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# Action Research in the Academy: Why and Whither? Reflections on the Changing Nature of Research<sup>1</sup>



DAVID COGHLAN ★

Ten years ago I published an article in IBAR on action research (Coghlan, 1994). In that article I introduced action research, defined it and contrasted it with case studies and ethnography. In this paper I want to reflect on the ten years of practising action research both in the role of researcher and in the role of developing it in the university setting.

## AN INTRODUCTION TO ACTION RESEARCH

### What is Action Research?

Several broad characteristics define action research (Adler, Shani and Styhre, 2004; Argyris, Putnam and Smith, 1985; Coughlan and Coghlan, 2002; Eden and Huxham, 1996; Greenwood and Levin, 1998; Gummesson, 2000; Peters and Robinson, 1984; Reason and Torbert, 2001; Susman and Evered, 1978):

- Research *in* action, rather than research *about* action;
- Participative;
- Concurrent with action;
- A sequence of events and an approach to problem solving.

Firstly, action research focuses on research *in* action, rather than research *about* action. The central idea is that action research uses a scientific approach to study the resolution of important social or organisational issues together with those who experience these issues directly. Action research works through a cyclical four-step process of consciously and deliberately: 1) planning, 2) taking action 3) and evaluating the action, 4) leading to further planning.

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Secondly, action research is participative and democratic. Members of the system which is being studied participate actively in the cyclical process outlined above. Such participation is frequently as research *with* people rather than research *on* people.

Thirdly, action research is research concurrent with action. The goal is to make that action more effective while simultaneously building up a body of scientific knowledge.

Finally, action research is both a sequence of events and an approach to problem solving. As a sequence of events, it comprises iterative cycles of gathering data, feeding it back to those concerned, analysing the data, planning action, taking action and evaluating, leading to further data gathering and so on. As an approach to problem solving, it is an application of the scientific method of fact-finding and experimentation to practical problems requiring action solutions and involving the collaboration and cooperation of the action researchers and members of the organisational system. The desired outcomes of the action research approach are not just solutions to the immediate problems; they provide important learning from outcomes, both intended and unintended, and a contribution to scientific knowledge and theory.

Action research works from its own quality requirements (Reason and Bradbury, 2001). Reason (2003a) discusses that the criteria against which quality in action research might be judged may be based on a range of choice points which action researchers make clear and transparent. For instance, the quality of an action research may be judged on the practical knowledge that emerges or the quality of participation. In a similar vein, Levin (2003a) argues that action research's contribution to scientific discourse is not a matter of sticking to the rigour-relevance polarity but of focusing on vital arguments relating to participation, real-life problems, joint-meaning construction and workable solutions.

### **The Origins of Action Research**

Action research originates primarily in the work of Kurt Lewin and his colleagues and associates (Coghlan and Brannick, 2003). In the mid-1940s, Lewin and his associates conducted action research projects in different social settings. Through the following decades, action research in organisations developed in organisation development, particularly in the US (French and Bell, 1999), the industrial democracy tradition in Scandinavia (Greenwood and Levin, 1998) and the socio-technical work of the Tavistock Institute in the UK (Trist and Murray, 1993). It also has deep roots in the emancipatory movements out of the work of Paolo Freire and Marx, from feminism and liberation theology (Brydon-Miller, Greenwood and Maguire, 2003; Reason and Bradbury, 2001).

Action research has developed to become a family of approaches with many different expressions. The often bewildering array of approaches within the broad action research term reflect different emphases within the core process or practice in different fields. So contemporary action researchers need to be

familiar with the elaborations of action science, clinical inquiry, developmental action inquiry, appreciative inquiry, cooperative inquiry, participatory action research and then approaches from outside the direct lineage that have parallel theory and practice, such as action learning and reflective practice.

Similarly, there is no one way of doing action research. For instance, distinctions between *Apollonian* and *Dionysian* approaches (Heron, 1996), and *mechanistic* and *organistic* approaches (Coghlan, 2003) reflect emphases on how much the inquiry process focuses on the practical outcome or the inquiry process itself. Action research in the Scandinavian tradition typically focuses on structural issues in working life and regional development (Fricke and Totterdill, 2004), while the CARPP (Centre for Action Research in Professional Practice) approach at the University of Bath places its emphasis on the person engaging in the inquiry (Reason, 2003b).

### **Contrasts with Positivist Science**

Action research can be contrasted with positivist science (Susman and Evered, 1978). The aim of positivist science is the creation of universal knowledge or covering law, while action research focuses on knowledge in action. Accordingly, the knowledge created in positivist science is universal, while that created through action research is particular, situational and out of praxis. In action research, the data are contextually embedded and interpreted. In positivist science, findings are validated by logic, measurement and the consistency achieved by the consistency of prediction and control. In action research, the basis for validation is the conscious and deliberate enactment of the action research cycle. The positivist scientist's relationship to the setting is one of neutrality and detachment while the action researcher is immersed in the setting and relates to the process in a reflective and reflexive mode. In short, the contrast of roles is between that of a detached observer in positivist science and of an actor and agent of change in action research (Riordan, 1995).

### **What Role Do the Action Researchers Play?**

Generally, action researchers are outside agents who act as facilitators of the action and reflection within an organisation. In such cases, it is useful to talk about the action researcher and the client system, i.e. those in the organisation who are engaging in the action research in collaboration with the external action researcher. Greenwood and Levin (1998) refer to the action researcher as the "friendly outsider". In other settings the action researcher may be an insider to the organisation, perhaps in an internal consulting role or as a manager (Coghlan and Brannick, 2001).

Action research in business schools typically works within the pragmatic school where the focus is on developing solutions to business and organisational issues (Schein, 1995), for example in operations management (Coghlan and Coghlan, 2002), information systems (Baskerville and Wood-Harper, 1996), continuous improvement (Coghlan and Coghlan, 2003) and IT-enabled change (McDonagh and Coghlan, 2001).

## WHY ACTION RESEARCH?

There has long been a crisis in the field of organisational science. Susman and Evered (1978: 582) noted that “the findings in our scholarly management journals are only remotely related to the real world of practising managers”. In their view, it appears that this dilemma is rooted in positivist research approaches that dominate the field. Such approaches “are deficient in their capacity to generate knowledge for use by members of organisations” (Susman and Evered, 1978: 585). Supporting this contention, Schein (1993: 703) reflected that “we have largely adopted a traditional research paradigm that has not worked very well, a paradigm that has produced very reliable results about very unimportant things”. In a similar vein, it has been argued that most research in the strategy domain is “irrelevant” since it is “increasingly and prematurely stuck in a normal science straightjacket” (Bettis, 1991: 315). The practical relevance of much IT-based research has been seriously challenged also. Senn (1998: 23–4) argued that “a great deal of the academic research conducted in information systems is not valued by IT practitioners” and that such research “is not relevant, readable, or reachable”. With respect to marketing, Hunt (1994: 17) argues, “if we wish even to keep up with marketing practice – let alone lead it – we need to rethink our theories and empirical studies of marketing practice”.

In the view of Greenwood (2002), the pillars of positivism – objectivity, controls and rational choice – are indefensible, yet positivism continues to dominate social science research within the university. Positivist social scientists study issues of interest to themselves and are not driven by the intensity or importance of social problems. Positivist social science is self-referential and reflects an inward-looking focus of university life. Research subjects are socially passive; research is done *on* them. Despite such strident criticism, positivist social scientists have not changed their research paradigms.

Reason and Torbert (2001: 5–6) reflect that after the linguistic turn of post-modernism it is now time for the “action turn” where we can re-vision our view of the nature and purpose of social science:

We argue that since all human persons are participating actors in their world, the purpose of inquiry is not simply or even primarily to contribute to the field of knowledge in a field, to deconstruct take-for-granted realities, or to develop emancipatory theory, but rather to forge a more direct link between the intellectual knowledge and moment-to-moment personal and social action, so that inquiry contributes *directly* to the flourishing of human persons, their communities and the ecosystems of which they are part.

Hence they argue for a transformational social science.

In the context of the gap between research and action, action research has a significant contribution to make to fill that gap (Haslett et al., 2002; Sarah et al., 2002). Action research repudiates the research–action split inherent in positivism and enacts dialogue between theory and practice with the aim of cre-

ating actionable knowledge. It does not impose expert knowledge but rather creates collaborative environments where research experts and local stakeholders share and work with different kinds of knowledge and share the intellectual property. The collaborative process between researchers and local stakeholders involves shared question formulation, data collection, data analysis and testing in action. It demands reflective practice on the strengths and weaknesses of our own practice. The world does not deliver social problems in neat disciplinary packages. Because it is holistic, action research has the capability to study complex, dynamic difficult problems. As Gibbons et al. (1994) argue, it is time for a mode of research that is transdisciplinary, heterogeneous, socially accountable, reflexive and produced in the context of application. "The new production of knowledge" as articulated by Gibbons and his colleagues, is a network activity and research, therefore, needs to move away from a model whereby it is embedded currently in the expertise of isolated individuals operating from a top-down expert model (Gustavsen, 2003).

### **Action Research in the Academy**

Action research has had a troubled history in university-based research (for example Levin, 2003a). "Is action research real research?" is not uncommon as a symposium topic, particularly in a positivist-oriented academic culture where engagement is perceived as a contaminant to good research. In a reflective piece on the current state of action research, which generated a series of responses (Arnkil, 2004; Dick, 2003; Eikeland, 2003; Greenwood, 2004; Levin, 2003b; Reason, 2003b), Greenwood (2002) poses the question of why action research has not taken over the social sciences. He provides two answers. The first is suppression: because action research feels oppressed in the academy it has adopted a defensive posture and has stayed silent. Indeed a great deal of action research takes place outside of the academy in social research centres. His second reason is negligence: he states categorically that action research has often been sloppy, passive, inadequately reflective and, sometimes, flatly incompetent. He argues strongly that action researchers need to challenge universities and public agencies to reallocate their resources in order to serve the people. Sherman and Torbert (2000) attempt just that. In a volume of papers that describes a number of projects where action and inquiry were interwoven in real time, they confront the general isolation that university research has from its local environment.

While action research in masters programmes has been long established in Irish universities, action research doctorates are beginning to emerge. In the School of Business Studies in Trinity College Dublin, two successful action research doctorates are illustrative. Jacobs (2003), at the behest of the organisation, worked as an action researcher in a healthcare provider and facilitated the development of listening within the organisation as a contribution to its strategic direction and articulated a theory of responsiveness. Nolan undertook doctoral research on an organisation he had founded to confront long-term unemployment. Through action research, he identified the underpinning

success of the project and created a framework by which other social ills might be confronted (Nolan and Coghlan, 2002). In both of these doctoral dissertations the quality of the action research process lay in the reflexive cycles of action and reflection, the quality of collaboration with members of the respective organisations and the practical outcomes.

#### WHITHER ACTION RESEARCH?

From questions posed by Gibbons et al. (1994) and Gustavsen (2003) we can reflect on the following challenging question: “If research is a network activity, what are the implications for Ph.D. research which is largely fundamentally focused on individual researchers controlling and grasping all that is to be known in the field of his/her research?”

There are two developments taking place in the wider context that I think are worthy of note as ways of considering this question. Firstly, there is the growth of practitioner research and secondly, the development of collaborative research.

#### **Practitioner Research**

In Europe and the US, the number of practitioner action research programmes is increasing. These programmes are typically part-time, where practising managers undertake action-oriented research in their own organisational systems (Coghlan and Brannick, 2001). Coghlan et al. (2004) provide an example of the research work of three such programmes (two of which are doctoral).

Manager-researchers operate from the complete member role within their organisations and hence are embedded in the setting and working with knowledge-in-use, rather than acquired knowledge. They are practitioner-researchers in Jarvis’ terms (1999) and typically undertake action research-/action-learning-type projects. The challenges of such engagement in research and action in the complete member role are particular and generally involve learning to stand back from what is familiar and critique it, hold organisational and researcher roles concurrently and manage organisational politics (Coghlan and Brannick, 2001). The outcome is actionable knowledge that contributes to both the academic and practitioner communities.

#### **Collaborative Research**

Collaborative research, as the term suggests, is an emerging action research approach to conducting inquiry in organisations, with the aim of “generating new insights that can simultaneously serve both action and the creation of new theoretical development” (Adler, Shami and Styhre, 2004: 359). One particular model that works from a collaborative research model between industry and academics is the FENIX doctoral programme in the Stockholm School of Economics and Chalmers University of Technology (Gothenberg). The FENIX approach is based on a partnership between industry and academics as stakeholders. Collaborative research, at the most basic level, attempts to refine

the relationship between academic researchers and organisational actors from research *on* or *for* to research *with*. In doing so, it attempts to integrate knowledge creation with problem solving and *inquiry from the inside* with *inquiry from the outside*.

- A partnership among a variety of individuals forming a “community of inquiry” within communities of practice.
- An emergent inquiry process that differs from the notion of scientific research as a closed, linear and planned activity.

Adler, Shani and Styhre (2004) provide a theoretical basis for collaborative research and present nine case studies in which external individual researchers worked in partnership with insider managers on issues of joint concern and knowledge generation. The FENIX programme as an inter-institutional and academic-industry partnership illustrates an exciting development in the field of doctoral research.

#### CONCLUSION

The construct of social science research is changing (Flyvbjerg, 2001), and it is changing under several dimensions:

- There is a growing concern about the gap between theory generated within university research and the world of the practising manager. Across several disciplines university-based research is perceived as becoming increasingly irrelevant. Hence there is a persistent call for research to address the world of practice and produce actionable knowledge. Developing forms such as practitioner and collaborative research are notable developments that address this concern.
- There is a growing engagement by the researcher as a person and the inclusion of reflexivity as a qualitative dimension of the relationship between the researcher and the researched, as contrasted with the detached objectivist stance of the positivist researcher.
- The development of trans-disciplinary research where research is a collaborative network venture between stakeholders with different perspectives and so that research is *with* rather than *on* people is opening up new possibilities.

These dimensions pose challenges to the traditional management doctorate where the individual selects a topic from an academic question and perceived gap in the literature, works individually to become the expert in the particular question and engages in isolated inquiry *on* organisational members as a detached, un-engaged outsider.

Action research as defined and practised has the capability to work with these dimensions. It has the potential to confront the self-perpetuating limitations that befall traditional research approaches and ultimately to open

up new possibilities of doctoral research for industry and the world of business and organisations. This reflection aims to provoke some discussion about the form doctoral programmes take and the role they play in generating actionable knowledge for and about Irish business and organisations.

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1 Presentation to the Doctoral Colloquium, University College Cork, 26 April 2004.

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# Universities and Technology Transfer: A Review of Academic Entrepreneurship Literature



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## ABSTRACT

The commercial exploitation of new knowledge created in universities has become increasingly important to universities and to the governments that fund university research. One of the key avenues through which commercialisation occurs is the spin-off of new venture companies, often headed by faculty or staff of the originating university. It is interesting to note, however, the degree to which universities differ in their spin-off activity across different institutional contexts. The importance of this topic to policy makers is reflected in a rapid increase in the number of journal publications that seek to explain this variation in spin-off activity and that suggest policies that would increase this activity. In this paper, we review the academic entrepreneurship literature to identify the determinants of spin-off activity in universities. We suggest that the literature can be categorised into six separate streams. We then outline the limitations of existing research. We seek to synthesise existing research by presenting a framework that captures the determinants and consequences of spin-off activity.

## INTRODUCTION

The rapid rate of technological change, shorter product lifecycles and more intense global competition has radically transformed the current competitive

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position of many regional economies. With the drive to generate knowledge-based employment opportunities, policy makers are now placing a greater emphasis on the role of universities in the commercialisation of scientific and technological knowledge produced within research laboratories.

This increased emphasis on technology-transfer from universities to industry and the need to develop more “rapid” linkages between science, technology and utilisation (Allen, Tushman and Lee, 1979; Allen, 1995; 1997) led to the emergence of a number of entrepreneurial initiatives within academic institutions.

The term “entrepreneurial university” was coined by Etzkowitz (1998) to describe instances in which universities have proven themselves critical to regional economic development. Although some authors refer to European universities (Chiesa and Piccaluga, 2000; Jones-Evans, 1999), the case of MIT is the reference example (Etzkowitz, 2002; Roberts, 1991). By encouraging faculty members to pursue private ventures outside the research lab, the Bank of Boston (1997) calculated that MIT start-up companies generated \$240 billion worth of sales per year and provided an additional 1.1 million new jobs to the US economy. Another known example cited in the literature relates to the University of Texas at Austin in promoting the emergence of the city of Austin, Texas, as a *technopolis*. UT-Austin contributed to local economic development by launching and running one of the most successful business incubators in the US, the Austin Technology Incubator (Gibson and Smilor, 1991).

Explaining spin-off behaviour and why some universities are better at it has become an important research objective within the domain of entrepreneurship research. Referred to broadly as “academic entrepreneurship”, this domain has received increased attention from scholars in recent years.<sup>1</sup> The objective of this article is to review the academic entrepreneurship literature systematically, to synthesise this research and to provide directions for future research. Extant research has sought to identify the determinants and the consequences of university spin-off activity. We argue that the existing literature can be divided into six distinct research streams: 1) studies that focus on the individual and the personality of the individual as the key determinant of whether spin-off activity occurs; 2) organisational configuration studies that seek to explain spin-off activity in terms of the resources of the university; 3) socio-cultural development studies that explain spin-off activity in terms of culture and the rewards within the university; 4) studies that explain spin-offs in terms of external environmental influences; 5) studies that measure the performance of spin-offs; and 6) studies that seek to measure the economic impact of spin-off activity. While these research domains are clearly not orthogonal, we employ them as classifications of convenience to facilitate a discussion on the literature and the development of a conceptual framework that explains the determinants, constituents and consequences of university spin-off activity.

This paper is organised as follows: first, we provide an overview of the evolving role of the university in economic development; secondly, we outline six distinct research streams that we have identified in the “academic

entrepreneurship” literature; thirdly, we identify the limitations of existing research and we suggest new avenues for future research; finally, building on our review of the literature, we present a theoretical framework of the determinants, constituents and consequences of spin-off activity.

#### THE ROLE OF THE UNIVERSITY IN ECONOMIC DEVELOPMENT

The primary mission of the traditional university is to engage in research and disseminate knowledge across both academic and student communities. The importance of this function of the university is well documented in the literature (Bok, 2003; Geisler, 1993; Newman, 1854). Universities can also play a key role in technology transfer activities by providing Research and Development (R&D) activities, by assisting in patenting innovations and by providing students with the skills that allow them to become highly qualified personnel (Roberts and Malone, 1996; Smilor et al., 1990). According to Segal (1986), universities not only provide a source for technical expertise for faculty members, but their students also acquire a wealth of codified and tacit knowledge through learning and living at the university. Rogers (1986) supports this view and contends that universities influence the innovation process through a number of mechanisms, such as: scientific publications that expand the technological opportunity set of firms; training of engineers and natural scientists; training of PhDs with its essential provision of background knowledge, skills and personal networks; and participation in common informal networks, joint R&D projects, research funding and contract research with an associated sharing of explicit and tacit knowledge. In essence, such universities place a strong emphasis on training, tacit knowledge and indirect benefits rather than codified information (or products) as being the main output of academic research into industry (Bok, 2003; Mansfield and Lee, 1996).

However, recent research suggests that traditional universities could play a greater role in regional and national economic development. A number of factors explain why universities are increasingly important to economic development: the growing role of knowledge in the development of national economies and employment; technical advances in information and communication technologies; and the increasing importance of regional high-technology clusters. These factors are explained in greater detail below.

#### **The Contribution of Knowledge to Economic Development**

There is a growing recognition among policy makers of the need to place more emphasis on knowledge creation and knowledge exploitation, and specifically on technology-based entrepreneurship, which converts new scientific discoveries into new opportunities (Chiesa and Piccaluga, 2000). Economic development is increasingly linked to a nation’s ability to acquire and apply technical and socio-economic knowledge and the process of globalisation is accelerating this trend. A recent World Economic Forum global competitiveness report states that “without technological progress, countries may

achieve a higher standard of living through a higher rate of capital accumulation, but they will not be able to enjoy continuously high economic growth” (2003). As such, comparative advantages come less from abundant natural resources or cheap labour and more from technical innovations and the competitive use of knowledge. Economic growth can be seen as much as a process of knowledge accumulation as of capital accumulation.

Economies looking to meet the aim of developing a comparative advantage based on the enhancement and exploitation of the national knowledge base must look to foster university-based entrepreneurship as a central component of their strategy to develop a knowledge-based society (OECD, 1998). This is particularly so because of the rapid acceleration in the rhythm of creation and dissemination of knowledge, which means that the life span of technologies and products gets progressively shorter and that obsolescence comes more quickly. The ability to develop technologically sophisticated and knowledge-led regions has already provided Greater Boston and Silicon Valley regions with wealth creation and quality of life improvements (Kenney, 2000; Roberts, 1991). As a result, governments increasingly recognise the need to support the process of technological change with the aim of spawning more high-growth, knowledge-intensive companies from university research.<sup>2</sup>

### **The Information and Communications Technologies Revolution**

Advances in information and communication technologies have revolutionised the way people work, the way organisations are structured and the way businesses compete. For example, rapid developments in information and communication technologies have eased the difficulty of communicating and enabled the development of widespread ventures and global supply chains. This has resulted in what is popularly referred to as the knowledge-based, interdependent, global village. Competition is much less likely to be localised and may now come from any corner of the world. To compete in such an environment, economies have to accelerate the generation of new knowledge, which in turn requires a continuous process of learning. Universities have historically been the centre for the accumulation, creation and dissemination of new knowledge and must now use this knowledge to enhance the competitive advantage of their regions.

### **The Role of Regional High-Technology Clusters**

In many national economies, policy makers argue that universities need to place increased emphasis on transferring and commercialising knowledge, as opposed to solely generating and disseminating knowledge within the academic community itself, in order to stimulate regional technological clusters. Universities and high-technology clusters are important to the attraction of inward foreign direct investment because human capital and R&D capability play a key role in determining where high value-added R&D projects from multinational corporations are located (Etzkowitz, 2000). Economies that possess a sophisticated technology infrastructure and that are populated by

start-ups are better positioned to attract knowledge-seeking investment from multinational corporations.

