing practices: top team buy-in, operational buy-in, alignment with reward systems, the development of appropriate metrics and the need for long-term commitment balanced by supple planning to accommodate the practicalities implied.

Coviello, Brodie, Danaher and Johnston (2002) speculate that different marketing practices may be adopted to suit environmental issues such as competitive behaviour and customer requirements. Senior (2002) uses the PEST model (Johnson and Scholes, 1993) to identify potential external triggers for organizational change. It seems logical to add suppliers and partners to complete the list of major macro and microenvironmental factors which could act as drivers for change in marketing practice.
Context

In choosing a context for this study it is appropriate to select an industry and firm in which a significant degree of change in marketing practice can be anticipated. A firm in the pharmaceutical industry (a high-technology industry) has been selected and this section outlines the rationale for this choice. Certain characteristics of high-tech organisations are taken to be important or even defining for high-tech and high-tech marketing in the literature. These include:

- High levels of technological and market uncertainty (Moriarty and Kosnik, 1989).
- High levels of competitive volatility (Day, 1999; Mohr and Shoshtari, 2003)
- High R&D spend, often with associated high ‘unit-one’ costs structures where the cost of producing the first unit is very high in comparison to the cost of reproduction (John, Weiss and Dutta, 1999; Traynor and Traynor, 2004).
- The importance of standards, the increasing returns with increasing numbers of supporters and adopters (the ‘bandwagon effect’) and the difficulty of predicting whether or not a new product or technology will become a standard (John, Weiss et al, 1999; Shapiro and Varian, 2004).

Thus high technology industries are associated with dynamic, rapidly changing environments. Change in the environment in an industry is likely to have an effect on the role of marketing: “More than most other fields of scientific inquiry, marketing is context dependent; when one or more of the numerous contextual element surrounding it (such as the economy, societal norms, demographic characteristics, public policy, globalization, or new communications technologies such as the Internet) change, it can have a significant impact on the nature and scope of the discipline” (Sheth and Sisodia, 1999:72).

So high-technology industries are likely to prove a rich context in which to study change in marketing practice.

Research Questions

The aim of this research is to identify and understand the contextual, customer and firm based factors that influence the adoption of certain marketing practice(s) and the transitions between practices. It is also intended that this research will give more detailed insight into and understanding of the nature of marketing practices in firm studied.

The specific research questions to be addressed, based on the theoretical model in figure 1 and the CMP framework are:

1. How is marketing practice changing in the firm to be studied?
2. Why are these changes happening?
3. How does the internal and external environment influence the process of change in marketing practice?

This paper reports an early study, in a planned series of cases, exploring these questions by means of interviews in a Central European subsidiary of an international pharmaceutical company.

Methodology

A case study methodology has been selected because of the purpose of the research, theory building rather than testing, the nature of the research questions and the phenomena under investigation. Bonoma (1985) suggests that the case method is particularly appropriate when developing theory and studying complex phenomena which need to be studied in a natural context and are difficult to operationalize quantitatively. In addition Yin (2003) advocates the
use of case studies when dealing with why and how questions intended to explain a phenomenon. He asserts that case studies have an advantage over other methods “when a ‘how’ or ‘why’ question is being asked about a contemporary set of events, over which the investigator has little or no control” (Yin, 2003:9). The case study co-operator is a central European subsidiary of a multinational pharmaceutical company, referred to as PharmaCo.

The theoretical model of change in marketing practice has been built to guide research and to make obvious any theoretical assumptions prior to conducting field work. The intention is to study changes in marketing practice in order to develop theory to explain them. The phenomena under investigation (the changes themselves and the influences upon them) are complex, difficult to quantify and intimately connected to their context. It would not be useful to study them outside of their natural context. The research questions themselves are all why and how questions intended to explain changes in marketing practice. Thus this research is suited to a case study approach.

Interviews have been chosen as the principal method of data collection. This is because, in the words of Kvale (1996:1) “If you want to know how people understand their world and their life, why not talk with them?” These interviews are intended to be relatively unstructured, asking open ended questions in a guided conversation with the goal of eliciting from the informants rich, detailed data on the phenomena of interest rather than a structured interview or survey where the goal is to elicit choices between alternative answers to pre-formed questions on a topic or situation. The interviews were guided or semi-structured and an interview schedule was used as an aid to ensure the issues relevant to the area of research were covered in the time available for the interview. It also helped to ensure that a similar set of issues was covered in each interview thus facilitating comparisons between interviews. Analysis was conducted using NVivo, a qualitative data software analysis tool, with initial coding based on constructs derived from the theoretical model.

In this early study a small number of respondents (four) was selected from across the functional levels within marketing and included a human resources manager who was deeply involved in the change process.

Findings

The findings from the analysis are summarised in Figure 2. In general the evidence supported the model though particular aspects of it were challenged.

Drivers of Change

There was great consistency between the respondents in describing the external pressures to change marketing practice. Legal, political and economic issues are putting pressure on the company. The state health system is under immense economic pressure and legislation regulating the pharma industry has increased. The number of competitors has increased and there has been a move towards cheaper generic drugs. There is also pressure from customers (defined by the respondents as the prescribers, doctors) to change the way PharmaCo markets, and from the press, where negative stories about the promotion of pharmaceuticals have been published. All the respondents spontaneously referred to ethical pressures arising from the reduced incomes and increased workload of doctors, the shortage of economic resources for health and health clinics, increased marketing pressure from a growing number of pharmaceutical sales reps and legislation governing ethical pharmaceutical marketing practices. These pressures were driving PharmaCo to become more efficient in its use of sales reps and to increase the emphasis on other forms of marketing which were subject to fewer ethical problems.
**Internal Issues**

There was evidence of internal pressures to change specifically from corporate initiatives. These could be viewed as arising in response to external events and changes in the market (and thus seen as enablers of change) or as proactive, coming before change is forced by external pressures and thus qualifying as drivers (particularly when seen from the perspective of a subsidiary company rather than corporate headquarters). At the very least it seems reasonable to infer that market trends, actual or anticipated, had influenced these initiatives. In particular there was a corporate initiative to define marketing practices, especially around branding and brand management. These practices were called PharmaCo Ways and a specific initiative was put in place to promote these practices locally, including communications, training and a competency definition and assessment program under the banner of a Marketing Excellence programme.