For example, traditional pharmaceutical companies such as Novartis and Wyeth located their R&D facilities around successful universities such as Harvard and MIT and spin-offs such as Alnylam and Genzyme in Cambridge (US) to access critical expertise in biotechnology. The clustering effect resulting from the interchange of knowledge among such corporations and universities resulted in high quality employment and increased wealth for the greater Boston region.

#### THE DETERMINANTS AND CONSEQUENCES OF UNIVERSITY START-UP ACTIVITY

The study of university spin-offs within the “entrepreneurial university” framework came to the fore with Roberts’ seminal study on entrepreneurial activity in MIT (1991). Many subsequent studies of spin-off activity have followed Roberts’ early work by investigating the factors that stimulate the creation of spin-off companies from universities. Indicative of this research, and of the general prescriptive findings that characterise this literature, is a cross-national study of five highly successful European universities that identified elements common among successful entrepreneurial institutions (Clark, 1998). They include:

1. Strong top-down leadership and policies that support and encourage the process of academic entrepreneurship and which merge entrepreneurial orientation objectives with the traditional academic values of the university;
2. Strong ties between the university and industry in research projects of mutual gain and “robust” structures, policies and procedures to enable such activity (for example, industrial liaison offices and flexible contracting procedures);
3. A diversified funding base such as industry and private benefactors, though much of university funding is still derived from government sources;
4. A strong academic base, what the authors referred to as “a steeple of excellence approach”, whereby the universities recruited the top candidates in those fields where it has built its “steeple”. Tenure and academic promotions are granted solely on academic achievement and not due to individual entrepreneurial endeavours;
5. An entrepreneurial culture that embraces change and sustains the fundamental values of the institution.

Such findings are underpinned by a body of research that has explored individual determinants of spin-off activity. Our review of the literature suggests six primary research groups or domains. The first four focus on the determinants of spin-off activity within a university context: 1) the attributes and

the personality characteristics of academic entrepreneurs; 2) the resource endowments and capabilities of the university; 3) university structures and policies facilitating commercialisation; 4) environmental factors influencing academic entrepreneurship. The remaining two factors focus on the consequences of spin-off activity; 5) the performance of spin-off businesses; and 6) studies that measure the economic impact of spin-offs on regional economies. We present each of these in more detail below.

For the purposes of this paper, we define university spin-offs as the transfer of a core technology from an academic institution into a new company, where the founding member(s) may include the inventor academic(s) who may or may not be currently affiliated with the academic institution (Nicolaou and Birley, 2003).

### **Individual Attributes as Determinants of Spin-off Activity**

A number of studies highlight the importance of entrepreneurial attributes in shaping the individual's behaviour and whether an academic will establish a spin-off business. Other researchers have stressed the role personality, motivation and disposition play in influencing academic entrepreneurship. Some studies have used psychological models to explain spin-off departure from universities. These studies emphasise the impact of individual abilities and dispositions on the entrepreneurial behaviour of academics. This stream of research shares a common theme: that spin-off behaviour is a reflection of individual actions and therefore is largely due to the personality, ability or willingness of the individual to engage successfully in entrepreneurial behaviour.

Roberts (1991), for example, found that academic entrepreneurs with outgoing, extroverted personalities were more likely to engage in spin-off activity. Furthermore, from a study of almost 130 technical entrepreneurs and almost 300 scientists and engineers, he concluded that personal characteristics such as the need for achievement, the desire for independence and an internal locus of control were common in both groups. Tenure in universities and occupational and research skill levels amongst academics are also found to impact university spin-off behaviour. Audretsch's (2000) analysis of academic entrepreneurs found that university entrepreneurs tended to be older and more scientifically experienced than "typical" high-technology entrepreneurs. Similarly, Zucker et al. (1998), using data on California biotechnology companies, found that scientific "stars" collaborating with firms had substantially higher citation rates than pure academic "stars".

### **Organisational Determinants of University Spin-Off Activity**

Social scientists operating at the organisational level have adopted a different approach to the study of spin-off activity. Organisational theories of university spin-off behaviour are generally concerned with the impact of environmental forces on academic entrepreneurship. But rather than focusing on broad social or economic forces, such researchers have centred their attention on organisational and human resource aspects of the university. Specifically, researchers



have sought to establish links between spin-off activity and the level and nature of research funding; the quality of the researchers, the nature of the research within the university; and the presence of technology incubators and technology transfer offices.

#### *Level and Nature of Research Funding*

Several investigators have focused their attention on the level and nature of funding for R&D activities within the university. For example, Lockett and Wright (2004) find that the number of spin-off companies created from UK universities is positively associated with R&D expenditure; the number of technology transfer staff; expenditure on intellectual property protection; and the business development capabilities of the university. Blumenthal et al. (1996) surveyed 2,052 faculties at 50 universities in the life sciences field and found industry-funded faculty members to be more commercially productive (i.e. patent applications and new products brought to the market) than those who are not industry funded. Similarly, in a cross-sectional study of doctoral granting research universities, Powers and McDougall (2005) found a positive and statistically significant relationship between annual university-wide R&D expenditure and spin-off activity. Furthermore, Wright et al. (2004) found evidence to suggest that involvement of industry functioning as venture capitalists via joint venture spin-offs may facilitate the emergence of university spin-offs because they have the necessary financial resources and commercial expertise to transfer technologies successfully to the marketplace.

#### *The Quality of the Researchers and the Nature of the Research*

A critical human capital resource for the development of cutting-edge technologies is access to persons with expert knowledge and talent (Powers and McDougall, 2005). Zucker et al. (1998) argue that “star” scientists from higher quality academic institutions create spin-off firms to capture the rents generated by their intellectual capital. Such capital is tacit and therefore it is difficult for lower quality institutions to imitate. DiGregorio and Shane (2003) suggest faculty members who develop leading edge innovations may wish to earn economic rents on valuable asymmetric information. They suggest it may be easier for academics from top tier universities to assemble resources to create start-ups for reasons of credibility. DiGregorio and Shane (2003), through regression analysis, provide support for this proposition finding that in 101 US universities from 1994 to 1998, *ceteris paribus*, a one-point increase in graduate school quality ranking as measured in the Gourman Report (Gourman, 1997) led to a 68 per cent increase in the spin-off rate.

The nature of university research and the industries where spin-off companies are more likely to emerge has gained prominence in the literature of late. For example, Shane (2004a) reports that the majority of MIT spin-off companies from 1980 to 1996 operated in the biomedical industry. Similarly, Golub (2003) found that half of all spin-off companies that emerged from

Columbia University operated in the biomedical industry while the remainder operated in the electronics and software fields. Furthermore, Shane (2001) provided a framework of favourable market preconditions for technology transfer to occur successfully. Using data from MIT patents, Shane demonstrated that the tendency for an invention to be exploited through firm creation varies with the attributes of the technology. These attributes include: 1) the age of the technical field; 2) the tendency of the market towards segmentation; 3) the effectiveness of patents; and 4) the importance of complementary assets. These studies suggest that “relevance of research” (Geisler, 1993) with regard to the lifecycle of industries may play a key role in explaining variation in university spin-off activity.

*Supports for Spin-Offs: Incubators and Technology Transfer Offices*

In recent years, the question of how universities are supporting the development of spin-offs is attracting increased attention. Tornatzky (1996) identified 50 best-practice incubator programs in the US and highlighted the role technology incubators could play in accelerating technology transfer. According to the author, incubators were involved in activities such as drawing up an R&D plan; obtaining the financial resources needed to carry out the project; team-building and tutoring; professional and administrative consulting, guidance and supervision; raising capital and preparing for marketing; giving secretarial and administrative services, maintenance, procurements, accounting and legal advice; giving professional and business guidance. However, a study of 101 universities by DiGregorio and Shane (2003) did not find any statistically significant results to support the argument that the presence of an incubator affiliated with a university increased spin-off activity.

Some universities operate a Technology Transfer Office as a vehicle to support the creation of spin-off companies (Hague and Oakley, 2000). For example, Oxford University ISIS Innovation is a wholly owned subsidiary of the university and its task is to promote and support the commercialisation of research ideas generated by Oxford academics. ISIS selects projects that it considers it should support and then uses its business network to attract investment into the spin-off business. According to Chugh (2004), the Technology Transfer Office plays a key role with respect to engendering academic entrepreneurship. The Technology Transfer Office achieves this by engineering synergistic networks between academics and venture capitalists, advisors and managers who provide the human and financial resources that are necessary to start a company; and by providing company formation expertise, as many technology transfer personnel have experience in evaluating markets, writing business plans, raising venture capital, assembling venture teams and obtaining space and equipment. Lockett and Wright (2004) and Powers and McDougall (2004) systematically analysed UK and US universities respectively. They found positive and statistically significant results supporting the proposition that the size and experience of a technology transfer office is positively associated with increased spin-off activity.

### **Institutional Determinants of Spin-off Activity**

The central tenet of the third stream of research is that university spin-off activity is a reflection of institutional behaviour. This research suggests that universities that have cultures that support commercialisation activity will have higher levels of commercialisation and higher rates of spin-off activity. In contrast, university environments that do not encourage entrepreneurship will have less spin-off activity.

Roberts (1991) argues that the social norms and expectations of the university are a key determinant of commercialisation activity. He suggests that MIT's tacit approval of entrepreneurs was a key factor in explaining successful academic entrepreneurship at MIT. Golub (2003) supports this perspective and credits the growth in spin-off activity at Columbia University, at least in part, to the knowledge spillovers provided by academic inventors in life sciences who had established companies in the early 1990s. Similarly, Kenney and Goes (2004) argue that Stanford University faculty members were more motivated than their Berkeley counterparts to become entrepreneurs because of the inspiration provided by prior academic entrepreneurs at their university. Shane (2004a) argues that faculty members' decisions to start companies in MIT were socially conditioned. He suggests that efforts by pioneering entrepreneurial faculty members to create start-ups led new academics to believe that firm formation was an acceptable and desirable activity.

By contrast, university environments that do not encourage entrepreneurship have been shown to inhibit spin-off activity. More specifically, an academic's reluctance to engage in spin-off behaviour may be exacerbated by the attitudes and behaviours of superiors such as professors or departmental heads. For example, Louis et al. (1989) found that local group norms were important in predicting active involvement in commercialisation. They argue that this may be due to self-selection, which produces behavioural consensus and behavioural socialisation, where individuals are influenced by the behaviour of their immediate peers.

One reason why a university may not have a supporting culture is the issue of reward systems and the possible conflict between the institutional rewards for research publication and commercial rewards of ownership (Birley, 2003). For example, Thursby and Kemp (2002) found that less than half of faculty inventions with commercial potential are disclosed to the technology transfer office. In some cases this may be because those involved do not realise the commercial potential of their ideas, but often it is due to the unwillingness to delay publication that results from the patent and licensing process. Restrictive leave of absence policies, whereby academics find it difficult to move between academia and the private sector, have been shown to negatively impact spin-off activity. According to Goldfarb and Henriksen (2003) the risk of forming inventor-led ventures is increased when leave of absence policies to start companies are restrictive. Furthermore, DiGregorio and Shane (2003) found evidence that university technology transfer policies that allocate a higher share of inventors' royalties decrease spin-off activity because the opportunity cost

in engaging in firm formation (rather than licensing technology to established firms) is increased. Other cultural factors such as the “publish or perish” drive, the ambiguous relationship of researchers to money and the “disinterested” nature of academic research to industry are also seen as inhibitors to the valorisation process of academic research (Ndonzau et al., 2002).

Universities that lack a culture supportive of commercialisation activity may take a number of actions. For example, studies in the UK suggest universities that are favourably disposed toward the use of surrogate entrepreneurs are more likely to be effective at university spin-off activity (Franklin et al., 2001). Similarly, Siegel et al. (2004) propose that in order to foster a climate of entrepreneurship within academic institutions, university administrators should focus on five organisational and managerial factors: reward systems for University Industry Technology Transfer (UITT); staffing practices in the technology transfer office; university policies to facilitate university technology transfer; increasing the level of resources devoted to UITT; and working to eliminate cultural and informational barriers that impede the UITT process.

### **External Determinants of Spin-Off Activity**

This stream of research emphasises the impact of broader economic factors on academics within universities. Three factors that it could be argued will impact on spin-off activity are access to venture capital, the legal assignment of inventions (or, more specifically, in the US, the enactment of the Bayh-Dole Act) and the knowledge infrastructure in the region.

Florida and Kenney (1988) highlight the central role of the availability of venture capital in encouraging the formation of high-technology companies. Several studies have provided empirical support for the geographic localisation of venture capital investments. Sorenson and Stuart (2001) found that the probability that a venture capital firm will invest in a start-up decreases with the geographical distance between the headquarters of the venture capital firm and the start-up firm: the rate of investment in companies 10 miles from a venture capitalist’s headquarters is double the rate of investment in companies located 100 miles away. However, more recently, DiGregorio and Shane (2003), using a dataset collected from 101 universities between 1993 and 1998, found no evidence that the number of venture capital investments, the amount of venture capital invested, the number of venture capitalists, the amount of their capitalisation or the presence of university venture capital funding are related to the amount of spin-off activity in a locale. In terms of seed capital, Franklin et al. (2001) found that those universities in the UK that generated a large number of spin-offs tended to provide their spin-offs with better access to sources of pre-seed stage capital than universities that did not generate a large number of spin-offs.

According to Shane (2004b) another significant impetus in the generation of university spin-offs in the US was the enactment of the Bayh-Dole Act whereby inventions were assigned to academic institutions rather than individual inventors. According to some European studies, national policies which

allow inventions to be assigned to academic inventors have inhibited spin-off activity. In Sweden, for example (Wallmark, 1997), academic inventors are reluctant to bear the upfront costs and risks associated with patenting technology. Other researchers suggest that national policies of assigning inventions to individuals can lead to an anti-entrepreneurial attitude among faculty and university administrators who do not gain from inventors' entrepreneurial activity (Goldfarb and Henrekson, 2003).

The knowledge infrastructure of a region is also cited as a key factor determining spin-off activity. For example, Saxenian (1994) has shown that spin-off activity is more likely to occur in high-technology clusters because of ease of access to critical expertise, networks and knowledge.

### **The Performance of University Spin-Offs**

A small but growing number of studies deal with the performance of academic spin-offs. In terms of performance, the survival rate of university spin-off companies is extremely high. According to AUTM, of the 3,376 university spin-offs founded between 1980 and 2000, 68 per cent remained operational in 2001. This number is much higher than the average survival rate of new firms in the US. Similar results have been found in other countries. Mustar (1997) found that only 16 per cent of the French spin-offs he studied failed over the six-year period that he tracked them. Dahlstrand (1997) found that only 13 per cent of the spin-offs from Chalmers Institute of Technology in Sweden founded between 1960 and 1993 had failed by 1993. Furthermore, Nerkar and Shane (2003) analysed the entrepreneurial dimension of university technology transfer, based on an empirical analysis of 128 firms that were founded between 1980 and 1996 to commercialise inventions owned by MIT. Their findings suggest that new technology firms are more likely to survive if they exploit radical technologies and if they possess patents with a broad scope. Shane and Stuart (2002) offered empirical evidence of the network-performance relationship, analysing how social capital endowments of the founders affect the likelihood of three critical outcomes of spin-offs: attracting venture capital financing, experiencing initial public offerings (IPOs) and failure. Direct and indirect linkages to investors were found to be important determinants of whether the business received venture funding and in reducing the likelihood of spin-off failure.

Franklin et al. (2001) focus on the academic entrepreneur in the context of the growth and development of the university spin-off company. They suggest that a combination of academic and surrogate entrepreneurs might be the best approach for developing successful technology-based spin-offs. While the academic entrepreneur may bring a strong commitment to the spin-off process, they argue it will ultimately be the surrogate entrepreneur with the business acumen and experience that will drive the company forward. At a university level of analysis, Vohora et al. (2004) identified four stages that spin-offs undergo during their development: the research phase, the opportunity framing phase, the pre-organisation phase and the re-orientation phase.

However, they also identified four critical junctures a spin-off must pass in order to progress to the next phase of development. These include opportunity recognition, entrepreneurial commitment, threshold of credibility and threshold of sustainability.

Doutriaux's (1987) study of the "passive" university found that the university was an impediment to growth as it prevented academics focusing their efforts solely on the commercialisation of their product. From his analyses of 200 companies created by researchers from university environments, Mustar (1997) found that the success of these companies depended upon their ability to establish linkages with a broad range of different actors such as financial institutions, research labs and clients. Furthermore, Daniels and Hofer (1993) found that new ventures in universities are more successful when the entrepreneurs have experience of taking ventures to the marketplace.

### **The Economic Impact of Spin-Offs**

University spin-offs are an important subset of start-up firms because they are an economically powerful group of high-technology companies (Shane and Stuart, 2002). According to the Association of University Technology Managers (AUTM, 2001), spin-offs from American academic institutions between 1980 and 1999 have contributed 280,000 jobs to the US economy and \$33.5 billion in economic value-added activity (Shane, 2004a). University spin-offs are also important economic entities because they create jobs, particularly for a highly educated workforce.

#### A CRITIQUE OF EXISTING RESEARCH

University spin-offs have received increased attention from both scholars and policy makers during the last decade. While this research has provided many insights into why some universities have higher levels of spin-off than others, there is still much we do not know about spin-offs. We outline seven limitations to extant research. The first four refer to the attempts to explain the determinants of spin-off activity; the next two refer to the policy context of the research; and the last refers to the research methods employed.

### **Explaining Spin-Off Activity**

1. Many of the studies conducted to-date are based on theories that are actually atheoretical in nature (Nicolaou and Birley, 2003), e.g. the research suggests relationships between events in the form of a model without providing a consistent explanation to account for those relationships. As a consequence, there is a need for more studies to systematically explain from an organisational perspective why some universities are more successful than others at generating technology-based spin-off companies (DiGregorio and Shane, 2003; Vohora et al., 2004).
2. While existing research has sought to map-out the dimensions of the patterning and rates of spin-off departure, it has only recently begun to

explore the complex processes within institutions that give rise to these patterns. Research needs to address the different forms of spin-off companies and the complex causes that lead some, but not all, academics to engage in technology-based spinoff ventures.

3. Past models and research of spin-offs has underestimated the role that the social setting of the institution plays in the spin-off process. This is despite evidence from, for example, Roberts (1991) that demonstrated that differences in spin-off rates can only be understood within the context of the social environment established by other faculty members in the university. Roberts argued that differences in spin-off rates in differing universities were a direct reflection of the degree to which the work peer culture made spin-off activity an important determinant of academic status. As such, differences in academic entrepreneurial intentionality seem to be a function of the ethos and culture which pervades the daily life of university and which informs the actions of academics alike. Therefore, research needs to investigate the behavioural and normative manifestations of academic entrepreneurship.
4. The question of the role of personality is still unresolved. Though it is obvious that individual personality may affect university spin-off rates, researchers have yet to discern anything resembling a “personality of spin-off creation”. Although very insightful work has been carried out by Shane and Roberts in an MIT context, constructs of personality have yet to capture in a reliable fashion specific attributes which underlie individual responses to experiences within different institutions of higher education.

### **The Policy Context of Spin-Off Activity Research**

5. Many of the studies conducted to date have not been particularly suited to the needs of institutional officials who seek to enhance spin-off activity on campus (Lockett and Wright, 2004; Shane, 2004a). Some researchers have tended to ignore and sometimes confuse the varying forms which spin-off activity takes in higher education and to downplay the role the institution plays in the start-up activity.
6. There is insufficient research that addresses the (unintended) consequences of engaging in commercialising academic research. For example, authors such as Callon (1994), Nelson (2001) and McMillan et al. (2000) caution policy makers in other countries who wish to emulate the US experience in university technology transfer. They call for more reflection on the potential drawbacks to the US system of innovation regarding the tensions that may arise between departments and colleges within a university that are “successful” and “unsuccessful” at technology transfer. They also highlight a strong concern with the Bayh-Dole Act, suggesting that it may inhibit a long-standing tradition of “open science and training”.

### **The Research Methods Used**

7. Much of the technology transfer literature is characterised by cross-sectional studies. Since the process of spin-off creation is longitudinal in

character, more studies need to be longitudinal in structure. From a methodological perspective, to be effective in assessing university spin-off programmes, researchers must employ multiple methods for collecting data. In addition to the need to accurately record, document and explain inter-institutional variations of spin-off rates, research must also capture the complexity and richness of the dynamics of academic entrepreneurship. For that reason, assessment systems in the literature should employ more combined quantitative and qualitative methods to understand the nature of spin-off activity. However designed, survey methods are not able to tap fully the complexity of academics' views and the character of their understanding of the quality of their entrepreneurial experiences. Therefore there is a need for the use of a variety of qualitative methods ranging from focus-group interviews to qualitative interview techniques to explain academics' perceptions of their experiences within their institutional context. Though such methods are typically unable to demonstrate a representative picture of academic entrepreneurial intentionality, they enable research scientists to uncover how academics make sense of their decisions. And they do so in ways not constrained by prior judgments that sometimes frame the questions of survey questionnaires.

#### DEVELOPING A CONCEPTUAL FRAMEWORK FOR THE STUDY OF UNIVERSITY SPIN-OFFS

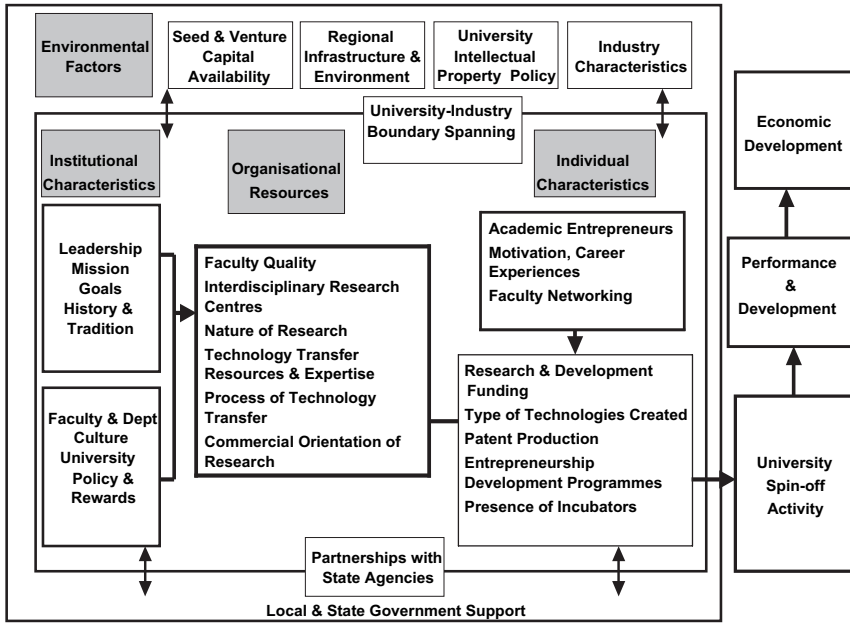
We have identified a number of streams of research within the domain of academic entrepreneurship. We have specifically focused on research that has sought to identify the determinants of spin-off activity within universities and the consequences of such activity. We now seek to integrate these perspectives into a university spin-off framework. We believe this framework provides a useful organising scheme for understanding existing literature on academic research and for explaining the determinants and consequences of spin-off activity.

This framework (see Figure 2.1) represents a conceptual integration of elements found in the academic entrepreneurship literature. The framework assumes a social-psychological perspective, in that we suggest that spin-off creation not only varies due to variation in the characteristics of individual academics but also due to variation in environments and university contexts. The framework suggests that four factors influence the rate of spin-off activity:

1. The academic's reasons for engaging in entrepreneurial activity (individual characteristics studies);
2. The attributes of universities such as human capital, commercial resources and institutional activities (organisational-focused studies);
3. The broader social context of the university, including the "barriers" or "deterrents" to spin-offs (institutional and cultural studies);



Figure 2.1: A University Spin-off Framework



4. The external characteristics such as regional infrastructure that impact on spin-off activity (external environment studies).

In addition, we incorporate two further streams of research that deal with the consequences of spin-off activity by suggesting that they can be considered in terms of:

5. The development and performance of spin-offs;
6. The spillover effect of spin-offs on the regional economy.

CONCLUSION

In this paper we organise the growing body of theory and research on university entrepreneurship into six different research streams. Specifically, we argue for the existence of an underlying set of individual and contextual factors that need to be recognised by universities implementing technology transfer policies. In addition, the two other primary streams of research identified (i.e. development and performance of spin-offs and the economic impact of spin-off activity) provide a parsimonious description of the outcomes of spin-off activity.

We provide an overview of the limitations of the university spin-off literature. We argue that a theoretical void exists in the research on university entrepreneurship. The literature on this subject is primarily subjective in that most writers develop conceptual models that are not empirically tested. Furthermore, much research in the spin-off literature has focused on a single university or on a very small number of institutions making it hard to draw any generalisations (Nicolaou and Birley, 2003). As a result, the conclusions of much of the current research concerning university spinout performance may not be generalisable to other settings. Therefore, empirical studies that provide a more fine-grained analysis of the nomological influences surrounding academic entrepreneurship are needed. We suggest that researchers need to test models of university spin-off activity. This should allow researchers to assess the relative influence of previously identified variables on spin-off activity.

To conclude, we argue that spin-offs are increasingly important for economic development. Policy makers and universities will increasingly seek to understand how best higher educational institutions can contribute to both their traditional functions and the added function of making the regional or national economy more competitive. In this paper we suggest a conceptual framework that should aid researchers in completing a much-needed assessment of the impact of organisational policies, practices and structures on university entrepreneurship. Specifically our framework should lead to the development of organisational interventions that facilitate technology transfer and spin-off activity. The integrative framework we present suggests that university heads and policy makers can encourage and develop university entrepreneurship by using a comprehensive systems approach for the identification, protection and commercialisation of university intellectual property.

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- 1 For example, Management Science and Research Policy have both devoted special issues to the topic.
  - 2 For example, Frank Ryan, Chief Executive, Enterprise Ireland stated, "In order to advance indigenous Irish industry, it is vitally important that we commercialise the knowledge we have emanating from third level colleges and create in greater numbers, new, ambitious and globally competitive companies", *Irish Independent*, 6 February 2004.

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# Is the Internet the Worldwide Cultural Catalyst? A Theoretical Approach



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*“A powerful force drives the world toward a converging commonality ...”*  
(Levitt, 1983: 92)

*“... through the mediation of information and communication technologies, new  
patterns of social and cultural organization are emerging.”*  
(Martin, 1995: 11)

## INTRODUCTION

The Internet has become one of the buzzwords of the moment and even though its potential impact on social and economic structures is more than tangible (OECD, 1999; Orłowski, 1997), perhaps we are yet to appreciate its final repercussions on these structures.

In any case, the appearance of the Internet can be considered as key to establishing a “before and after” in the study of exchange relations among the different social agents in a given environment. This same reasoning can be transferred to the specific field of business in a way in which both companies and consumers can become involved in the processes of communication and marketing (for example Hamill and Ennis, 1999; Hoffman and Novak, 1996; Leverick et al., 1997; Peattie and Peters, 1997; Prabhaker, 2000; Weiber and Kollmann, 1998).

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We can find numerous contributions highlighting the need for work to create a framework of knowledge which allows a better understanding of the implications of this new communication medium over the behaviour of individuals and society in general (Leung and Lee, 2004; Wellman et al., 2001). In this line, this paper attempts to analyse its implications over cultures of different nations whose individuals make regular use of the Internet. We consider this research important in determining the repercussions that the Internet may have on the evolution of cultures, an area still largely unexplored.

Considering the key role that the adoption of technologies has had on fostering the globalisation of both economic processes and values (Levitt, 1983), the following question could arise: "Is the Internet the worldwide cultural catalyst?" Inasmuch as the world is increasingly interconnected by the Internet, the widespread adoption of this new communication medium must intensify and accelerate a cultural convergence among countries. It is important to determine if this cultural convergence happens because of the Internet and what are its main repercussions on cultures of nations.

The purpose of this paper is to analyse theoretically the effects of individuals' growing adoption of the Internet in their respective cultures. Moreover, we discuss the role that the Internet can play on rapprochement of cultures. As such, a key question in this study is to determine if the Internet can foster cultural convergence among countries.

To address these issues it is necessary to use several cultural approaches with the aim of providing a balanced view. Thus, we begin by discussing the pan-cultural approach, which is viewed as one of the more classic and cited cultural theories. However, in spite of the utility that this approach has demonstrated during previous decades, it seems to be insufficient to explain fully the cultural convergence argument prompted by the Internet. As a result, we will pay more attention to those cultural approaches whose essence is in agreement with a dynamic view of culture. This new perspective of culture is more modern than the pan-cultural approach and it is due to a cultural paradigm shift defended by several authors (see Hong and Chiu, 2001).

This paper, therefore, is organised as follows. First, we theoretically analyse the treatment of the culture variable as a determinant of individuals' behaviour. Next, a theoretical proposal is presented regarding the future cultural convergence that will take place among individuals belonging to different primary cultures due to the Internet-technology adoption. This proposal will be discussed based on several cultural theories, approaches and culture-related models. Finally, within the conclusions, we summarise our main findings, together with the most relevant implications to explain the current and future settings for this issue.

#### CULTURE, GLOBALISATION AND CONSUMER BEHAVIOUR

The individual's cultural factors are defined in this paper as the group of beliefs and values shared by a group of persons. These factors have usually been considered by social psychology as behaviour determinants and as a guide for

members of the society to justify their choices. In fact, Schwartz's (1992) cultural-level values theory describes culture as a set of values being determined by an underlying "structure of interacting belief systems" (Watson et al., 2002).

Thus, Hong and Chiu (2001) point out that several studies have shown that the way in which individuals perceive their social environment is directly related to their cultural background. Their evaluation and regulation of day-to-day conduct partly reflect the cultural knowledge they have acquired throughout their lives. Therefore, it is to be expected that these values and standards that are typical in a certain society affect the daily decision processes carried out by the individual members of this society *in their condition as consumers*. In this respect, Liu and McClure (2001) go further in emphasising that culture does not only affect the consumers' present behaviour but also their intention to commit themselves in the future.

However, in spite of the importance of this variable as a determinant of consumer behaviour, Johnston and Parminder (1999) state that on many occasions the difficulties entailed in its measurement have meant that it has been included in research as an explanatory variable of a residual nature and thereby relegated to a secondary position.

Recently, the consideration of the inherent cultural factors in the diverse national markets has taken on special relevance for companies that intend to address the consumer on a global scale. Thus, on the one hand there are the manners in which firms interact and communicate with their customers and, on the other hand, there are the ways in which they develop the processes of marketing in the countries of reference (Seth and Parvatiyar, 2001). As such, we can summarise the contributions into two different groups:

1. The first group deals with the phenomenon of the firms' global positioning with a certain reticence. Certain precautions are taken which allow the differences between countries of origin such as that of the cultural component to be saved;
2. The second group is concerned with the existence of a market homogenisation process regarding shared values among consumers from different countries. The principal catalyst in this case is the widespread diffusion of the Information and Communication Technologies (ICT), i.e. the growing generalised adoption of the Internet.

Regarding the first group of contributions, Malhotra et al. (1998) note that there is still a broad debate about the suitability of market globalisation. Although the ICT contributes to the convergence of preferences among consumers from different countries and cultures, in a "multicultural world" the cultural heterogeneous nature will be the most significant barrier to the development of global market strategies (Kale, 1995). In a similar vein, Walter and Shyan (1999) consider that despite the market's globalisation process, it is necessary to consider the differences between countries by looking at several factors, including the cultural factors, as these are partly responsible for the marketing environment in any market. Along these lines, McGorry (2000)



points out the fact that companies must be aware of cultural and social movement in different national markets, with the aim of adequately addressing the needs of the global consumer. As Raju (1995) affirms, despite the generalisations made with regard to consumer behaviour in global markets, one must not forget that each country is unique. So it can be argued that in spite of the inevitable globalisation of markets due to the convergence of values, differences still remain (Watson et al., 2002). Mattila (1999), for example, supports this idea by stating that as global competition increases, firms will require a greater understanding of consumers from different cultures. This supports the argument that cultural differences among countries are still obvious.

On the other hand, the ideas defended by the second group give rise to the following question:

Could the Internet be considered as the medium which unifies and generates shared values and beliefs among consumers or, in a broader sense, individuals from different cultures and places of origin?

In his renowned article, "The Globalization of Markets", Levitt (1983) focused on technology, arguing for its role in the inevitable homogenisation of the needs and desires of consumers from different countries and regions. In fact, the "ubiquity of the desire" idea might be a consequence of the emerging global economic and cultural ubiquity. Hence, if we specifically focus on the Internet technology and expand the essence of Levitt's reasoning, we could pose the following proposition:

The Internet represents a fundamental force able to integrate and approximate different cultures, each of them with their own values and beliefs, corresponding to all those countries and regions that make regular use of it.

Though it is a simple idea, Tonn and Ogle (2002), based on a revision of academic contributions regarding the globalisation phenomenon, found that some authors maintain that it will encourage a process of loss of both values and specific characteristics of world regions. As a result, this would unavoidably finish with the supremacy of a hegemonic culture and language, whose seed is being compounded by the omnipresent American culture and the English language.

However, our approach to this question is going to be substantially different. It is important to be aware that cultural globalisation is not necessarily supported by a standardisation of values, but also by a pluralism of cultures (Ning, 2002). Moreover, as countries balance their economic development, their respective cultural values will also become stronger (Mooij and Hofstede, 2002). As a result and in opposition to the classic globalisation postulates, a certain (national) culture would have more difficulties in predominating over the rest, not only on a global context, but also on a world increasingly interconnected by ICT.

In sum, the core of this proposal is that the ongoing development phase of ICT is the main factor for bringing together values across countries. This

happens, however, not by the appearance of a hegemonic culture (the former idea of globalisation), but by the emergence of a *new paradigm of globalisation* (see Tonn and Ogle, 2002). This paradigm poses that the ICT and especially the Internet provide the ground for the integration and respectful co-existence of cultures. In the following section, we will discuss this question in more detail.

#### THE INTERNET AS A WORLDWIDE CULTURAL CATALYST

The growing communication processes developed through the Internet can be identified as a brand new and essential factor among all those contributing to the rising of hybrid cultural areas, either in physical or virtual environments (see Thompson, 2002). In fact, it can be seen as an electronic environment which favours frequent cultural contacts.

As the Internet becomes more available and the adoption rate increases throughout the world, individuals belonging to different cultures will have to generate and reach a consensus on a set of new symbols and values in order to obtain meaningful exchanges. As a result, a process with diverse degrees of transference will take place among different cultures. In this way, although the nuances of each culture of origin will basically remain in place, there will be an assimilation of part of the culture surrounding the exchanges carried out over the Internet. This assimilation will be due to the values acquired by the Internet users belonging to a certain culture, as well as to the new values transferred by them, fruit of the interaction process.

In an attempt to specifically discuss and support this argument, we will develop a series of reasoning based on different cultural theories, approaches and culture-related models: the Pan-Cultural approach, the Dynamic Constructivist Approach, the Adaptive Culture Model, the Theory of Culture Hybridisation and the Tensor Product Model. Our aim is not to analyse these cultural approaches in depth but to treat their main idea in order to provide a theoretical basis to the cultural convergence argument.

The structure of this section follows several cultural approaches and cultural models mentioned above. These can be grouped into two sets: 1) views culture as a static entity, i.e. the pan-cultural approach; 2) includes those cultural approaches characterised by their dynamic view of culture. In this respect, we will expand on the dynamic constructivist approach, as it is currently the more challenging and contributing proposal that defends a paradigm shift in the study of culture (Hong and Chiu, 2001). At length, we will use and briefly present other cultural theories and culture-related models whose essence is similar in order to better place our proposal.

In sum, we not only pursue to theoretically justify our proposition based on certain cultural theories, approaches and culture-related models, but we also aim to provide a balanced view for readers to appreciate how the more recent dynamic approaches are the most appropriate for addressing this issue.

In Table 3.1 we present a summary of the cultural theories and approaches including: their main starting assumptions; whether their basics can support

**Table 3.1: Culture Theories and Approaches Used to Support our Theoretical Proposition**

Cultural theories and approaches used	Starting assumptions	Does it support our theoretical proposition?	How does Internet culture assimilation take place by individuals (consumers/Internet users)?	What is the process of values transference from the Internet culture to the original cultures?	Contributions related with each stream
Pan-cultural approach	<ul style="list-style-type: none"> <li>- Individuals' values (culture) are static dispositions.</li> <li>- Individuals acquire cultural theories from their primary culture.</li> <li>- It follows an "etic" approach, i.e. it reduces cultures to a set of universal dimensions. Hence, cultural diversity exists in the form of integrated universal dimensions.</li> <li>- It does not allow a domain-specific cultural view of cultures.</li> </ul>	No	—	—	Hofstede (1980) Schwartz (1992)
Dynamic constructivist approach	<ul style="list-style-type: none"> <li>- Individuals' values are dynamic in time.</li> <li>- Individuals are potentially multicultural.</li> <li>- They may receive and assimilate different cultures as a consequence of the acculturation process.</li> <li>- Individuals are able to change (or create) their cultural prism depending on the context.</li> </ul>	Yes	Internet users, due to the online exchange processes carried out, assimilate and adapt their cultural framework (change of cultural prism) to the existing set of values on the Internet (new context).	- <b>Initial consideration:</b> Internet users are culturally closer than those individuals belonging to different cultures which do not use the Internet.	Hong et al. (2000) Hong et al. (2001) Hong and Chiu (2001) Lau et al. (2001) Orlowski (1997) Sperber (1996)

**Table 3.1: Culture Theories and Approaches Used to Support our Theoretical Proposition (Continued)**

Cultural theories and approaches used	Starting assumptions	Does it support our theoretical proposition?	How does Internet culture assimilation take place by individuals (consumers/Internet users)?	What is the process of values transference from the Internet culture to the original cultures?	Contributions related with each stream
Theory of culture hybridisation	<ul style="list-style-type: none"> <li>- Individuals' values are dynamic in time.</li> <li>- When interaction among individuals from different cultures takes place, a set of new hybrid cultural forms emerges.</li> </ul>	Yes	<ul style="list-style-type: none"> <li>- Communication processes carried out by individuals belonging to different cultures of origin in Internet generates new hybrid cultural forms (Internet culture).</li> <li>- It facilitates cultural convergence among groups while maintaining diversity.</li> </ul>	<p><b>- A two-stage process:</b></p> <ul style="list-style-type: none"> <li>- Firstly: Internet users, who are part of certain original cultures, have already adapted and taken them.</li> <li>- Secondly: When Internet users</li> </ul>	Alasuutari (2000) Portella (2000) Thompson (2002)
Tensor product model	<ul style="list-style-type: none"> <li>- Shared representations (cultural stereotypes) within a group. Though they tend to be collectively maintained while being used, cultural stereotypes are changing over time because of new emerging relevant information.</li> <li>- Shared values are generated due to periodical interactions.</li> <li>- Shared representations evolve over time when individuals repeatedly find new and important representations, inconsistent with the primitive.</li> </ul>	Yes	Shared values existing on the Internet are set up as new "representations" for the individuals from different cultures of origin, which tend to influence and to alter their primitive representations, fruit of repetitive interactions developed in this medium.	"come back" and interact with those individuals of their respective original cultures which do not have any contact with the Internet, they make a transference of the new values acquired in this new context.	Kashima (1999) Kashima (2000a) Kashima (2000b) Kashima et al. (2000)

Table 3.1: Culture Theories and Approaches Used to Support our Theoretical Proposition (Continued)

Cultural theories and approaches used	Starting assumptions	Does it support our theoretical proposition?	How does Internet culture assimilation take place by individuals (consumers/Internet users)?	What is the process of values transference from the Internet culture to the original cultures?	Contributions related with each stream
Adaptive culture (extended) model	<ul style="list-style-type: none"> <li>- Individuals' values are dynamic in time.</li> <li>- Individuals tend to become similar due to the communication and interaction process developed through networks.</li> <li>- This trend could generate a set of shared values, so a dominant culture could emerge.</li> <li>- Individuals not only interact locally, but also globally thanks to the development of communication media.</li> </ul>	Yes	<ul style="list-style-type: none"> <li>- Due to the exchange processes developed on the Internet.</li> <li>- Individuals imitate better performances of others. It facilitates cultural convergence among groups while maintaining diversity.</li> </ul>	<p><b>Additional consideration</b> based on the Shibanaï et al. (2001) extended model:</p> <p>Due to the factor "global information feedback", individuals adapt to their cultures of origin the information acquired when interacting on the Internet.</p>	Axelrod (1997) Shibanaï et al. (2001)

our theoretical proposition; and a description of how the process of values transmission from the Internet to the original cultures takes place.

### **The Pan-Cultural Approach**

Cultural psychologists have usually used certain pan-cultural dimensions (for example individualism v collectivism; masculine v feminine, etc.) to explain cross-cultural differences among national cultures. The pan-cultural approach derives from an *etic* perspective of culture. The neologism “etic” was introduced by the linguistic anthropologist Kenneth Pike in the 1950s and it is associated to a perspective of cultural system. This system “relies upon the extrinsic concepts and categories that have meaning for scientific observers” (Lett, 1996). As such, this approach gives standard units and categories for a cross-cultural comparison. In other words, it reduces cultures to a restricted set of universal psychological dimensions.

However, despite the fact that the pan-cultural approach has been usually applied by many cultural studies (for example, those studies which used Hofstede’s cultural dimensions), it has also been recently criticised for several reasons:

1. Currently, due to globalisation, individuals are involved in complex social processes which fall outside the scope of universal cultural dichotomies (Hermans and Kempen, 1998) defended by this approach;
2. The pan-cultural approach is characterised by a static view of culture (Hong et al., 2000);
3. Consequently, it is not aware of the dynamic aspects of cultural influence (Hong and Chiu, 2001);
4. The pan-cultural approach does not consider that the influence of culture can be determined by the context of knowledge application (Hong and Chiu, 2001).

Most of these limitations increase the difficulty in using the pan-cultural approach to support the role that the Internet can play in fostering the cultural convergence among different primary cultures. In fact, it does not support a contextual knowledge application. That would mean that, for example, values of individuals’ primary cultures could not remain in a latent state when developing their communication processes on the Internet. This is an important constraint for individuals to generate a set of shared values on this medium. Moreover, as this approach does not view cultures as open dynamic systems, it presents some insufficiencies to explain how values acquired on the Internet can be transferred to their primary cultures.

### **The Dynamic Constructivist Approach**

This cultural approach comes from the social psychology research. It argues that the individual’s cultural factors do not remain static in time, as claimed by the pan-cultural approach (Hong et al., 2000). They are expected to influence the individual with different levels of intensity depending on the context in

which the behaviour occurs. Furthermore, cultural factors may even take on another form. This is because cultural theories are not static dispositions in time; rather, they are latent knowledge structures potentially able to influence individuals' self-cognitions in certain contexts (Hong and Chiu, 2001). The latter idea is explained because the dynamic constructivist approach considers the individual as potentially multicultural, i.e. certain individuals may receive and assimilate different cultures because of interactions with other individuals. This assimilation may take place in frameworks away from their primary culture, for which they have the capacity to change their "cultural prism". This happens with the aim of adapting them to a determined context or performance framework. In this respect, the Internet may be considered a new economic and social context with its own values, rules and forms of communication, which are assimilated by the users from different cultures in the interactive processes<sup>1</sup> developed in the medium.

In keeping with this argument, Schlegelmilch and Sinkovics (1998) sustain that the Internet has not only broken down the cultural and geographic barriers between countries but also contributed to the creation of new ones. In the same way, Johnston and Parminder (1999) consider the Internet as a "cultural region" with its own distinguishing marks, being made up of a mass of individuals who share a wide number of beliefs and values. Specifically, they apply the cultural dimensions defined by Hofstede (1980) to explain this medium's characteristics. The results showed that the cultural aspects of the virtual society are:

1. Low power distance;
2. Low uncertainty avoidance;
3. Collectivist becoming mixed;
4. Feminine becoming mixed.

In addition to this, they refer to the Internet as a virtual country in itself. Recent works (for example Howard et al., 2001; Johnston and Parminder, 1999) have highlighted that one of the effects that the use of the Internet produces in the user is the emergence of a feeling of belonging to a group or community, in this case the new virtual community.

Furthermore, Sperber (1996) and Lau et al. (2001) defend the idea that the communication developed in a certain community, especially one formed by members from different cultural environments, tends to 1) generate mutually acceptable values, language and a system of symbols and 2) consolidate a series of common ideas and beliefs with these community-shared values.