**CMP Types**

There was a great deal of agreement between the respondents that while all four types of marketing, as defined by the CMP model, are practiced in PharmaCo to some degree, the emphasis is on interaction and database marketing and the change has been to increase the extent of database marketing. Historically interaction marketing has dominated marketing practice with sales reps calling on doctors as the main method of communicating product and marketing information and of influencing the behaviour of doctors, pharmacists and patients.

**Inhibitors and enablers of change**

The availability of marketing skills and competences emerged as an area which was key to facilitating change in marketing practice. Specific competences (in database marketing and market research) were missing. Given the importance the respondents placed on marketing skills in the change process, not surprisingly the work done to define, analyse and develop marketing competences and processes was mentioned as an important part of facilitating change.

The availability of a CRM system and within that a useable customer database was seen as critical to the change in marketing practice across the respondents. The overall level of marketing resources was not seen as a significant issue except in relation to the number of qualified market researchers and the amount of money spent on market research. This inhibited the ability of the marketing team to implement new practices based on an analytical, planned approach to marketing.
Interestingly, evidence for personal motivation or individual’s attitude to change affecting the change process is not strong. It may be that this issue did not arise so strongly because it was regarded it as a truism – of course individual’s attitude to the process would affect change but that would vary with the individual, making general comments of little value. There were comments made about the volume of change going on and negative impact of this on the change process.

The relationship with the sales force is seen as one of the most important internal relationships affecting the ability of the marketing department to perform at all, let alone successfully change. There were different views as to how far the relationship had improved. The organisational structure in marketing had changed as part of the change process, separating marketing and sales and thus creating a potential barrier between the groups. The organisation moved from separate business units, each with its own marketing and sales force, to a common marketing structure reporting to the marketing director with marketing teams, managed by marketing managers, divided according to the different products groups or therapy areas. It moved from a fragmented to a consolidated structure for marketing. The previous competitive relationships between business groups had not helped the marketing process. The new structure had only been in place for about 6 months at the time of the interviews but was generally viewed positively and as having facilitated change in marketing, even though there was some initial disruption.

The organisation was not seen as marketing oriented before the change. There appears to have been a change towards a marketing orientation during the process of changing marketing practice. Hence it may be more appropriate to consider this as part of the change itself rather than a factor influencing change. The respondents believed that marketing was becoming more important to the firm and acquiring a more strategic role and becoming more proactive.

The change in marketing practice came about as part of a Marketing Excellence program implemented locally and inspired by corporate initiatives. This program included a number of initiatives to communicate the changes and the need for change within marketing. However, even after prompting by the researcher, few comments were made on the effect of internal communications programmes on the change process. This may be because they were taken for granted by those involved. There was a sense from the HR Manager that involvement was more important and that examples of successful implementation of the new practices and messages sent by actions were more valuable than merely informing people.

The attitude, commitment and involvement of the executive team was noted as having a significant impact on change at both the country (General Manager) and marketing function level. Various new managers had been put in place. The Marketing Director was new to his post and had been promoted from being the manager of strategic marketing partially on the strength of his commitment to change marketing. The evidence points to these new managers having a different view of marketing and being very committed to changing marketing practice.

One new factor arising from analysis of the transcripts was the requirement for an internal challenge to ‘make the changes stick.’ This challenge was described by the Marketing Director. He saw it as the responsibility of management and that it could be provided, for instance, by hiring challenging people and tasking them with provoking new and better practice through example and challenge. He also spoke about lack of challenge previously as being a factor increasing resistance to change.

Conclusions

In general the results of this pilot study support the proposed model of change in marketing practices and provide evidence for a specific set of drivers, enablers and inhibitors of change in this organisation at the time the evidence was collected. Marketing practice changed to
increase the emphasis on Database Marketing and lessen the reliance on Interactive Marketing. Change seems to have been inspired by a combination of external market factors and internal corporate initiatives. It was enabled by the attitudes of specific senior managers locally and the challenge they provided to existing marketing practice. It was supported by changes in marketing organisation and a Marketing Excellence initiative, designed to improve marketing skills and processes. Inhibitors of change included the level and type of marketing skills existing in the organisation, the volume of change initiatives, the previous marketing structure and the tendency to revert to older practices in the absence of constant challenge. Not all of the change in marketing practices could be described in terms of the CMP marketing types. Marketing seemed to be becoming more proactive, planned, process driven and professional. There was a move from a sales orientation and towards a marketing orientation and from technical, prescriber-focused communications towards emotional, patient-focused communication. The emphasis on ethical issues and potential corruption as a driver for change was unexpected. This arose from increased financial and work pressures on doctors locally and could be interpreted as a demand from customers and other stakeholders to change marketing practices to avoid this pressure and demonstrate ethical practices. These factors may indicate a need for further refinement in the model. In addition the lack of evidence for some of the drivers, inhibitors and enablers of change suggests they may need to be removed or redefined.

References

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