Therefore, if we take into account the assumptions of the acculturation process (see Hong et al., 2001), closely connected with the dynamic constructivist approach, the extent to which individuals (consumers) adapt themselves to the Internet culture will depend on the degree of cultural activation experienced. This, however, is directly related with the degree of cultural knowledge acquired on the Internet (the host culture).

Similarly, it is not unusual, considering the high number of connected users worldwide – slightly higher than 935 million (Computer Industry Almanac, 2004) – that some academics such as Orłowski (1997) point out the likelihood that the values acquired by the users in the “cyberspace culture” will be passed on to the general society. The contribution of Steidtmann (2000) follows this line of reasoning when he points out that the Internet may be considered as the maximum catalyst of what he calls the “Consumer Nation” (CN). This is related to the growing social mass that, independent of places of origin, shares a series of values (such as immediacy, technology and novelty) and characteristics (i.e. interactive, ubiquitous, decentralised, libertarian and open). Moreover, centring on the US market, it is noted that in the future, the CN will be dominated by two differentiated demographic segments: the generation of the “Baby Boomers” (currently around 50 years old) and the generation “Echo of Baby Boomers” (currently around 20 years old). This latter group of individuals truly has an interactive global community on the Internet, so we may expect a more than considerable impact to be made on their current cultural values.

### **The Adaptive Culture Model**

In line with some of the postulates of the dynamic approach, Axelrod (1997), in his adaptive culture model, establishes that members of a certain society will tend to bond together as regards to their values due to the communication and interaction processes developed through the local networks. Individuals tend to imitate their neighbours based on their better performance, i.e. if your neighbour has a better solution to a certain problem than you do, you try to be more like them. Hence, if we assume such a trend, Axelrod highlights that traits of individuals involved in such processes could converge and a dominant culture could emerge.

Shibanai et al. (2001) go further and claim that individuals not only interact with their closest fellow beings but also, thanks to the current state of development of communication media, with all the members of a growing global society. The authors extend Axelrod’s model including the “global information feedback” factor (or the function of the mass media), whereby it is considered that individuals adopt into their cultures of origin the information acquired when interacting with those communication media.

### **The Theory of Culture Hybridisation**

The adaptive culture model can also be complemented by the essentials of the theory of culture hybridisation. This theory was previously mentioned when adapting Thompson’s (2002) reasoning, whereby mixing of cultures produces a set of new hybrid cultural forms (see Alasuutari, 2000). In this sense, the key factor is the interactions taking place when individuals from different cultures carry out exchanges via the Internet (for example when browsing for information, shopping or just realising communication processes), especially those developed inside virtual communities. As the philosopher Portella (2000)



poses, “interaction is the hallmark of culture”. This interaction of cultures should necessarily lead to a hybridisation of them being represented by the emergence of a brand new group of shared values (in this case, the Internet culture) different from the originals. This, however, does not imply that the respective identities of the original cultures have to be lost.

### **The Tensor Product Model**

Kashima’s tensor product model (TPM) principles (see Kashima, 1999; Kashima, 2000a; Kashima 2000b; Kashima et al., 2000) can also be adapted to the digital context to look deeply into explaining how different cultures can evolve and converge thanks to the interactive communication processes carried out through the Internet. In essence, the TPM is a connectionist model of memory and learning which is used to describe the process of group impression formation and change. In this respect, it emphasises that such impressions are context-related and dynamically evolving over time (Kashima et al., 2000).

### CONCLUSIONS

It is clear that social studies have traditionally paid attention to the study of culture and its evolution. The understanding of this factor is very helpful in knowing how individuals behave. This research topic has not only been of interest to researchers belonging to the area of sociology, but to the social sciences in general including the areas of business sciences.

The focus of this paper has been to analyse, in theoretical terms, the consequences that the growing adoption and use of the Internet by individuals can produce over the evolution of their cultures of origin. To do that, we have made use of several cultural theories, approaches and culture-related models. Most of them have a subjacent and essential view of culture, i.e. its dynamic entity. We have posed that this view of culture is necessary to address fully this issue. However, we have also discussed the pan-cultural approach, characterised by its static view of cultures, with the aim of offering a more balanced stream of reasoning to the reader.

Specifically, we would like to emphasise two main contributions of this paper. Firstly, it demonstrates that the Internet is a relevant factor which may strongly foster the culture convergence among countries. Secondly, it shows how such convergence may take place, whereby a process of new values assimilation and transference on the Internet to the primary culture is suggested. In accordance with the above, individuals belonging to countries making regular use of the Internet will probably accelerate their cultural convergence, i.e. the continuous interactions carried out over this medium will aid both development and maintenance of shared values.

Moreover, the claim that the dissemination of the Internet throughout the world population will foster the transmission of values to the cultures of origin and that it will promote the convergence of cultures does not necessarily imply that cultural diversity is going to disappear. We rather expect that

there will be certain groups of countries – those with access to the Internet – that will achieve a higher degree of convergence than others.

Although it has been theoretically shown how the Internet contributes to the rapprochement of cultures we are still in an early phase of its worldwide adoption and development. Nevertheless, it is expected that future cultural convergence will be more plausible and intense for those countries that make higher and regular use of the Internet for developing their exchange processes.

- 1 As Hoffman and Novak (1996) maintain, the technical properties of the web allow it to develop an interactive bi-directional communicative process both between the parts or agents that develop the electronic exchange process, and between each one of the parts and the medium.

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# Enhancing Performance Capacity in the Workplace: A Reflection on the Significance of the Individual



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## INTRODUCTION

Ireland's move to a knowledge-based economy, backed by supportive government policies, has been acclaimed for its success and questioned for its sustainability. Green (2002) praises the National Development Plan 2002–2006, but identifies adverse implications in the 2003 budget. O'Higgins (2002) describes the beneficial role of foreign direct investment, but ponders the consequences of a global economic slowdown and worries about the competitiveness of indigenous Irish enterprise. These observations focus attention on macro-level considerations, raising important issues for policy consideration. Another and similarly important set of issues can be raised, and answered, at the micro level of analysis.

Although government can create a positive environment for economic development, this alone cannot guarantee success. Long-term, sustainable advancement depends on the creation of a management infrastructure capable of taking full advantage of emerging environmental opportunities. Favourable government policies and actions are best considered as “investments” in an economic environment whose eventual “returns” are uncertain and subject to risk. In order to achieve sustainable progress on national economic development goals, a compelling majority of Irish firms must be managed well enough to deliver constant high performance results. This requires the alignment of firm-level executive leadership priorities with the demands of organisation development for high performance in times of transition.

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Cassells (2003), in his role as Executive Director of the recently formed National Centre for Partnership and Performance (NCP), reflects on the challenge Ireland faces in the new economy. He points to the importance of achieving competitive advantage and continued economic growth through innovation and creative approaches to problem solving. Significantly, he notes also that “changing how we work at the ground level” is the often-neglected key to these performance capacities. A nation committed to success in a knowledge-based economy requires a management infrastructure that excels at mobilising, activating and supporting human talent. Although there are many points of attention for building this infrastructure, this paper specifically focuses at the “ground level” on developing leadership that fully values individuals as basic building blocks of organisational capacity. Using insights from the emerging literature on positive organisational behaviour, organisational citizenship behaviour and an individual performance framework, the paper discusses the key role employee ability, managerial and organisational support, and work effort play in enhancing individuals’ performance capacity in the workplace. Our premise here is that such performance capacity begins with people and is significantly affected by the ways in which they are managed at all levels of the enterprise. Only when leadership is fully infused with a positive mindset, one that respects and fully values people as irreplaceable human resources, will organisations be able to achieve and sustain competitive advantage in a changing business environment.

### **From Marginal Performance to Discretionary Behaviour: The Impact of Performance Expectations and Leadership**

In most organisations, individual performance levels can vary substantially across employees. Organisational citizenship behaviour (OCB) theory is useful for understanding why differences occur in the level of effort employees expend at work which, in turn, affects performance outcomes. Organ (1988: 4) defined OCB as “individual behaviour that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes effective functioning of the organization”. Bolino and Turnley (2003) contend that citizenship behaviours generally have two features: firstly, they are not technically required as part of the job description; secondly, they represent extra efforts employees give to their organisations to enable them to be successful. Work by Van Dyne and LePine (1998) on extra-role behaviour is related to the concept of OCB. More recently, it has been argued that OCB can lead to the creation of social capital. Intellectual capital theory posits that social capital is a desirable feature of organisational functioning and can lead to a competitive advantage (Bolino et al., 2002; Cohen and Prusak, 2001). The research to date on OCB has tended to explore the link between OCB and performance. It has generally been reported that OCB has a positive impact on performance outcomes such as customer service (Koys, 2001), organisational effectiveness (Lee, 1994) and teamwork and productivity (Podsakoff and MacKenzie, 1997). It could be argued then that lower levels of OCB reflect

lower or marginal individual performance and higher OCB is expected to result in individuals engaging in discretionary behaviour at work leading to higher performance.

One of the major risks to organisational performance capacity is under-utilisation of human capital. Research has found that a proportion of an organisation's workforce can be classified as marginal performers – employees who merely do enough in their jobs to get by and do not fully apply their capacity to their jobs (Schermerhorn et al., 1990). The potential impact of marginal performance on lost productivity in organisations is a significant issue under any circumstances. But the possibilities of marginal performance or worker disengagement is further complicated by the possibility that it can become somewhat institutionalised within organisational norms. The logic of the self-fulfilling prophecy and its counterparts the Pygmalion effect (Eden, 1990, 2000; Livingston, 1969) and the expectancy effect (Rosenthal, 1973) help explain how marginal performance survives in organisations and satisfactory underperformance can even become a norm. Low performance becomes self-reinforcing; the leader who accepts it actually encourages it. The evidence in the social sciences is that high expectations can make a significant performance difference (Rosenthal, 1973), with a prime example in the workplace being the extensive research on the motivational properties of task goals conducted by Locke and Lathan (1990).

When reflecting on global challenges in the 21st century, Daniell (2000: 1) describes satisfactory underperformance as “generating a continuing state of outcomes, which by objective assessment is not acceptable, but which has over time become accepted as the prevailing norm”. Whether this notion of satisfactory underperformance is applied to individuals, groups or organisations, the possibilities are equally disturbing. The possibility is that we get so used to marginal performance that it creeps into organisational norms and is no longer viewed either as a problem to be corrected or as a baseline from which continuous improvements can and should be made. Rather, underperformance becomes viewed as “not too bad” and even “quite okay”.

The concept of marginal performance is closely related to worker disengagement. In the US, a recent survey of 1,000 American workers (Crabtree, 2003; Gallup, 2001) explored the degree to which respondents were “actively disengaged” or “fundamentally disconnected” from their work. From the first quarter of 2000 to that of 2003, the percentage disengagement ranged from a low of 14 per cent to a high of 19 per cent. The disengaged workers in the Gallup surveys report that they are absent more often, less loyal and less productive in their work. Gallup estimated the annual cost of lost productivity to the US economy of these actively disengaged workers at some \$240–\$370 billion per year.

In an effort to explore what leads to higher individual performance at work, the concept of discretionary behaviour has gained increasing currency in the arena over the past decade (Appelbaum et al., 2000; Bailey, 1993; Purcell et al., 2003). Bailey (1993) argues that work reform efforts are aimed at

addressing the problem of HR under-utilisation and attempt to elicit discretionary behaviour. Discretionary behaviour refers to the human effort and imagination that workers exhibit above and beyond what is expected for acceptable performance. In other words, employees who use discretionary effort at work attempt to exhaust the potential contribution they make to the organisation (Appelbaum et al., 2000). Organisations that have policies, practices and management styles in place that elicit employee discretionary behaviour avoid the problems inherent in marginal performance efforts.

In Ireland, there is a dearth of research exploring worker attitudes, engagement and work effort. Hitchens et al. (1990) allege that the Irish put too little effort into their work and that employers expect too low a standard from their workers, resulting in an undesirable approach to work. However, as Black (1994) points out, this assertion remains to be tested empirically. Some related self-report statistics are available from the recent study of over 5,000 employees conducted by the ESRI, and commissioned by the NCPP, investigating the experiences and attitudes of Irish employees to the workplace and change. The report concludes that respondents generally reported high levels of job satisfaction, high levels of commitment to work in general and high levels of organisational commitment (O'Connell et al., 2004). While organisational commitment and discretionary behaviour are not meant to be used interchangeably here, research has shown that higher levels of organisational commitment can predict to some degree higher levels of effort and performance (Wright et al., 2003).

While the findings of the ESRI/NCPP study are positive, care must be taken when interpreting their meaning regarding discretionary effort in the Irish context. These are self-report measures and may be affected by score inflation due to social desirability error. Furthermore, only one item in the commitment scale explored the concept of discretionary behaviour asking respondents to rate agreement/disagreement with the statement, "I am willing to work harder than I have to in order to help this organisation succeed". Of the respondents, 80 per cent either agreed or strongly agreed with the statement. However, it is difficult to establish if these respondents *are currently* working harder than expected or if they are indicating that they *would* work harder if organisational success were in jeopardy. If their responses are indicating the latter, this means respondents are not currently working to their optimum and are not engaging in discretionary effort at work but that they acknowledge they have the potential to do so.

In a review of the factors that promote employee citizenship, Bolino and Turnley (2003) enumerate several variables which have a positive impact on OCB. These include job satisfaction, transformational and supportive leadership, interesting work and job involvement, and organisational support. The role of line managers in terms of their leadership abilities is central in a discussion of what leads employees to "go the extra mile".

The impact of front-line managers on employee performance has been well-established in the research. Purcell et al. (2003) report on the key role that



front-line managers/leaders play in determining employee performance. They report that it is the enactment of policies and practice that is most important and not merely their existence. They argue that “employees are more likely to go ‘beyond contract’ or that ‘extra mile’ for the organisation if managers behave in ways that stimulate and encourage positive attitudes” (2003: x). Furthermore, due to the longitudinal nature of their study, Purcell et al. (2003) report that organisations that had engaged in improving line management behaviour between Time 1 and Time 2 reported improved employee attitudes and performance.

A recent study conducted by Torc Consulting and Cranfield University School of Management of 74 senior foreign nationality managers’ perception of Irish managers reveals that “Irish managers work only moderately hard and efficiently” (Bennett and Brewster, 2003: 11). While this study has its limitations in terms of the lack of rationale regarding scale items used and their validity, it does point to some worrying perceptions of Irish managers by their foreign counterparts. The findings have two important implications for the discussion in this paper. Firstly, the report finds that Irish managers are not perceived to exert maximum effort in their jobs indicating only a marginal level of performance. Secondly, the behaviour of these managers not only affects their own performance but acts as a poor example to their subordinates. It is most likely that employees who perceive that their managers are not performing to their optimum capacity will not be motivated to expend maximum or discretionary effort either.

### **Building Individual Performance Capacity**

In order to maximise the productive potential of human capital in organisations, a basic building block is the individual contributor. One straightforward but insightful framework for building individual performance capacity is the equation: *Performance = Ability X Support X Effort* (Blumberg and Pringle, 1982; Schermerhorn, Gardner and Martin, 1990; Wall et al., 1992). This US model closely resembles recent research in the UK examining the impact of people management on organisational performance. In the UK study, Purcell et al. (2003) explored specifically how and why HR practices impact on performance. Their empirical study was developed from a framework which claims that performance is a function of *ability + motivation + opportunity* (AMO).

Viewed from a managerial perspective, these factors take the following meaning. *Ability* creates the capacity to perform through job-relevant knowledge, aptitudes and skills. *Support* establishes the opportunity to perform in an environment that provides people with what they need to best apply their capabilities in a job. Support equates with opportunity as operationalised by Purcell et al. (2003). *Effort* displays the willingness to perform and is similar to motivation. The multiplicative relationships among the three factors in this equation indicate that each must be maximised for an individual to achieve high performance results; the absence of any one will

greatly limit performance. In simple “o-1” logic, a “o” for any factor on the right side results in a “o” for performance; when all right-side factors have values of “1”, performance equals “1”.

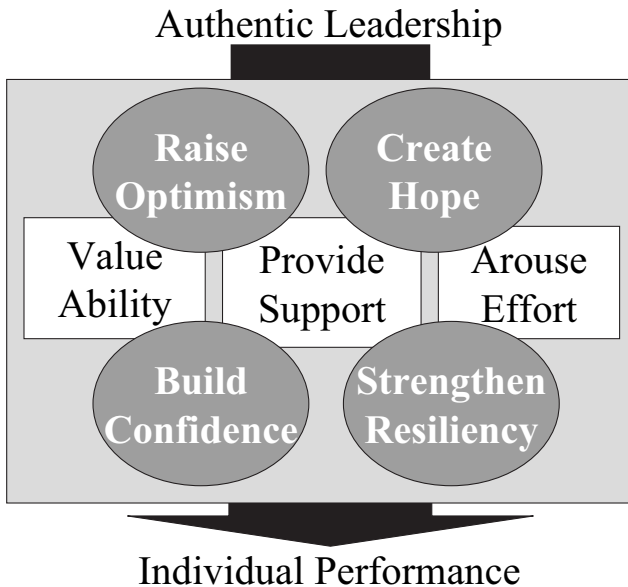
Although a highly simplified view of a far more complex reality, this equation is a reasonable and practical summary of research and conceptualisation on leadership and motivation as advanced by Lewin (1951), Vroom (1964), Porter and Lawler (1968), Mitchell (1984) and others historically, as well as more recently by Campbell (1999). Further, the logic enables a discussion of positive and practical research and leadership agendas fitting well with the theoretical perspectives referred to earlier. The basic question is how to invigorate leadership agendas that help organisations achieve success and high performance impact while avoiding the marginal performer and satisfactory underperformance situations described earlier.

Luthans (2002: 57) defines Positive Organisational Behaviour (POB) as “the study and application of positively oriented human resource strengths and psychological capacities that can be measured, developed and effectively managed for performance improvement in today’s workplace”. In grounding POB in leadership practice, he cautions against negative perspectives that concentrate management attention on people’s weaknesses. Luthans and Avolio (2003) advocate “authentic leadership” that fosters the POB states of *confidence*, *hope*, *optimism* and *resiliency* in people and organisations. Authentic leaders facilitate positive self-development; their intentions are transparent; their behaviour is consistent, linking espoused values and actions (Gardner and Schermerhorn, 2004). Rather than trying to manipulate or even logically persuade others, they achieve positive influence through integrity, trustworthiness and genuine concern for fully developing their associates. Figure 4.1 shows how the critical POB states link up with ability, support and effort as the foundations of individual performance.

### **Focus 1: Creating and Sustaining Ability**

Positive high performance leadership raises the upper limits on performance that can be expected from an individual or system under the most favourable conditions of work. The importance of ability as a performance factor reminds us that whenever a leader staffs a job or team with anything less than fully capable individuals, performance potential is reduced. Establishing high performance potential through human resource management is a basic leadership responsibility which results from building organisational capacity through the attraction, development and maintenance of a high quality workforce. Pfeffer and Veiga (1999) list selective hiring and extensive training as key practices of successful organisations. Drucker (1988) calls this the “hard work” of being a good leader – selecting the right people and then developing them into highly capable followers. Employee training and development play a key role in building organisational capacity by enhancing individuals’ knowledge, skills and abilities. However, a country’s educational infrastructure is an important precursor for skill development. The educational system in Ireland ranks high

**Figure 4.1: Authentic Leadership, POB States and Individual Performance**



in comparison with other countries. The high educational level and the relatively young workforce have been heralded by some as reasons for Ireland's recent unprecedented economic success. However, employee ability is not solely dependent on education qualification. Moreover, the extent to which employees are afforded training and development opportunities throughout their career is a key driver of enhanced performance. Winterton and Winterton (1997) found support for the proposition that investment in management development leads to more effective individual and business performance.

Training and development in Ireland has evolved from an essentially apprenticeship-based system driven by national schemes aimed at lowering unemployment levels in the 1970s to a more organisationally driven approach today (Heraty and Morley, 2000). However, as Heraty and Morley (1998) point out, the preoccupation in Ireland with schemes aimed at youth and long-term unemployment has resulted in diminishing the role of training for organisational improvement. It is only recently that organisations have begun to embrace human resource development in Ireland. Investment in human resource development in Ireland averages 3.85 per cent of payroll (Garavan and Heraty, 2001). This compares well with comparable figures in the US where expenditure as a percentage of payroll averaged 2.75 per cent for 2001 (ASTD, 2003).

O'Connell et al. (2004) report that 42 per cent of employees surveyed participated in training over the previous two years. In a recent CIPD

commissioned study, Garavan and Carberry (2003) report that over 70 per cent of the 742 employees surveyed indicated that they had participated in some form of training and development in the previous year. There is quite a difference between the two surveys regarding employee engagement in training and development. The difference is difficult to explain, since both studies used random sampling and included employees from diverse sectors, different organisational size and included both the public and private sector.

Garavan and Carberry (2003) report an important divergence between “privileged” and “less privileged” groups in terms of their training and development experience at work. The privileged group are characterised by better education, higher social class and are relatively young. The less privileged group tend to have lower educational achievements, occupy lower-level occupations, are older and female. The privileged group received significantly more training and development opportunities in comparison with the less privileged group. Employees working in small firms form an important cohort of the less privileged and are less likely to receive formal and on-the-job training. This trend is echoed in the study conducted by O’Connell et al. (2004).

These findings raise important issues for enhancing performance capability. Garavan and Carberry (2003) report that employees who experience more positive training and development experiences report higher levels of self-confidence regarding their learning ability than the less privileged group. This finding raises important considerations for the impact that training and development can have on employee self-confidence. While the report does not set out a causal relationship between training and development opportunity and self-confidence, the findings do indicate a relationship. The tenets of self-efficacy theory suggest that the extent to which individuals engage in certain activities is determined to some degree by their belief and self-assessment of their capabilities to perform the task (Bandura, 1982). This can create a vicious circle whereby employees do not engage in training and development due to low self-efficacy and thus do not get a chance to improve skills and abilities which should result in increased self-confidence and self-efficacy. This dilemma is discussed in greater detail below.

In a study of human resource development (HRD) professionals in Ireland, O’Brien and Thompson (1999) found that there is a strong emphasis on individual trainee needs focused on addressing current issues that exist with little focus on future development and strategic group/organisational issues. This is a worrying finding for the future of HRD practice since the champions of training and development, the HRD professionals themselves, appear to be acting in a more reactive rather than proactive way. O’Brien and Thompson (1999) highlight that limited importance is given to the intellectual competencies that underpin future practice and the business competencies required for organisational development. They go on to question how future HRD demands will be met if the HRD professionals are not focused on the future. The HRD profession, therefore, must examine how it operates and the

requirements of its own career development to adequately equip itself with the requisite intellectual, technical, cognitive and strategic skills to be effective in its own right and, perhaps more importantly, to lead and guide others effectively in the practice of HRD.

### **Focus 2: Building Support**

Support in organisations takes many shapes and forms including managerial, co-worker and organisational support. Facticeau et al. (1998) define organisational support as the extent to which employees perceive that they are valued and cared about by the organisation and that the organisation cares about their development. Eisenberger et al. (1986) highlight that perceived organisational support is influenced by various aspects of an employee's treatment by the organisation and in turn influences the employee's interpretation of organisational motives underlying that treatment. They found that employees in an organisation form "global beliefs" concerning the extent to which the organisation values their contributions and cares about their well-being. A study by Van Yperen and Hagedoorn (2003) found intrinsic motivation related positively to the presence of social support, or "helpful social interaction" with supervisors and co-workers, in the job environment. Their suggestion is that managers should help people come to know and access the support systems available in the organisation. They conclude that enhancing job social support in particular can reduce strain and increase motivation, even in highly demanding jobs.

Lynch, Eisenberger and Armeli (1999) suggest that perceived organisational support serves to increase the expectation of material resources (for example pay, fringe benefits) and symbolic resources (for example praise, approval) resulting from increased work effort. This increased work effort would include participation in training and development on the part of the employee, as well as increased effort on the job. Research has generally concluded that perceived support for development within the organisation is positively related to *participation* in development activities (Noe and Wilk, 1993) and perceived *effectiveness* of these training and development endeavours (Jones and Whitmore, 1995). Organisations need to ensure that managers and peers are supportive of development activity and that the organisation alleviates working conditions that prove to be punitive to employees participating in training and development.

The extent to which employees feel the environment allows them to make changes following training and development is also an important aspect of support. Maurer and Tarulli (1996) found that there are a set of contextual variables that facilitate skill improvement and these include:

- Supportive co-workers who encourage skill development;
- Dimension-relevant development resources including workshops, skill-building seminars, job assignments and other learning activities;
- Freedom from competing time demands such that employees are afforded the opportunity to participate in development activities without such participation adding pressure to their workload.

There is very little research available on supervisor or organisational support in the Irish context. Furthermore, there is limited analysis of management styles and attitudes in Ireland both from the perspective of incumbent managers and their subordinates. One study exploring acceptance of multi-rater management development feedback reports that perceptions of organisational support were a significant predictor of positive attitude towards the system (McCarthy and Garavan, 2004). This indicates that supervisor and organisational support may be an important factor affecting other dimensions of employee behaviour in the Irish context. It is argued here that support is a necessary condition of the work environment which has the ability to enhance an employee's performance capacity. One manner in which this can be operationalised in a meaningful way is to devolve more training and development responsibility to supervisors. However, research in Ireland has found that line management autonomy in training and development decisions is less extensive than desired (Heraty and Morley, 2000). If line managers are given the adequate power to make training and development decisions, this can be a form of employee support aimed at enhancing individual performance.

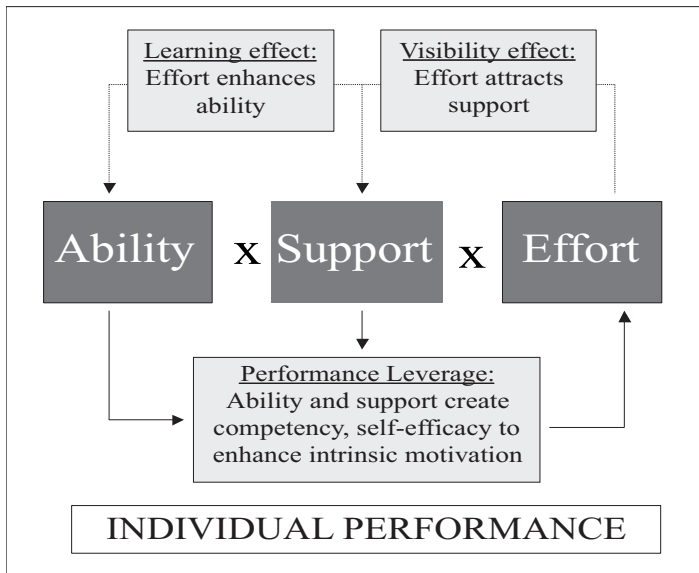
### **Focus 3: Effort**

Employee motivation has received much attention in the management literature to date investigating how it impacts on, for example, performance improvement, reward management and employee retention (Deci and Ryan, 2000; DeVoe and Iyengar, 2004; Herzberg, 2003; Houkes et al., 2003). Motivation represents "those psychological processes that cause the arousal, direction, and persistence of voluntary actions that are goal oriented" (Mitchell, 1982: 81). Motivation as defined by Robbins (1993: 212) is the "willingness to exert high levels of effort toward organisational goals, conditioned by the effort's ability to satisfy some individual need". As discussed in the section on marginal performance and discretionary behaviour, effective management involves getting employees to work to their maximum capacity to perform more effectively.

A number of industrial and organisational psychology constructs are relevant to the discussion of employee effort. Recent research on behaviour at work has focused attention on organisational commitment, which refers to employee identification with organisational goals, willingness to exert effort on behalf of the organisation and interest in remaining with the organisation. Research has found that organisational commitment and work effort are related (Moon, 2000). Social exchange theory suggests that employees' commitment to the organisation is generally significantly related to their perceptions of the employer's commitment to them as they reciprocate their perceptions of the organisation's actions in their own attitudes and behaviour (Shore and Tetrick, 1991; Whitener, 2001). As mentioned earlier, due to a lack of research in this area, we are unsure of how committed employees are to their organisations in the Irish context and, furthermore, it is difficult to assess motivation and effort levels.

Positive high performance leadership takes full advantage of leverage gained by routinely doing things whose initial positive impact on individual performance continues to grow and reinforce itself over time. As shown in Figure 4.2, leaders who are disciplined enough to commit attention and resources to the ability and support factors can also gain performance leverage through the effort factor. They influence it indirectly by activating the powers of intrinsic motivation driven by felt competency (White, 1959) and self-efficacy (Bandura, 1982). Simply put, employees who feel competent at a task can be expected to work hard at it; people who believe they can achieve mastery over a situation can be expected to attempt it. It is suggested here that effort can result from employees having positive experiences of both ability/skill development and support.

**Figure 4.2: Individual Performance Foundations**



### Implications for Policy, Practice and Research

Ireland's competitiveness has consistently fallen since being ranked fifth among the smaller nations in the world in 2000 to being ranked eleventh in 2003 (IMD World Competitiveness Yearbook, 2003). It might be an opportune time to refocus on micro-level factors that have the potential to impact positively on Ireland's competitiveness. This paper has reflected on the interaction and interplay of employee ability, knowledge and skills, managerial and organisational support, and effort for enhancing employee performance capacity. The arguments presented in this paper do not necessarily mean that managers should be making employees work "harder"; rather, the paper argues that management must ensure employees are working to their full potential and

capacity. It is believed that this can be more effectively achieved by management practices that build ability and create an environment of managerial, co-worker and organisational support. As a result of the review in this paper, a number of implications for policy, research and practice have emerged.

The importance of avoiding marginal performance and ensuring employees perform to their full capacity is a central concern of effective leadership and management practice. The extent to which employees are engaging in discretionary behaviour and working to their full capacity in the Irish context has received little research scrutiny. Organisations must strive to ensure employees are exhausting their potential contribution at work. The loss of productivity where employees are expending less than optimal effort becomes quite problematic when aggregated across all employees in an organisation.

However, apart from looking at employees, managerial effort is equally, if not more, important for improving performance. Bennett and Brewster (2003) argue that Ireland has become complacent due to its recent successes and warns of the importance of Irish managers becoming more self-critical. They point specifically to the problem of employee educational skills and abilities not being effectively applied at present in Irish workplaces and state that “most of the key deficiencies which affect the competitiveness of Irish management can be significantly improved by focused training initiatives which build on these strengths to create truly sustainable competitive advantage” (2003: 20–1). While their assertion that effective management training will deliver sustainable competitive advantage is somewhat overly ambitious and simplistic, management skill and competence is, nonetheless, a critical issue which needs more attention in competitiveness debates. Leadership in Irish firms must be proactive and accepting of its responsibilities to find internal pathways for performance gains, even in the face of external hardships. Also, leadership must stay focused on high performance fundamentals with the capacity to deliver long-term gains, even in the face of short-term stresses and strains. One of the key priorities in these leadership agendas must be a commitment to excellence that fully values human capital and taps into the pool of talents in the Irish workforce.

The discrimination of training and development opportunity highlighted by Garavan and Carberry (2003) and O’Connell et al. (2004) needs to be rebalanced. At present, it appears that those most in need of career development opportunities are those who do not have access to training and development. The current situation whereby employees who are older, with lower education attainment, working in lower-level occupations in small firms are not receiving the same training and development investment as their more “privileged” comparators is problematic. It might be proposed that if these less privileged workers are not getting the support they need in terms of improving their skill set, and if this is a predictor of performance and effort expended at work, then the issue of marginal performance is perpetuated as a result of poor training and development provision. This area needs to be examined empiri-



cally to shed light on the relationship between self-efficacy, training and development participation, and performance level. Policy makers might consider the implications of this discussion for any nation-wide investments in management development. For example, in addition to the four aims presently stated for the Irish government's Research, Technological Development and Innovation (RTDI) strategy in the National Development Plan 2000–2006, another objective might be worthy of addition which is aimed at supporting a leadership development initiative targeted at all levels of management in the private and public sectors. This initiative would ideally be focused on what Cassells (2003) would call the "ground level", having a clear and verifiable performance purpose, and addressing very specifically the practicalities, not just the possibilities, of high performance leadership.

Much more needs to be done on the research front to inform the topics raised in this discussion. It would be useful to explore organisational citizenship behaviour among Irish employees and investigate its antecedents and outcomes. By understanding what facilitates organisational citizenship behaviour, organisations and managers would be better equipped to develop policies and practices which should lead to greater employee discretionary behaviour at work. Moreover, organisations and managers may be more favourably disposed to the issues discussed here if there were clear evidence of their benefits in the Irish setting. The concepts of performance ceilings, performance leverage and the associated learning and visibility effects presented in Figure 4.2 need empirical attention and the contingencies associated with positive self-fulfilling prophecies are worth additional inquiry. Only solid research can tell if, and to what extent, Ireland's transition to a knowledge economy is being slowed by insufficient or under-utilised individual performance capacity in the nation's businesses and social institutions. In the meantime, there seems little to lose and a lot to be gained potentially by infusing leadership at the enterprise level with the positive approach suggested here.

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# Evaluating Relationship Quality in a Business-to-Business Context



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## INTRODUCTION

In recent years, the well-established transactional view of marketing has been increasingly questioned in the academic literature. As competition between businesses becomes more demanding and perceived product differentiators become less apparent, the relationship between a company and its customer takes on increased significance. Previous research has provided compelling evidence to suggest that the main reason why businesses lose the loyalty of their customers is that they simply do not pay sufficient attention to their relationships with these customers (Gummesson, 1997). It therefore seems logical to suggest that the most sustainable levels of customer loyalty are achieved through the development and maintenance of high-quality relationships with customers.

However, while the link between customer loyalty and long-term profitability is well established and while many firms have readily accepted the validity of the concept of customer retention, the principle of establishing customer relationships has been less successfully applied. This is in part due to an element of confusion over the concept of relationship marketing and also due to a lack of understanding of what constitutes a relationship between a customer and a company. The result is that many firms are beginning to understand that customer retention is fundamentally a good concept and that building a relationship with a customer is a good way to retain that customer for the long term. The problem that many companies may be encountering is that they have little insight into what constitutes a positive relationship from the customer's perspective and what it will take for the customer to feel that they have a high-quality relationship with a firm. Hence we feel that the

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relational orientation to marketing calls for a more complete understanding of relationship quality.

By investigating the relationship between buyers and suppliers in the software industry, the aim of this research is to contribute further to a greater understanding of relationship quality in business markets.

Accordingly, this paper specifically focuses on three research questions:

1. What are the key characteristics of a high-quality business relationship?
2. Do buyers and suppliers agree on what constitutes a high-quality relationship?
3. What factors influence perceptions of relationship quality?

The remainder of the paper is structured as follows: Firstly, we examine the literature pertaining to business-to-business relationships and to relationship quality in business markets. Secondly, we report on our research findings in the software industry. We conclude with a discussion of the theoretical and managerial implications and offer recommendations for further research.

#### THEORETICAL FRAMEWORKS

Theory development into the governance of buyer-seller relationships has built extensively on well-established contributions from the economic, social and behavioural sciences. Governance, as defined by Heide (1994), is a multi-dimensional phenomenon, encompassing the initiation, termination and ongoing relationship maintenance between a set of parties. Researchers have adopted different theoretical frameworks in order to explain relationship governance, including transaction cost theory, social exchange theory and resource-dependence theory (Robicheaux and Coleman, 1994). These frameworks have all contributed to the modelling of buyer-supplier relationships both in their identification of the underlying dimensions of relationships (such as trust, power/dependence and adaptation) and their selection of appropriate units of analysis (such as firm, dyad or network). There is also clear evidence of what Robicheaux and Coleman label “paradigm convergence” (1994: 40) both in terms of further theory building in relationship marketing.

Relationship quality captures the essence of relationship marketing. According to Ford (1980) quality relationships between buyers and sellers bind members to each other in such a way that they are able to reap benefits beyond the mere exchange of goods. This leads to long-term and more stable relationships in which both members mutually benefit. However, while numerous characteristics of relationship quality are proposed in the literature, there does not seem to be any real consensus regarding the conceptualisation of relationship quality. The following sections examine the dimensions of relationship quality most commonly cited in the literature. These are commitment, cooperation, trust, communication, adaptation and culture.

## **Commitment**

Commitment is widely recognised as being a key determinant of high-quality relationships. Relationships are built gradually in the social exchange process through which the parties come to trust each other. As a consequence of interaction over time, commitment bonds of various kinds are formed by the parties (Hakansson and Johanson, 1992; Moorman et al., 1993).

In the marketing literature, commitment is seen as an essential ingredient for successful long-term relationships. It has been identified as the variable that distinguishes between relationships that break down and those that continue and implies importance of the relationship to the parties and a desire to continue the relationship in the future.

Gabarino and Johnson (1999: 73) define commitment as “customer psychological attachment, loyalty, concern for future welfare, identification and pride in being associated with the organisation”. Dwyer et al. (1987) further define commitment as an implicit or an explicit pledge of relational continuity between exchange partners. These authors argue that commitment implies a willingness to make short-term sacrifices to realise longer-term benefits. Indeed, Gundlach et al. (1995) argue that commitment is closely related to mutuality, loyalty and the forsaking of alternatives, variables that are at the core of the meaning of relationalism. This is in sharp contrast to the economic model of rationality and discrete transactions.

Commitment can thus be seen to be indicative of the most advanced stage of the relationship. At this point both parties are actively involved in maintaining the relationship. Once commitment is reached the emphasis moves to one of cooperation and long-term maintenance of the relationship.

## **Cooperation**

Cooperation refers to the extent to which the work of buyer–seller relationships is coordinated (Metcalf et al., 1992). Anderson and Narus (1990) find cooperation to be a causal antecedent of trust. However, an alternative view is that trust generates a greater willingness to cooperate (Hunt and Morgan, 1994).

Campbell (1985) found that buyers and sellers who relate to one another in a cooperative mode intentionally seek common goals. In addition, it has been shown that members of buying and selling firms are often willing to engage in cooperative behaviour in order to maintain a relationship that is viewed as being mutually beneficial (Metcalf et al., 1992).

Cooperation is often seen as a product of the exchange episodes that take place between buyers and sellers (Hakansson, 1982). As representatives of the buying and selling organisations interact over time, agreement is reached as to the appropriate role and scope of both parties. However, cooperation is not just a product but is also a form of behaviour.

## **Trust**

Trust is such a critical element in determining the quality of a relationship that Spekman and Strauss (1986) claim it is the cornerstone of strategic

partnership. The importance of trust pervades the most diverse situations from personal relations to economic development. Indeed, it is constantly alluded to as a fundamental ingredient or lubricant, unavoidable in social interaction. However, while the importance of trust is often acknowledged in passing in business relations, it tends to be relegated to one of those intractable dimensions.

Gambetta has defined trust as a particular level of the subjective probability with which an agent assesses that another agent or group of agents will perform a particular action, both before he can monitor such action (or independently of his capacity ever to be able to monitor it) and in a context in which it affects his own action (Gambetta, 1988). The central argument of this definition is that parties must be vulnerable for trust to become operational. In other words, decision outcomes must be uncertain and important to the trusting party (Moorman et al., 1992). The vulnerability is created by the high degree of interdependence usually found in close long-term relationships (Gundlach and Cadotte, 1994). This vulnerability makes way for trust to become operational.

Trust has also been strongly suggested as having an important role in facilitating closer buyer–supplier relationships by reducing the tendency of firms to take advantage of each other (Zaheer et al., 1998). Trust reduces the perception of risk association with potential opportunistic behaviour and increases the confidence that short-term inequities will be resolved over the long period.

### **Communication**

Anderson and Narus (1989: 44) define communication in an industrial context as being “the formal as well as informal sharing of meaningful and timely information between firms”. Leek et al. (1999) confirm this by stating that open and trustworthy communication are essential to positive interactions; breakdown in relationships can be caused by a lack of understanding and knowledge of each partner’s business and market.

Hunt and Morgan (1994) observe that willingness to share timely, meaningful information is important when choosing a partner, since communication is an important part of resolving eventual disagreements. It is also vital to developing trust, commitment and understanding between parties.

### **Adaptation**

When buyers and suppliers establish and develop long-term relationships with each other and where the volume of business in such relationships accounts for a considerable share of the supplier’s sales and/or the customer’s needs, there is reason to expect that significant partner-specific adaptation occurs (Heide and John, 1988). Thus it can be expected that that suppliers adapt to the needs of specific important customers and that customers adapt to the capabilities of specific suppliers (Hallen et al., 1991). Such adaptation frequently occurs by way of investing in transaction specific assets such as product/process technology and human resources (Hakansson, 1982).



Adaptations are important for a number of reasons. Firstly, they can represent considerable investments by one or both parties. Secondly, they may be of critical importance for the conduct of business. Thirdly, the investments frequently cannot be transferred to other buyer-supplier relationships. Fourthly, the adaptations may have significant consequences for the long-term competitiveness of firms: adapting to one relationship may enhance the competencies and attractiveness of a particular supplier/customer (Hakansson, 1982).

#### RESEARCH DESIGN

A single representative case perspective using a leading multinational corporation in the software industry was adopted for the purposes of this research for several reasons (for reasons of confidentiality the name of the company cannot be disclosed). Firstly, the logic of selecting case studies in a case-based research strategy is mainly determined by the body of ideas or theory with which the researcher is concerned. Research should always begin by examining theoretical concerns and move from there to elaborating a logic of case selection (Roche, 1997). This is in line with Stake (1994), when he argues that the role of a case study is to provide insight into an issue or refinements of a theory. Examining the literature pertaining to business-to-business relationships and to relationship quality in business markets, it is clear that the theory in the area posits reasonably clear and unambiguous theoretical generalisations. In such circumstances the logic of a critical case strategy might meet all the conditions for testing the theory. Roche (1997) argues that a critical case design strategy involves the selection of one case with a view to providing a compelling test of a well-known theory. Given the nature of the research question, to gain a deeper understanding of relationship quality in business markets the selection of a critical case design strategy would seem the optimum research approach. In this study, the case can be seen as doing both. It provides insight into the issues of relationship quality and customer loyalty by reflecting on the theoretical concepts in empirical reality. Finally, the information concerning perceptions of relationship quality is a complex area and requires an understanding of the constructs used by both the supplier and customer in their evaluation of relationship quality. It was felt that such perceptions would not be captured in other research methods, such as questionnaires, for example.

As good access and multiple sources of evidence are deemed critical to a case study, it was decided by the researcher to concentrate efforts on gaining such access and sources of evidence (Yin, 1994). The case study combined several types of data: interviews of individuals involved in the relationship, archival data, such as annual reports, records of company and supplier information and correspondence, strategic business plans as well as industry statistics and information, articles in professional publications and interviews and informal discussions with various company employees. In addition, taking into account both the organisational and customer perspectives makes it easier to focus on the relationship itself and gives a more balanced impression of the perceptions of relationship quality. Consequently, in order to achieve a dyadic

approach, it is essential to examine business relationships from both perspectives. It was decided that a selection of the company's key account managers would represent the supplier's perspective of their business relationships. In-depth interviews were hence conducted with four key account managers. In order to facilitate a broader and more international scope of the research, it was decided to interview an Irish account manager, a Dutch account manager, a South African account manager and a German account manager. Interviews were also conducted with the respective people in selected customer companies with whom the afore-mentioned account managers had most interactions. These were felt to be most representative of the customer's perspective of the relationship. The customer companies consisted of two Irish customers, one Dutch customer, one German customer and one South African customer. For reasons of confidentiality, the names of these companies are not disclosed.

In order to provide a balanced account of the supplier company's different relationships with its customers and to broaden the scope of the study further, it was decided to be preferable to interview customers with a background in different industries. Therefore the customer companies chosen were from the high-tech, transportation, telecommunications, industrial manufacturing and pharmaceutical industries.

#### FINDINGS

We arrange our findings in the context of our research questions, namely:

1. What are the key characteristics of a high-quality business relationship?
2. Do buyers and suppliers agree on what constitutes a high-quality relationship?

What factors influence perceptions of relationship quality?

#### **Key Characteristics of a High-Quality Relationship**

The following section outlines the characteristics mentioned by respondents in this research when asked which components they felt were crucial to a high-quality business relationship.

Characteristics mentioned most frequently by suppliers included the following:

- Flexibility
- Trust
- Technical information readily available
- Personalisation of service
- Good value for money
- Effective resolving of problems
- Speed of technical support
- Good humour

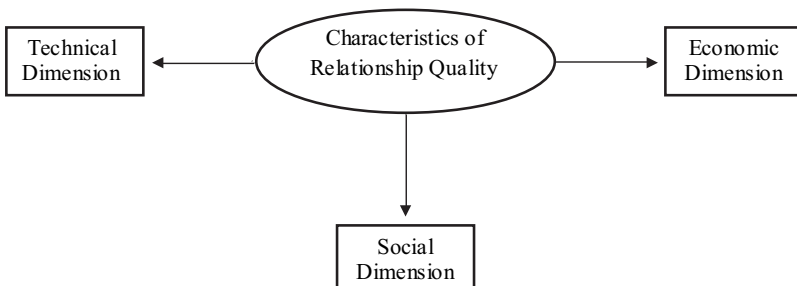
- Long-term commitment
- Willingness to help
- Elimination of frustration
- Honesty
- Two-way offering of advice and recommendations
- Knowledgeable and experienced staff
- Delivering according to promise
- Constant communication
- Professionalism
- Understanding of respective party's business
- High-quality product
- Having a personal relationship with the other party
- Special benefits and discounts.

From this preliminary enunciation of the components of a high-quality relationship, we can distinguish between three “categories” of characteristics. Firstly, several items refer to the social dimension of the relationship. These items describe the characteristics of the people involved in the human interaction between the two parties in the relationship such as trust, professionalism, understanding, honesty and personalisation of service. Secondly, the technical dimension of the relationship can be described as involving the technical issues related to the service or the product. These characteristics consist of, for example, the availability of technical information, the speed of technical support and the level of knowledge and experience of employees. Finally, the economic dimension refers to how each actor perceives the economic issues related to their interactions with the other actor in the business relationship. This category incorporates characteristics such as profitability, effectiveness and efficiency.

### **Comparison of Buyers' and Suppliers' Perceptions of Relationship Quality**

In order to evaluate comparatively buyers' and suppliers' perceptions of the key characteristics of a high-quality relationship, it is necessary to examine each party's perspective under the three categories.

**Figure 5.1: Characteristics of Relationship Quality**



### **Social Dimension**

From the buyers' perspective, the social dimension of the business relationship was not seen to be paramount to building a high-quality relationship. In fact the only social characteristic which was referred to consistently by all customer respondents was that of *trust*. The common consensus seemed to be that if there was no trust, there could be no relationship. However, the trust of customers was primarily captured by their confidence in the quality of the product and the reliability of the support teams in providing the necessary after sales service. In this case, the quality of service for customers is ultimately determined by the degree of efficiency, knowledge and expertise with which any post sales service is offered to the customers. Customers need to trust that the supplier's promise will match the technical deliverable. Failure to do so will result in a reduction of trust and satisfaction with the supplier and negative referral of their products and services. This was seen to be the case in several of the relationships examined between the supplier company and their customers.

Contrary to this, from the supplier's perspective, the most common characteristics mentioned throughout referred to the social dimension of the relationship. More specifically, the characteristics of honesty, trust, building a personal relationship and understanding of the customer's needs and problems were generally viewed as being central to the building and maintenance of high-quality business relationships.

Honesty, particularly on the part of the supplier, was a characteristic that was undoubtedly felt to be critical in a relationship with a customer. Many of the account managers acknowledge the fact that a customer needs to be able to believe that their supplier is being honest with them. They make a strong link between the concept of honesty and trust. The general consensus is that if the supplier is honest with their customers, a bond of trust will automatically form between the two parties. In addition, the account managers all indicated that the existence of a personal relationship with their customers substantially increases the propensity for successful relationships. The most frequently cited reason was that when there was a personable, friendly element to it the relationship tended to be calmer and stress free.

Understanding of a customer's needs and problems also emerged from the suppliers' perspective as being the crux of a solid relationship. Several account managers refer to how the supplier values a good relationship with their customer as much as the customer values a good relationship with them. It is therefore necessary for both parties to work together to reach a mutual understanding of the objectives of the relationship.

### **Technical Dimension**

From the buyer's perspective, there was a strong emphasis on the technical dimension of the relationship. In fact the characteristics most often mentioned by customer respondents relate to the provision of timely and relevant information, the professionalism of the technical support service and the knowledge and expertise of technical support staff.

The majority of customers acknowledge that the timely provision of relevant information is an essential characteristic of a high-quality relationship. It is felt that if a customer requests specific information regarding a technical or other issue, failure to facilitate the request promptly could result in frustration and impatience on behalf of the customer. Conversely, the immediate transmission of the required information would be greatly appreciated and would lead to higher customer satisfaction and hence a greater perception of the quality of the relationship.

In addition, the professionalism of technical support service is also cited as having a major influence on customers' perceptions of the quality of their business relationships. In many cases, the knowledge and expertise of the technical support staff are particularly acknowledged as being key contributors to the effectiveness of the support service and as such, key sources of satisfaction for the customer.

In sharp contrast, there was a distinct lack of importance attributed to the technical dimension of the business relationship from the supplier company's perspective. The fact that this aspect of the relationship is not viewed by suppliers as being key to the building of a high-quality relationship may be explained by the fact that many account managers consider that technical errors have simply got to be expected and accepted when buying and selling software. Such technical hitches are unavoidable and therefore, according to suppliers, technical efficiency cannot be distinguished as being necessary or vital for the development of a high-quality relationship in the software industry.

### **Economic Dimension**

According to the majority of buyers, a key element of a high-quality relationship is that the supplier fulfils the promises made during negotiation or before the close of the deal. This refers to both the quality of the product and the level of service quality available. Several customers point to the fact that should the quality of the supplier's products and services satisfy the customer's expectations, the likelihood is that trust and confidence will develop in the supplier's ability to meet their needs. However, it is interesting to note that customer representatives made little reference to factors relating to the monetary value of goods or services received.

From the supplier's perspective, factors such as special privileges or fair prices, fulfilment of customer expectations and good value for money were briefly alluded to during the course of some interviews. However, again it must be noted that there was a considerable lack of emphasis placed on the importance of the economic dimension of the relationship as being critical to high-quality relationships.

It would thus appear that although buyers and suppliers agree on several characteristics of a high-quality relationship, buyers generally seem to attribute more significance to the technical dimension of the relationship while suppliers place more importance on the social dimension. This may lead to a significant gap between a customer's expectations of a supplier and their satisfaction

with the quality of the product or service actually delivered. The question arises as to why such disparity exists between the perceptions of suppliers and their customers regarding the characteristics necessary for a high-quality relationship.

In order to gain an insight into the differentiation between the two parties regarding their views on relationship quality, respondents were asked what they felt were the goals of their business relationship. On this point, there was a definite divergence of opinion. This serves to shed considerable light on the overall difference in the perceptions of buyers and suppliers with respect to the components of relationship quality.

For each of the suppliers, from the beginning of the relationship, the goal of the relationship is to increase the profit margin for the supplier company. Several account managers remarked on how the underlying motive for building high-quality relationships was essentially to “make money”. Therefore any attempt to improve the quality of the relationship was driven by a profit-seeking motive. However, from the customer’s perspective, this is certainly not the case. While customers claim to be prepared to pay high prices for superior quality products, they are not prepared to pay extortionately high prices. Their aim is to reduce the expenditure of their respective companies as much as possible.

It is therefore evident that both parties have entirely opposing views of what the party’s objectives are. Both parties, however, agree that these diverging goals are characteristic of any buyer/supplier relationship. This simple but obvious differentiating factor may offer some explanation as to why buyers and suppliers look at the quality of their business relationships from different angles and hence why they attribute different degrees of importance to the various dimensions of their relationships. Management is therefore encouraged to communicate frequently with their customers in order to gauge what characteristics they value in a relationship and to focus on enhancing these in order to develop a relationship of superior quality.

### **Factors Influencing Perceptions of Relationship Quality**

Two key factors emerged in our research that had a significant impact on how relationship quality is perceived in a business-to-business context. *Culture* was found to exert considerable influence on buyers’ and suppliers’ perceptions of the characteristics necessary for a high-quality relationship while the *prior experiences* of customers strongly influences their evaluation of the quality of their business relationships.

#### **Culture**

Culture is cited as being a crucial element in international business due to the impact of differences in national characteristics in conjunction with both physical and language differences. All of these factors are particularly pertinent in the context of this research, whereby the supplier is in communication with customer companies in Germany, the Netherlands and South Africa. Each of

these companies is therefore operating within different cultural contexts. As such, it is interesting to examine the different responses from each nationality of respondents partaking in this case study.

From a German perspective, the technical dimension of the relationship is most important. The predominant characteristics of a high-quality relationship are the quality of the product, the knowledge, expertise and speed of technical support, efficiency of problem solving and lack of time wasting.

The Irish respondents place more importance on the social dimensions of the relationship. Good humour, trust, honesty, personal rapport, communication and flexibility were most frequently cited as being the basis for a high-quality relationship. It is also important to note that the interviews conducted with both the Irish account manager and the two Irish customer companies were of the longest duration. This is illustrative of these respondents' willingness to communicate and their openness to discuss their business relationships.

The Dutch respondents display a tendency to value the economic dimension of a business relationship. Timely provision of information, fulfilment of customers' expectations, special benefits or privileges, efficiency of administration processes, fair price and reputation of supplier were greatly emphasised by the Dutch respondents. It is interesting to highlight that the Dutch interviewees make most reference to the fact that they would view the relationship as being predominantly a sales or a business relationship and made little reference to the personal aspect of the relationship.

Finally, the South African respondents appear to have a more balanced view of the importance of each of the dimensions of a relationship. However, the *social dimension* is marginally preferred overall. Indeed, it is interesting to note that, in general, South African respondents displayed a tendency to prefer face-to-face communication and conceded that negotiations or discussions with customers are usually more successful if they are conducted face to face.

It is therefore evident that there exists a strong cultural influence on how relationship quality is perceived in business markets. Management should hence be aware of the different perceptions of international customers with regards to relationship quality and to accommodate for these.

### **Prior Experience**

Prior experiences are defined as an accumulation of an individual's experiences and knowledge of others' experiences (Anderson and Narus, 1990). In the context of this research, the past experience of many of the customer companies was used as a basis for their future expectations of the supplier company. In the case where customers have positive past experiences with the supplier, they approached their relationship with them optimistically and with high expectations for the development of a high-quality relationship. Hence, evaluation of the actual quality of their relationship is based on high expectations. It can therefore be deduced that, assuming the customer is satisfied with the outcome of the relationship, they will relate their positive experience with their supplier to potential future customers.

Conversely, if the customer's prior experience with the supplier company is negative, they will be inclined to evaluate the current and future quality of their relationships negatively. Despite both Irish customers claiming to be currently very satisfied with the quality of the products and services provided by the supplier company, they would nonetheless rate the quality of their relationship as being poor on the basis of their past negative experiences with them. It is clear that negative past experiences are also shared with prospective customers in the future, thus diminishing the attraction of new customers to the supplier company.

Several respondents refer to the history of their relationship with the supplier company as having a profound impact on how they currently perceive the quality of their relationship. It was often highlighted how the supplier may not have been so customer focused in the past and that this reputation has had an enormous impact on how both current and future customers perceive the supplier company. Comments were also made referring to the fact that customers who have been with the supplier company for a number of years and who have had a poor experience with them do not have confidence in the supplier company's current ability to be customer focused.

From the above evidence, it can therefore be deducted that all prior experiences that a customer encounters with a supplier are remembered. These will have an enduring impact on how a customer evaluates their relationship with the supplier company. In addition, all experiences, be they negative or positive, are relayed to other customers of the supplier and also to possible future customers. In this regard, it is essential that management ensures that every experience a customer has with the supplier company is a pleasant and satisfactory one. This will guarantee that the customer evaluates their relationship in a positive light, thus enhancing their satisfaction and loyalty with the supplier company. It will also serve to attract new potential customers through positive referral from currently satisfied customers.

#### DISCUSSION

One of the reasons why businesses lose the loyalty of their customers is that they simply do not care enough about their relationships with customers. The quality of the product and service has taken precedence over a focus on relationship quality. While important, the achievement of excellence in product and service quality delivery is only part of the story. As competition between businesses becomes more demanding and perceived product differentiators become less apparent, the relationship between a company and its customer takes on increased significance. To grow and survive, a company must move to the more visionary approach of creating customer commitment and loyalty through creating and maintaining long-term, high-quality customer relationships.

This research reveals that there is no one formula for developing a high-quality business relationship. While buyers and suppliers are not of the same



view in terms of what constitutes relationship quality, there are basic elements which most customers recognise as being crucial in the development of any high-quality relationship. These predominantly constitute both the technical and social dimensions of a relationship. In terms of the technical dimension, factors considered to be critical include the provision of timely and relevant information, the fulfilment of the promises of the supplier in terms of product and service, and the efficiency, knowledge and expertise of support staff. Most frequently mentioned factors corresponding to the social dimension of a relationship include commitment, trust and communication. Suppliers should, however, be aware of the differences between what they perceive to be crucial to relationship quality and the significance that customers attribute to various aspects of the relationship.

It is interesting to note that several characteristics referred to in the literature were not mentioned by any respondent in this research. These included synergy creation, respect for privacy, adaptation, joint problem solving and uncertainty reduction. However, this is not to say that these characteristics are not important to the attainment of a high-quality business relationship. Rather, in the context of this research, it would appear that neither buyers nor suppliers would regard them as being critical to relationship quality.

Other characteristics mentioned by respondents but which were not predicted by reviewing the literature pertaining to relationship quality included good humour, marketing knowledge (knowing and understanding a partner's business), not wasting time, professionalism, superior quality of product and punctual delivery of it. It is difficult to offer a plausible explanation for their absence in the literature. Perhaps their oversight is due to the fact that many of these characteristics are too obvious or alternatively, perhaps their significance to relationship quality is not yet fully realised.

In addition, the findings of this research indicate that culture has a significant impact on the characteristics perceived necessary in a high-quality relationship, and in particular on the social characteristics of communication and trust. Supplier companies should therefore be attentive to how a focus on the different characteristics deemed important by their national and international customers could serve to enhance relationship quality. The relative importance of these characteristics in a high-quality relationship reflects the idiosyncratic needs and expectations of the particular customer base. Each supplier company should have its own balance. The more accurately the factors are balanced to reflect those needs and expectations the closer the business comes to achieving the ideal. Furthermore, this research reveals that the customer's prior experience with their supplier has an enduring impact on their evaluation of relationship quality. Hence, suppliers should ensure that each experience a customer has with the company is a pleasant one, thus enhancing customer satisfaction and loyalty at all times.

The area of relationship quality requires further in-depth investigation in the future to more fully validate the connection between relationship quality and customer loyalty.

Furthermore, in an increasingly global business environment, it becomes critical to maximise marketing efforts across different cultural environments. Finding a common ground is the key to creating effective and efficient marketing strategies. Although several differences with regard to perceptions of relationship quality were observed between the different nationalities in this study, future research could focus more deeply on how relationship quality is influenced by culture across the globe and how cultural barriers to developing high-quality relationships could be overcome.

Similarly, future research may include different industry sectors within the analysis, thereby making the research more generally applicable. This would facilitate an exploration of the same research questions but within different contexts.

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# Designing Organisations to Survive in the Global Economy: An Insider's Account



ROBBIE O'CARROLL★

## INTRODUCTION

There seems to be a general recognition that continuous increasing productivity is an absolute necessity if an organisation is going to survive in the global economy. Towards that end, many companies have initiated large-scale downsizing of their workers. The jobs are either being shipped overseas or just eliminated. The objective is to do more with less, so they try to squeeze more work out of their remaining workers by compelling them to work additional hours.

However, these policies will not be able to continue to make significant improvements in productivity. The workers are reaching their physical limits. There are thousands of studies over the last 60 years that show that the quality of the output of a worker significantly degrades after 40 hours per week. As early as 1926 Henry Ford (1926) recognised this when he said that we can get at least as great production in 5 days as we can in 6. Studies as recently as the late 1990s show that working over 50 hours per week reduces productivity by 10–17 per cent and that working 60 to 70 hours per week reduces productivity by 15–44 per cent.

What is required to sustain significant continuous increases in productivity is an organisation designed to replace the traditional organisation with its steep hierarchies, rigidly divided functions and bloated bureaucracies. This new organisation must be lean, flexible and designed to support, motivate and

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enable its employees to contribute maximum energy and ability to the success of the organisation. The problem has always been how you change these organisations.

This paper describes how the author, when employed as a section manager, helped to lead his division to the kind of lean, empowering organisation required to survive in the global economy. He used short-cycle manufacturing combined with Japanese product and quality improvement strategies wonderfully described by Masaaki Imai (1986) to create sociotechnical systems autonomous teams outlined by Trist (1986), Pasmore (1988) and Cummings (1978)

These autonomous, self-regulating work groups – called self-managed, self-directed or high-performance work teams – are cross-trained, empowered workers who progressively accept, as a team, the total responsibilities and duties necessary for completing a well-defined segment of work. These teams differ from traditional work teams in that they progressively assume increasing control of their operation. Management sets the goals and boundaries for these teams. The team then develops the methods, measurements and strategies to achieve these goals. As the team meets these goals, they take on more of the responsibility for the management of their activities. As these teams take on more of the management activities it allows the organisation to reduce organisational structure. The result of this process is a lean, empowering organisation that realises a level of organisational effectiveness that previously did not seem possible.

The development of these teams, like the development of a manager, requires a process where training is strategically combined with increasingly more responsible tasks and the guidance of a manager who will champion the developmental process (for greater detail see Carroll, 1998; 2001).

This paper starts by describing how the section manager slowly developed his first self-managed teams and the changes he championed in the organisation to support those teams, including his participation in a major organisational change. These changes resulted in the elimination of three layers of management and a significant improvement in organisational effectiveness.

Finally, the paper describes a model the author developed for a high-performance knowledge team, a product design team. The section manager had always wanted to combine his seven years' experience in developing high-performance production teams with his many years working on product design teams (Carroll, 1999). This model is significant since almost everyone who has tried to create high-performance knowledge teams has failed. They failed because they assumed that knowledge teams were essentially the same as production teams and designed these knowledge teams to fit the standard production self-management model. Unfortunately this did not work – knowledge teams are different to production teams both in the nature of the tasks that are to be accomplished and in the skill required to accomplish those tasks. These differences mandate that a different empowerment model be developed for each type of knowledge team and if a model can be developed for a product design team, probably the most difficult type of knowledge team, a model can be created for any type of knowledge team.

## BACKGROUND

When he started the team process, the company with which the author worked as a manufacturing section manager employed about 3,000 people, including approximately 2,000 electrical, mechanical, software, manufacturing, test and quality engineers. The company was organised into two divisions, each with three main functional departments – engineering, operations and business (program management) – along with various support departments, such as financial, human resources and facilities. Work was organised into projects of 10 to 200 members.

The division that the author worked for designed and manufactured unique computerised communication equipment. This equipment was designed to unique customer specifications. The contracts were usually for quantities from one to four or five hundred units and they were very competitively priced. This resulted in very tight budgets for both the design and manufacturing phases of the programs. The section manager had one hundred and sixty-five individuals and ten major projects in his section. At the start of the process, in the operations there were six layers between the assemblers and the division manager; at the end of the empowerment process there were three. This paper will describe how this was achieved.

## DEVELOPING HIGH-PERFORMANCE PRODUCTION TEAMS

The section manager started the process of developing high-performance teams out of desperation. His most important project was in trouble. The team was in disarray, behind schedule and over budget and it did not appear that it could be fixed without some major changes in how the work was being accomplished. The company had sent him to a number of lectures on using cycle-time reduction to reduce inventory and improve overall performance.

The process is quite simple. Each reduction in cycle time exposes obstructions to that reduction. These obstructions can be design or process deficiencies, organisational impediments that add cycle time for no good reason or simply additional steps that have been put in place for a reason that nobody remembers and now have no obvious value.

Correcting the deficiencies in the design or process results in a more reliable product. Removing the non-value steps and structural impediment results in fewer hours per unit and quicker cycle time, with all the benefits that result from that. As each obstruction or non-value step is identified, the team must decide how to remove it. He was not sure if cycle time reduction really worked, but at the very least it might pull the team together and thus improve the project's performance.

The team made significant progress reducing the cycle time but after a year or so they seemed to hit a wall and could not make any more progress – they even seemed to be losing ground. The section manager realised that further process would require a more cohesive, cooperative team willing to share tasks and responsibilities. This led him to try to develop the team as a self-managed work team.

A comparison between a traditional production team and a self-managed production team are shown in Figure 6.1.

**Figure 6.1: Comparison between a Traditional and a Self-Managed Team**

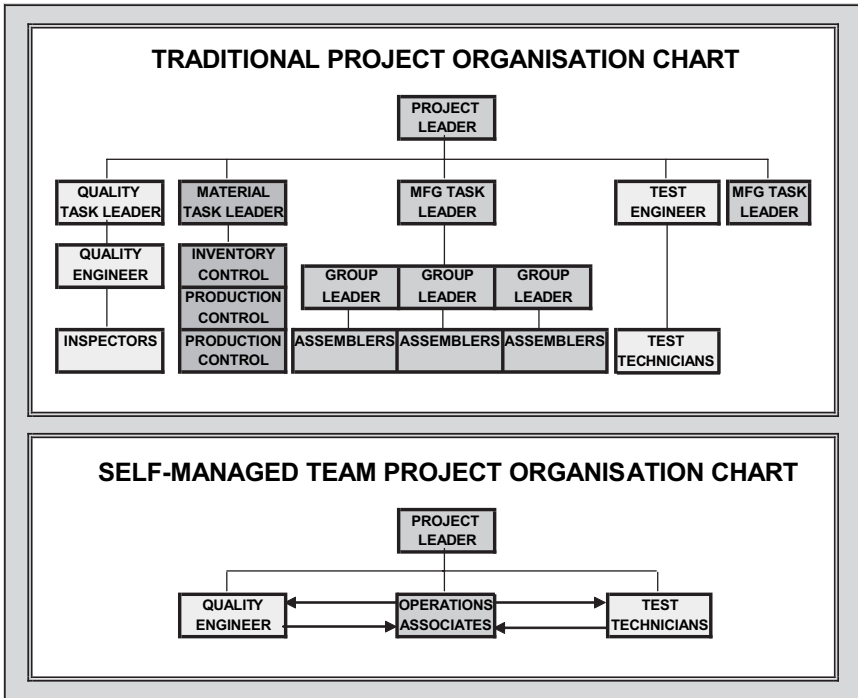
<b>Traditional Production Design</b>	<b>Self-Managed Production Team Design</b>
Specialised, simple task	Whole, complex task
Training limited to accomplishing simple task	Cross-trained to do all tasks
Segmentation of activities	Team completes whole segment of work
Individuals' input to process minimised	Individuals' input to process maximised
Individual measured on own performance	Individual measure on team performance
Tightly hierarchical management	Lean, empowering management
Centralised authority	Delegative authority
Humans considered problem	Humans considered solution
Accomplishes supervisor-directed activities	Accomplishes team-directed activities

As these teams take on more of the management activities it allows the organisation to reduce its levels of management. This is exactly what happened over a five-year period. Figure 6.2 shows the project as it was originally organised in the traditional manner and then the way it was finally organised, as a self-managed team. As can be seen, support labour was reduced from fourteen people to two.

The results of this evolution were way beyond the section manager's original expectations. The team not only caught up with the original schedule and productivity targets, it far exceeded them.

The system cycle-time was reduced from 22 weeks to 5. Quality improved more than 30-fold, going from 750 defects per million opportunities to 22. The cost of the product was significantly reduced, primarily by reducing support labour, as the hands-on people took on the support (hands-off) people's tasks in addition to their own. The project's space needs were cut from 8,000 square feet to 3,500 square feet, while more product was produced. The contract was completed a year ahead of the original schedule and under budget.

**Figure 6.2: Change in the Project Organisational Structure**



This project was so successful that the section manager developed his other production projects into self-managed teams.

This one change on a single team eliminated two layers of supervision and fourteen support people, who now worked as direct contributors. The section manager then started to expand this to all the other projects in his sections. Early on in the development process the section manager started the process with his other manufacturing projects.

CHANGING THE ORGANISATION

However, to make these teams work, the section manager was required to champion major organisational changes. The first was job descriptions.

About two years into the development of self-managed work teams, the section manager started to run into the first of many organisational obstructions. As the teams advanced, the need for cross-functional task sharing increased but the teams kept encountering people who said they could not do tasks outside their job description. When he started to look into the problem he found out there were 106 separate operations job descriptions for the direct employees. Each job description specified in detail how the task was to be accomplished and did not



allow that individual to do any task not listed in their job description. The section manager had read about other companies who had encountered the same problem and solved it by creating cross-functional positions called “worker one”, “worker two” and “worker three”, and the only thing the job description listed was to just do whatever was required to build the product.

The section manager talked to the division compensation person about changing the job descriptions. She recommended that the two of them meet with the company’s compensation person and propose changing the job descriptions. This person was, at this point in time, trying to handle the numerous requests for new job descriptions. These increases in job descriptions would have more than doubled the job descriptions for the direct people, from 106 to 225. He was overwhelmed with the task and jumped at the idea of significantly reducing the job descriptions. The final result was five “operations association” positions replacing the 106 job descriptions. The assemblers, inspectors and production control personnel now all had a common title that eliminated functional barriers, promoted team cohesion and removed the organisational restrictions on performing cross-functional tasks. The new job descriptions were well received by the associates because the new descriptions gave them two additional grade levels they could reach if they mastered additional skills. In addition, the team members now felt that they were all one team with a common purpose and since the workers could do multiple tasks it reduced the total number of people required on every project.

Although these new job descriptions helped, they did not eliminate the problem. The associates were now cross-functional but their managers were not. The department managers ran their department like separate fiefdoms, each with their own agenda, which was often in conflict with the other department managers and even the company’s overall objectives.

### **A Threat to Teamwork**

The teams had developed a system for scheduling all the hardware that had to be built each week on weekly requirement sheets. These sheets gave the team the flexibility to change instantly how the work was accomplished as long as they met the shipping schedules. With this system the team members were starting to make the day-to-day decisions on how the work should be accomplished. In the past the shipment goals were rarely met; now they were always met and very often exceeded.

This system had been working very successfully for about a year when the material manager decided to have his department develop detailed schedules for each of the projects, breaking down all the activities into fifteen-minute intervals. He did not understand why anyone would allow the associates to participate in the management of the projects. His most important objective was to effectively take the management of production projects away from manufacturing by allowing his people to schedule all the projects.

When the material manager described his schedule to the section manager, who was now the manufacturing manager, he became very upset. He knew

that the system the associates had developed was very successful and that the new schedules would destroy the whole team empowerment process and wipe out two years of work. He described to the material manager how the weekly requirement sheets worked and how imposing a schedule would disempower the teams. But the material manager did not understand how the operators could work without being told exactly what to do and when to do it. He concluded by saying that the new scheduling system was not open to discussion and would be used for all projects. The manufacturing manager said that manufacturing had the responsibility for managing the production projects and the detail schedule would not be used.

The next day the two managers were invited to the operations manager's office. The material manager had gone to the operations manager after his meeting with the manufacturing manager requesting that the operations manager direct the manufacturing department to use the detail scheduling system and complaining that the manufacturing manager was difficult to work with.

The operations manager asked the manufacturing manager why he refused to use these schedules. Repeating his previous argument, the manufacturing manager tried to convince the operations manager that the new system would destroy the self-managed teams. The operations manager was not quite sure why the detail schedules would destroy the self-managed team but, since he had received numerous kudos for this team's outstanding performance, he was reluctant to do anything that might hurt them.

### **Division Reorganisation**

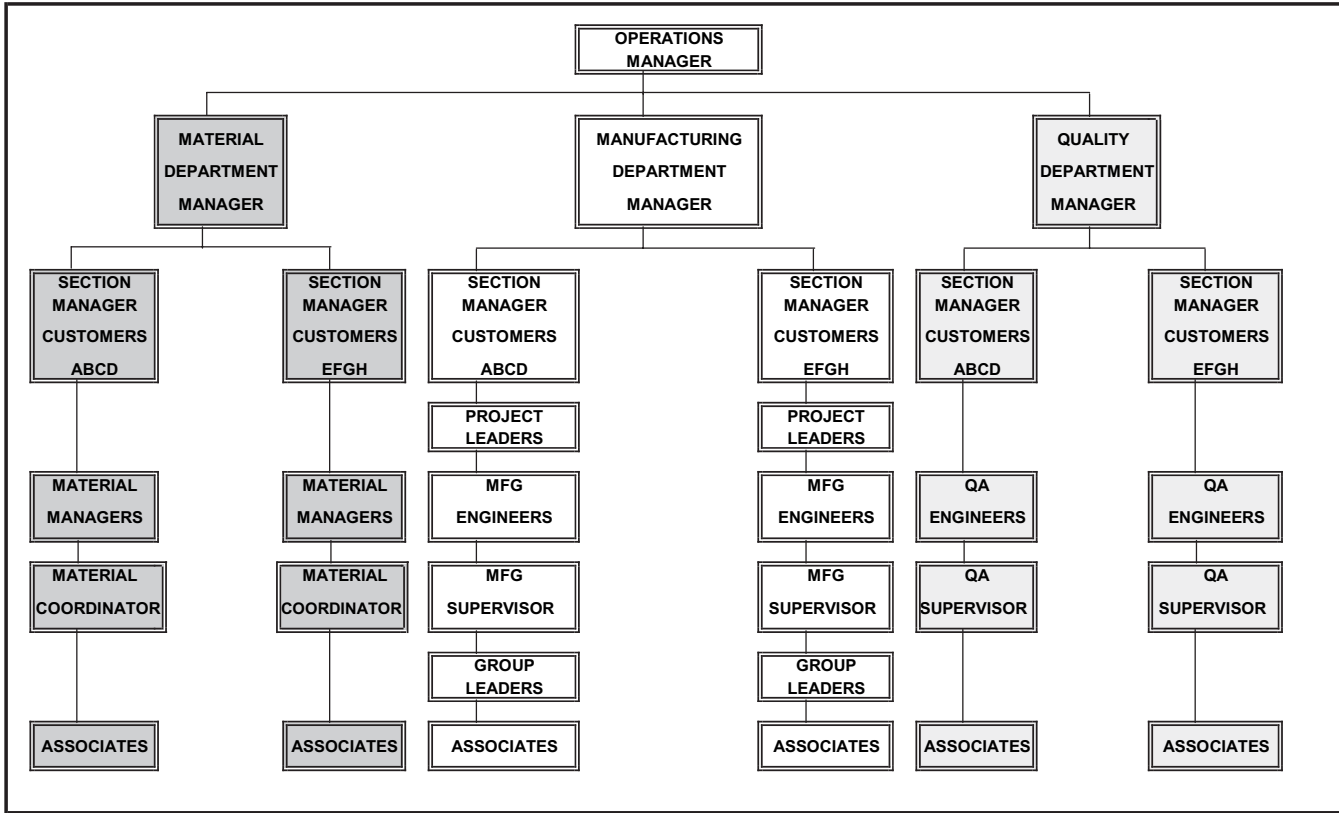
This experience showed the operations manager that a major reorganisation was required. For some reason, the present organisation was not working; there was too much conflict between department managers.

He set up a meeting with his three department managers and described some of his ideas about how he wanted to change his organisation. The manufacturing manager quickly realised that these ideas would not support teams. He suggested to the operations manager that they hire an expert in redesigning organisations just to get them started. The operations manager reluctantly accepted the idea.

The consultant's presentation on how to conduct reorganisation was so persuasive that the operations manager hired her to give technical assistance to his managers in their reorganisation effort. The operations manager's only requirements were that there should be no increase in the layers between him and the associates (and preferably one less layer) and that conflicts between departments should be eliminated.

When they started the reorganisation, operations was organised in a very traditional manner. There was an operations manager at the top of the pyramid and beneath him were the manufacturing department, material department and quality assurance department. Under each of these departments, there were two to three sections that contained all the personnel required to support the projects (see Figure 6.3).

Figure 6.3: Original Organisation



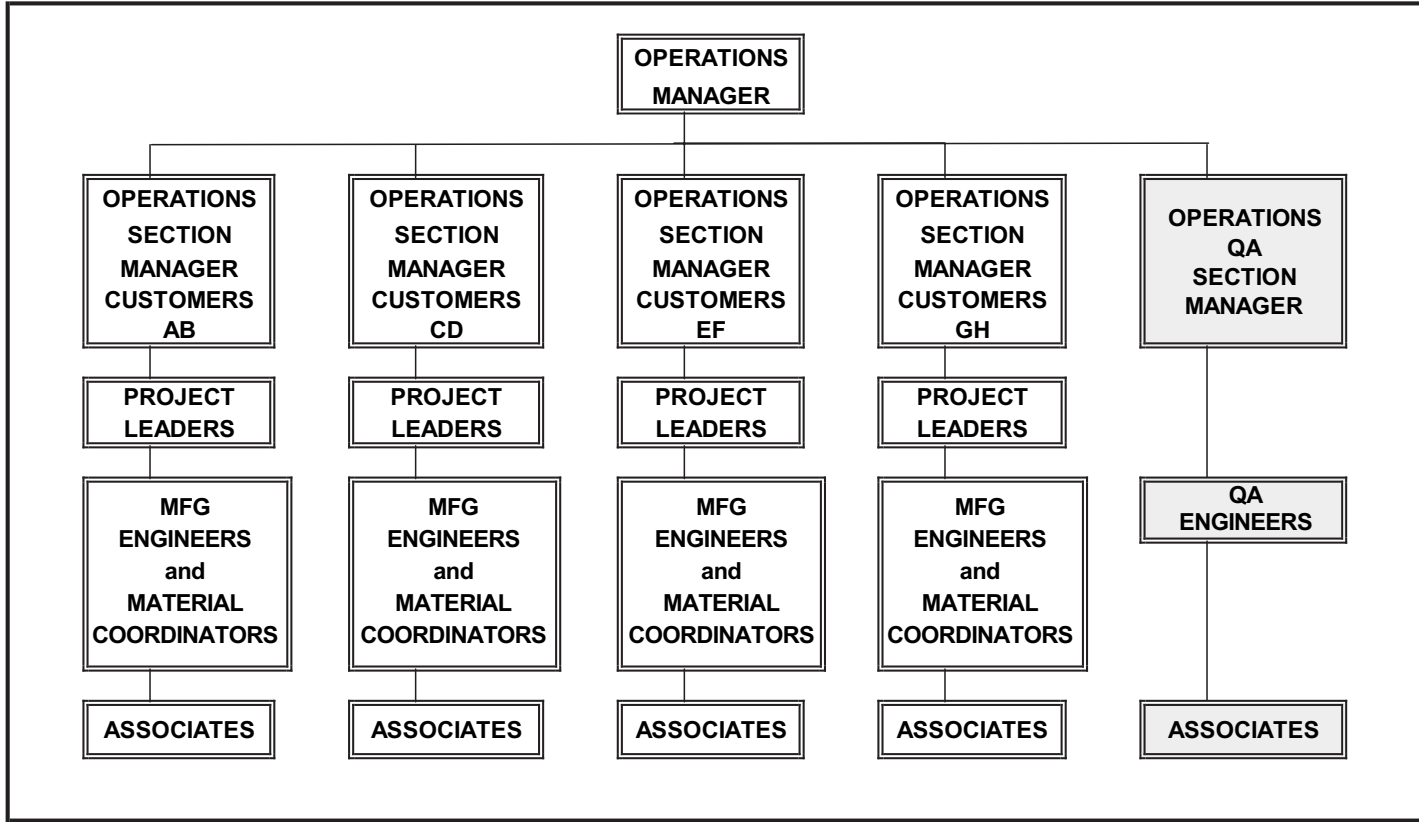
During the first week the consultant concentrated on training the operations reorganisation design team (the three department managers) on how a major organisational design should be conducted. She spent the next week helping the organisational design team to establish their expectations and objectives for this reorganisation, as well as its boundaries. From this, she helped them generate a preliminary vision statement on the organisational redesign's purpose and objectives. They used this to craft a preliminary concept for a new operations department. They spent the next eight weeks developing the new organisational design. Figure 6.4 shows the major steps in the reorganisation.

**Figure 6.4: Reorganisation Steps**

Step	Activity	Time
1	Consultant educates the reorganisation design team	1 week
2	Define purpose and objectives of reorganisation	1 day
3	Define the boundaries of the new organisation	1 day
4	Identify those groups who will be affected by the reorganisations	2 days
5	Generate a preliminary vision statement	1 day
6	Interview groups directly affected by the reorganisation	2 weeks
7	Design the new organisation	1 week
8	Show the new organisation to the groups interviewed	1 week
9	Modify the organisation to reflect any new inputs	1 day
10	Generate final vision statement	1 day
11	Present new organisation design to senior management	2 days
12	Modify the organisation to reflect any new inputs	1 day
13	Present the new organisation to the entire organisation	1 week
	<b>Total</b>	<b>8 weeks</b>

The new organisation eliminated the separate manufacturing and materials departments and all three department managers. It also eliminated the supervisory and group leader levels. Where there were six levels between the operations manager and the associates, there were now three. It created four operations centres at the section manager's level, as well as a quality assurance section (see Figure 6.5).

Figure 6.5: New Organisational Structure of Operations



These centres combined the material and manufacturing people into a common operations group. This eliminated the conflicts that existed between these two groups, gave them the same common purpose that the associates had and reduced the staff required for projects, since, in many instances, a single individual could do both tasks.

The three department managers and one of the manufacturing section managers filled these four positions. The quality assurance section spot was filled by one of the quality section managers. The rest of the section managers became project leaders with no loss of salary. The operations centres served fewer customers, so they could provide better customer focus. The centres were aligned with the design engineering and program manager sections so all three sections had a common purpose and served the same customers. This again provided better customer focus. The primary mission of the operations centres was to hire and develop the people required to staff the projects and to develop the manufacturing technologies required to build the new designs developed to meet the future needs of the customers.

Recognising that all production teams would be self-managed, the new organisation eliminated the supervisory and group leader positions. The self-managed teams would be managed directly by the project leaders, who would do essentially as they had done before – handle customer interface and overall project planning and responsibility. The self-managed team would manage the floor activities, take care of the tasks that the supervisor and group leaders had performed and be responsible for making sure the project goals were met. Self-managed projects had already produced significant improvements in their project's performances and with these organisational changes this improvement in performance accelerated. The teams now were truly self-managed and felt a greater commitment to the success of their projects and their company. The supervisors and group leaders were given an equivalent grade in non-supervisory job positions as direct contributors.

The new organisation eliminated the functional conflicts that were draining peoples' energy, significantly reduced the staffing requirement by job combination and, most significantly, eliminated three layers of management between the operations manager and the associates. This improved communications and substantially improved the *esprit de corps* of the people at the lower levels of the organisation. They now felt that they were full partners in the success of the business.

Reinforcing this feeling of partnership was the way the reorganisation was conducted. In the past all reorganisation was handled by senior managers in secret and it was kept secret until an announcement was made. In contrast, this reorganisation was done in the open by the level of management directly affected by the changes, i.e. the managers whose jobs would be altered. The whole organisation was asked for their input and the room where the reorganisation planning was taking place was kept open so anyone could walk in anytime they wanted to see what was being done. Since the reorganisation was open and all groups participated in it, they all felt committed to making it work.

By designing an organisation that trusted people to manage themselves, these managers significantly improve the productivity of the division and later the company.

#### DEVELOPING A MODEL FOR A HIGH-PERFORMANCE PRODUCT DESIGN TEAM

After he had successfully developed high-performance production teams and become the driving force behind the reorganisation of the division, the operations section manager was looking for new ways to improve productivity further. The area that seemed the most promising, and interesting, was the product design teams. About one-third of the company employees were on product design teams at any one time and they were the highest paid group in the company. So a small improvement in the efficiency of these teams would result in a significant improvement in productivity. The design teams were organised as traditional product design teams when he started thinking about developing a model for them.

#### **Traditional Product Design Teams**

The traditional product design teams were organised with a senior electrical design engineer as the project leader. They were responsible for the total design. Under this person were various design task leaders. Each task leader was given a major segment of that design and had a number of design engineers assigned to them to complete individual tasks. Each individual accomplished their assigned task in relative isolation. The task leader integrated their effort and the task leader's integration was integrated again by the design leader to produce the total design. The quality of the output of this design team was determined by how well that design leader could integrate those individual efforts into a coherent single design. This meant that the quality and success of the total design were dependent on the ability of a single or at most a few individuals.

Compounding this problem was the sequential processing of the design. Each discipline handed off their portion of the design to the next discipline in line: electrical design engineers handed off their effort to the mechanical engineers; mechanical engineers handed off their effort to configuration; configuration handed off their effort to the production, test and quality engineers. The various engineering disciplines were time phased to join the design team when their expertise was needed. While this information flow varied from team to team, it was essentially a one-way flow of information – downstream. Each group had to accept what was given to them unless they could show it was wrong or that a change would result in a major improvement in cost or performance. Any change that did not result in a major improvement was considered too late in the process. It would delay the design and cause significant cost increases. So each person accepted what they were given and did the best they could. This very often meant that producibility problems were not found until they were at the most costly point in the process – production. This caused the production cost to be higher than it should have been.

Over time the company found that they were no longer cost-competitive. To correct this, the company heavily invested in automated manufacturing equipment, believing that it would help the company become cost-competitive. However, the company soon learned that it could not use this equipment to build the existing designs. The automated equipment required that all products be designed to very precise design rules.

Up to this point, there were no company-wide design rules; each design team tended to produce a unique product design. Since everything had been hand assembled almost any design could be built, albeit at a high cost. Once the company realised that all products had to be designed to these very precise rules, it established company-wide standardised design rules. This did not work; the design engineers did not like their creativity being restricted by rules that made their tasks difficult so they continued to design as they always had. Realising that the rules were not enough, the company mandated that all product design teams would be concurrent product design teams. On a concurrent product design team the operations project leader, the manufacturing engineer, and the other support engineers are on the team full-time from the start of the design to ensure that the product is designed to use advanced manufacturing technologies and meet all the design-to-cost goals.

### **Concurrent Product Design Teams**

Although the intention of these changes was good, the goal was never achieved. The problem was that the cost to produce a concurrent design was significantly higher than that of a traditional design. The reason that the traditional design teams only brought on people as they needed them was to minimise design costs. Concurrent teams were very expensive; the manufacturing and other support engineers had to be paid for a full week at the early stages of the design process when they only had a day or two worth of tasks. This extra design cost should not have been a problem, since the total cost to design and then manufacture a product with automated equipment was significantly lower than the total cost to design without concurrent design teams and use hand assembly.

Knowing that it would be less expensive to produce products that were designed to utilise the automated equipment, the company reduced all its manufacturing bids but did not add in the additional design time required to produce concurrent designs. No one wanted to admit that concurrent design teams cost more. Because of this, the engineering project leader had to try continually to balance the management directive to have a concurrent product design team with a budget that only allowed for a traditional team.

Since the project leader was measured each month on how well they were doing relative to the budget and not on how well the concurrent the design team was doing, they would tend to budget the manufacturing members and other support departments for only the actual tasks that were required of them. This meant that that the manufacturing people would be



budgeted for one or, at most, two days a week. Because of this, the manufacturing and other support engineers would have to be on three or four product design teams to be fully budgeted. This did not allow them to be around the design engineers when they were making critical design decisions. As a result the design engineers repeatedly designed hardware that could not be built on the automated equipment. Unfortunately for the manufacturing people, when this occurred they were blamed for not finding the design errors. If this occurred several times, it adversely affected the operations department because the operations project leaders were being blamed for something over which they had no control.

At that point, the section manager knew that if he wanted to continue to survive, he had to find a way to get his project leaders on a single product design team full time. The only way he could do that was to use his expertise to develop a high-performance concurrent product design team model and then implement it.

### **Model for High-Performance Product Design Team**

A self-managed production team solves the problem of ensuring that everyone on the team always has work by cross-training the entire team so each team member can perform all the tasks required to produce that product. That way, if an operator completes a task, they can start whatever task is required next to complete that segment of work.

Cross-training is usually not possible on a knowledge team and it is never possible on a product design team. Each design task must be accomplished by an engineer who has spent many years acquiring the specialised education and skills required to accomplish that task. It is difficult to imagine a digital electrical engineer designing a complex piece of mechanical hardware or a chemical engineer designing a digital circuit.

When the operations project leader reflected on the limitation of specialisation, he realised there was still the potential of using a form of task sharing to improve the design process significantly. The team could take the collective responsibility for the final design and support each other by sharing the tasks that are common to all engineers.

Probably 40 per cent of an engineer's time is consumed in doing tasks that are common to all engineers: researching information, contacting outside suppliers, ordering material required for the design, setting up design reviews or doing business tasks such as generating budgets and schedules. On a high-performance product design team, as each discipline hits its peak activities the other members of the team who were not fully engaged could pitch in to do these common tasks. This would enable the engineers who had too much to do to spend most of their time doing the portion of their tasks that only they can do.

This model would significantly increase organisational productivity firstly, and most importantly, by improving the quality of the design and secondly, by reducing the cost to complete the design.

### **Improved Designs**

In the traditional product design teams each individual accomplished their assigned task in relative isolation. In a high-performance product design team the final design is the result of the whole design team and if the entire team is involved in the process, it brings a collective seeing and knowing that far exceeds that of any individual. This collective seeing and knowing will result in a superior final design. When an expert is working in isolation there is a tendency to optimise their portion of the design, but the sum of these optimisations may not equal the best design; in some cases, it does the opposite. By working as a team the team members learn how to optimise their portion of the design in a fashion that optimises the total design.

In addition, when all the team members are engaged in all aspects of the design, they increase their own knowledge of the design itself, the total design process and each other's activity. This results in individuals who are continually expanding their individual knowledge and continuously improving the design process. As future high-performance product design teams are staffed with individuals who have gone through this process, design cycle times will continue to be reduced and the quality of the final designs will improve.

### **Cost Reduction**

The cost for a high-performance product design team effort is reduced in two ways: by reducing the staffing required and by reducing the time it takes to complete a design.

On traditional product design teams, as each discipline hits its peak activity more people from the particular functional area are added. When a function requires only a portion of some person's time to meet that function's peak activities, the individual is paid to be on the team full-time or the team suffers delays while it waits for that person's time. Either way, any time people are added to a process it increases confusion, creates delays and adds cost. With all the engineers sharing common tasks, all the part-time personnel could be eliminated, creating much smaller, tightly knit teams. This significantly reduces the cost to design a new product.

These smaller cohesive design teams, where all the members are engaged in all aspects of the design, eliminate most of the delays associated with functional hand-offs. The elimination of these delays means the product design cycle can be reduced. Reduced cycle time equals reduced cost and quicker time-to-market with new products.

It is difficult for most managers to consider that a different organisational model might be required. The traditional management model is very powerful; it has order with its clear lines of authority, well-defined tasks and tight control from top to bottom. Most managers grew up in this model, they feel comfortable with it, it is all they know. Because of this, they assume that they can form the workers into high-performance teams to achieve the required productivity without disturbing the existing top-down, command-and-control organisation.

Unfortunately they are wrong: the underlying assumptions and structures of the traditional organisation work against, and ultimately prevent, these teams from ever becoming self-managed. High-performance/self-managed teams require an organisation that is lean and flexible, that facilitates and enables instead of commands and controls, and that maximises cooperation across all functions and levels; an organisation whose policies and structures are minimum in number and have been designed to support empowered people and teams. When organisations are designed to trust people to manage themselves, they will achieve an organisational effectiveness well beyond what they ever imagined, and that organisational effectiveness will ensure their long-term success.

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# Irish Female Entrepreneurs: Mapping the Route to Internationalisation



EMMA MCCLELLAND ★

## INTRODUCTION

According to Deakins and Freel (1998), it seems to be generally accepted that a vibrant and healthy economy depends highly on the competitive advantage that can be gained from a strong and dynamic small business sector. Many national governments have funded initiatives to promote entrepreneurship and the long-term development of small firms. This, alongside considerable academic inquiry, has highlighted the importance of entrepreneurial activity for future economic development and the crucial role of entrepreneurs within a small business sector that will create and build fast-growth and internationally focused smaller firms.

Further to this, the importance of female entrepreneurs and their potential contribution to both the local and global economy has now been recognised and there is increased policy and research interest in this area. Nevertheless, the extant literature on female entrepreneurs is often limited to the pre-start-up stage of business, dealing in particular with issues of discrimination in raising finance (Brown, 1995 as cited in Mukhtar, 2002; Touby, 1994) or the motivations of female entrepreneurs in starting new ventures (Cromie, 1987).

An OECD report (2001) concludes that it is difficult to ascertain how many women entrepreneurs are involved in international trade, in what capacity and in what countries. Indeed, Koreen (2001) argues that “comprehensive studies are lacking and there exist important gaps in statistics on the small firm in international trade broken down by gender”. Moreover, while it is possible to detect the level of female entrepreneurship in Ireland and other countries using the Global Entrepreneurship Monitor (2002), this particular study does not indicate how many of these women trade internationally. Thus, despite the fact that the global marketplace presents a huge opportunity for women to

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expand their businesses internationally, there is little conclusive evidence that they are doing so or, indeed, that they have the motivation to do so. Given this gap, the present study aims to focus very specifically on the internationalisation of the small female-owned entrepreneurial firm in Ireland. It reviews the limited existing literature on the topic and explores the internationalisation processes with regard to female-owned Irish entrepreneurial firms. The aim of the empirical research is to investigate the circumstances, motivations and barriers of these entrepreneurs and to explore how they believe gender affects internationalisation issues. A secondary objective is to identify any notable differences between the experiences of internationalising women entrepreneurs in the North of Ireland and those in the Republic of Ireland.

## OVERVIEW OF LITERATURE

### **Internationalisation**

Many of the extant models of firm internationalisation posit that firms gradually internationalise in an incremental manner through a series of evolutionary “stages”. As they do so, they commit greater resources to overseas markets gradually and tend to target countries that are increasingly “psychically” distant. An underlying assumption of all these models is that firms are well established in the domestic market before venturing abroad. (For comprehensive reviews of the literature see Leonidou and Katsikeas, 1996.) However, these conceptualisations have been challenged as “much too deterministic” (Reid, 1983). Indeed, Andersen (1983) also contends that stage theories lack clear boundaries and explanatory power, and that the models do not address the reasons for moving from one stage to the next. More recent research into “born global” firms has also contested the incremental processes of internationalisation as these firms skip many of the stages or move straight into international markets without a period of domestic activity (Hurmerinta-Peltomaki, 2001) or without activity in the domestic market at all (Bell et al., 2001).

Ibeh (2000) highlights three alternative views on small firm internationalisation: the resource-based perspective (Barney, 1991; Grant, 1991; Wernerfelt, 1984) the business strategy perspective (based on the work of Young et al., 2000) and the contingency approaches. Although many of these theories form the basis of much research in the past, it has been recognised that they do not always reflect the realities associated with the global business environment of the 21st century. A firm does not necessarily follow any consistent organisational approach as they enter foreign markets and may choose different approaches on a market-by-market basis (Johnsen and Johnsen, 1999). Internationalisation may therefore be viewed as a chosen strategy, based on analysis of the firm’s capabilities, resources and opportunities, and may involve a company adapting its organisational form and market relationships to the unique character of each individual market and its own specific circumstances rather than following a structured path of international market development.

Coviello and Munro (1995) suggest that network theory offers a fresh perspective on the theories of internationalisation, particularly for smaller organisations whose development tends to be dependent on relationships with others. Such relationships can involve customers, suppliers, competitors, private and public support agencies, and family and friends. Therefore, according to this school of research, internationalisation depends on an organisation's set of network relationships rather than a firm-specific advantage. Styles and Ambler (1994) assert that a firm forms relationships at the start of the export process to gain knowledge. Subsequently, these relationships will help the firm gain progressively more knowledge and the firm will commit resources to foreign markets accordingly. Coviello and Munro (1995) also argue that firms were able to internationalise much more quickly by linking themselves to extensive established networks. Researchers such as Rosa et al. (1994) as cited in Carter (2000) have also argued that networking is both critical to and should be greater among female entrepreneurs than male entrepreneurs because women use networking as a common strategy to advance their business (Carter and Rosa, 1998). This particular strand of literature also suggests that formal and informal networks are without doubt different in both the value of the networks and how each sex uses them to their advantage, although due to societal factors, women often do not have as much time for networking (Ibarra, 1993), particularly formal networking. Ashley (2000) contends that the rise in women's networks is at least partly due to women looking for an alternative to the male-dominated networks currently in place. These networks are described as bearing a "passing resemblance" to their male counterparts where social support comes first, while business comes later. Vinnicomb and Colwill (1995) agree that women view networks from a social perspective and look for friendship and support, which then often create channels for information that can further help the woman business owner.

According to Weeks (2001), international trade is an increasingly important avenue for many small firms who find that the global marketplace offers tremendous potential for business growth, and women are no exception to this. It is therefore imperative to examine more closely the motivations of the female entrepreneur in international business. Research conducted in the USA by the National Foundation for Women Business Owners (1998) indicated that women-owned businesses in Ireland were more domestically growth orientated than internationally orientated. A study by Carter and Anderson (2001) in the UK also revealed that while over 40 per cent of women-owned businesses planned to extend their geographical range of sales, just 7 per cent planned to initiate export. So what are the motivations behind the internationalisation of the small, female-owned entrepreneurial firm and why is there distinct resistance from women to get involved in international businesses – are there specific gender barriers to internationalisation?

### **Motivations**

The varying motivations for export involvement by any organisation were identified by Bilkey in 1978 (as cited in Johnsen and Johnsen, 1999: 301) who

suggested that companies may be motivated to export by external contacts such as foreign customers or suppliers with whom they are already involved; they may be motivated by reacting to opportunities such as responding to unsolicited export orders or alternatively, they may deliberately become exporters through actively identifying and researching export opportunities. In the 1970s, Pavord and Bogart (1975) found that the strongest motivations of exporters related to the importance of new foreign market development as an alternative to saturated domestic markets and declining profits. Perceived profitability was another motivation in several studies (Bilkey and Tesar, 1977). However, according to Bilkey (1978), small entrepreneurial firms with little international experience are more motivated by the potential of a new market than initial profit. Johnsen and Johnsen (1999) also discuss the idea of “psychological distance” as a motivation for a firm to get involved only with foreign markets that are culturally similar. Carlson (1975) identified that small firms are influenced more strongly by psychological distance than large firms.

### **Gender Barriers to Internationalisation**

Orser et al. (1999) discovered that there were gender-specific challenges and traits that influenced export behaviour. In this particular research, more than half of the women business owners interviewed had stated that gender posed a challenge, particularly as it related to credibility in foreign markets. Many of the women felt that they were not being taken as seriously as male-owned firms in these export markets. In addition, respondents revealed that gender influenced travel decisions relating to internationalisation. Both concerns for personal safety as a woman traveller and the logistics of balancing family commitments with travel were cited. Nelson (1987) believes that women approach the entrepreneurial experience with disadvantages rooted in education and experience, and that therefore they often lack the knowledge or skills required to develop their business internationally. There is also literature to suggest that it is often resistance from family that proves the greatest barrier for female entrepreneurs (Babaeva and Chirikova, 1997), as well as the problem of overcoming cultural conditioning (Scherer and Oeltjen, 1992, in McKay, 2001).

In contrast, Neider (1987), as cited in Cately and Hamilton (1998), believes that much of the work on gender-based barriers to growth is anecdotal and reliant on memory rather than objective analysis. Indeed, Carter and Allen (1997) feel that women-owned businesses remain small by choice and that there are no differences in the level of performance and success of male- and female-owned businesses. If we look back, however, to initial capitalisation of firms, there is no doubt that in the past women were indeed discriminated against when trying to get financing for a new business venture (Schartz, 1979). Carter and Cannon (1988) reported that lenders did not see women as credible business proprietors. Although recent reports carried out in Canada and the UK (Carter and Rosa, 1998; Riding and Swift, 1990) found relatively no evidence of gender bias, it is undeniable that shortfalls in initial capitalisation which stem from gender discrimination in previous years has had an

adverse affect on subsequent business performance and created a long-term disadvantage for women-owned businesses (Carter, 2000).

#### METHODOLOGICAL APPROACH

This study is exploratory and qualitative in nature, carried out through in-depth case studies of female-owned entrepreneurial firms in Northern Ireland and the Republic of Ireland. This approach was chosen for a number of reasons: the aim of qualitative research is one of understanding; therefore, the goal of the researcher is to expand and generalise theories, not to establish the frequency with which a phenomenon occurs (Hyde, 2000).

The sample included nine firms in various industries; six located in Northern Ireland and three located in the Republic of Ireland. Non-probability purposeful sampling was used (as suggested by Patton, 1990) in order to ensure a richness of information was gathered. In this study the following selection criteria were applied:

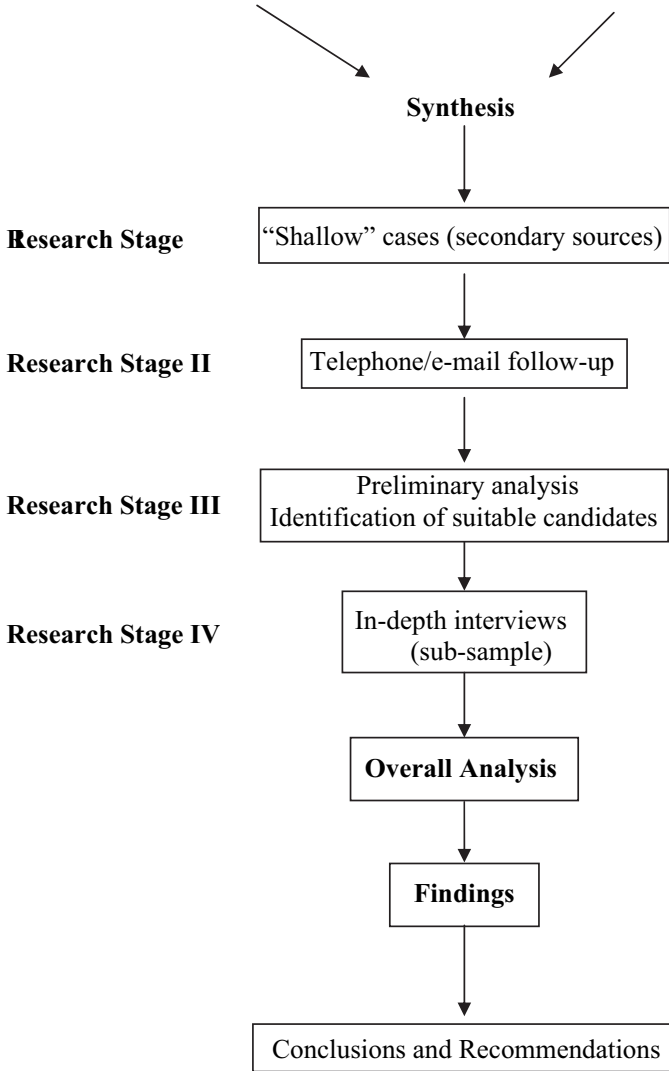
- The business had to be female-owned;
- It had to be classified as a small or medium-sized business under the Companies Act of 1985 (employed less than 250 people) and;
- It had to be involved in some type of international activity in at least one country outside their domestic market. (For the companies in the Republic of Ireland, this was extended to activity outside the domestic market and the UK.)

The research process is shown in Figure 7.1. A comprehensive cross-cultural literature review of current literature was carried out initially. Approximately 25 female-owned organisations were then selected using online directories from government and business sources across a variety of business sectors. In many cases, these companies had been past winners or nominees of business awards in their regions, i.e. they were successful companies making an impact on the local and global economy. Cases were not chosen based on their typicality of an internationalised company, but rather because they offered a chance to better understand the phenomenon of internationalisation in a range of contexts. Case profiles were compiled of these companies and information was obtained from a variety of sources including online sources, newspapers and industry magazines. This information was then tabulated, which highlighted the gaps in the information that would be filled using in-depth interviews. A smaller number of women who were felt to be most eligible were then selected from the original sample, i.e. those who would provide the richness of information required were then contacted to secure an interview. Nine women agreed to participate and arrangements were made to carry out the in-depth semi-structured interviews. Thematic content analysis was then employed to highlight the important results from the interviews.



**Figure 7.1: Research Design and Process**

**Internationalisation Literature: Processes/Motivations/Barriers**



It must be recognised, however, that there are limitations to the exploratory approach adopted in the study – the number of women used for the research, nine in total, cannot indicate a trend in female entrepreneurs in Ireland. However, the issues raised may merit further investigation at a later date, using a larger sample.

## RESULTS AND DISCUSSION

**Demographic Profile of Firms**

The demographic profile of the participating organisations is shown in Table 7.1. As shown, the majority of firms were less than ten years old. Half were micro-enterprises, two of which were sole traders and three employed less than five staff. None of these firms had more than twenty-five employees. Industry

**Table 7.1: Demographic Profile of the Firms**

Company	A	B	C	D	E	F	G	H	I
<b>Company age (Years)</b>	6	10	6	11	16	5	3	2	12
<b>Industry sector:</b>									
Craft			✓	✓		✓			
Consultancy									✓
Engineering	✓								
Food							✓		
Pharmaceutical		✓						✓	
Travel					✓				
<b>Company location:</b>									
Northern Ireland	✓		✓			✓	✓	✓	✓
Republic of Ireland		✓		✓	✓				
<b>No. of employees</b>	25	23	2	0	14	5	3	0	24
<b>Length of time exporting (years)</b>	6	3	6	2/3	16	5	3	2	9
<b>Export ratio (as % of total sales)</b>	99	12	38		99		100	30	25
<b>No. of export markets</b>	ww	3	4	ww	ww	ww	ww	1	3
<b>Top export markets:</b>									
a) USA	✓	✓	✓	✓	✓	✓			✓
b) Europe	✓	✓	✓	✓	✓			✓	✓
c) Japan	✓					✓	✓		
d) Middle East	✓	✓	✓		✓		✓		✓
e) Australia/New Zealand	✓		✓				✓		
f) Other	✓		✓			✓	✓		

sectors represented in this sample were highly varied and included food, craft, travel, pharmaceutical, consultancy and engineering. Two-thirds of the companies were international from inception and in one-third of the cases, firms exported virtually all their production to foreign markets and a further three firms had export ratios of over 25 per cent. Principal international markets included the USA, the EU, Australia/New Zealand and the Middle East.

### Demographic Profile of Female Entrepreneurs

The profile of the Irish female entrepreneurs is shown in Table 7.2. From these results it can be seen that the majority of women in this particular sample were in their thirties and forties, and most of them (seven out of nine) were educated to third level with a relevant degree. Each woman had prior industry experience and this experience ranged from setting up a foreign subsidiary in the US and managing local branches, to working with costume and design through a career in acting. Many had prior international experience in terms of living, studying or working abroad.

**Table 7.2: The Female Entrepreneur**

Company	A	B	C	D	E	F	G	H	I
<b>Age of entrepreneur (years):</b>									
20–29				✓					
30–39		✓	✓			✓	✓		
40–49	✓				✓				✓
50–59								✓	
<b>Level of education:</b>									
Secondary	✓	✓	✓	✓	✓	✓	✓	✓	✓
Tertiary	✓	✓	✓	✓			✓	✓	✓
Trade Qualifications	✓								
<b>Previous industry experience?</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Prior international experience?</b>	✓				✓	✓		✓	
a) Lived abroad			✓			✓	✓	✓	
b) Studied abroad								✓	
c) Was involved in international trade through prior job	✓				✓	✓		✓	

### **Internationalisation Strategies of Female Entrepreneurs**

In terms of internationalisation strategies, the results were consistent with the extant literature. In many respects this research would suggest that the internationalisation process does not appear to be influenced by gender of the owner involved. Indeed, it seems that the companies involved chose different approaches on a market-by-market basis (Johnsen and Johnsen, 1999) and the decisions to internationalise were often based on an analysis of the firms' capabilities (Reid, 1983), resources and a recognition of new opportunities rather than any formal strategic moves towards international markets.

The results indicated that all nine organisations used an import/export strategy and the most common method of involvement was exporting directly to the consumer. However, some companies used agents or distributors located within the foreign market. These companies stressed the necessity of these relationships with the distributor as a way of compensating for their lack of language skills and cultural knowledge, as well as their initial insecurities in dealing with foreign customers. As the literature suggests, prior international experience was also a major factor in the ability of the entrepreneurs to identify and seize the opportunity to internationalise for two-thirds of this sample. Four of the entrepreneurs had been heavily involved in international trading through previous jobs before starting up on their own. A further two had lived abroad for lengthy periods of time and were therefore determined to satisfy the demand for their good/service, no matter where in the world that might be. In contrast, the other three women involved in the study had never had any real international experiences. They had never lived or studied outside Ireland and none of them had had the opportunity to get involved with international trading through previous jobs. Indeed, psychological proximity of markets was also very important to these three companies (Johnsen and Johnsen, 1999) and would have had an effect on their willingness to respond to orders, while the six other companies involved in the study were prepared to fill export orders in any foreign market. In a closer examination of these three companies, it is possible to see that they took a more traditional, almost staged approach to the internationalisation of their firms. Initially, they considered the domestic market to be the most important and only after building up a reputation for their products and proving themselves within their industry did they feel comfortable in considering international trade as a viable option (Leonidou and Kat-sikeas, 1996).

### **The Role of Networking in the Internationalisation Process**

The literature revealed that networking is very important for business growth amongst women (Coviello and Munro, 1995; Styles and Ambler, 1994) and these results showed no exception to this (see Table 7.3). Networking in the development of exporting was identified as very important by seven of the firms. All of the firms involved had some sort of network in place for help, support and advice, although only three women were involved in formal networking associations. All the women discussed the time constraints and often

**Table 7.3: Processes, Motivations and Barriers to International Trade**

Company	A	B	C	D	E	F	G	H	I
<b>Motivations for internationalisation:</b>									
a) Global vision	✓		✓	✓	✓	✓	✓	✓	
b) Expand customer base		✓		✓				✓	✓
c) Identified new opportunities	✓	✓	✓	✓	✓	✓	✓	✓	✓
d) Solicited orders		✓	✓	✓	✓			✓	✓
e) Saturated/Inhospitable domestic market	✓						✓		
f) Perceived higher level of profitability	✓					✓	✓		
<b>Internationalisation strategy:</b>									
a) Instant globalisation	✓		✓		✓	✓	✓	✓	
b) Stages of internationalisation		✓		✓					✓
c) Use of networks in foreign country	✓				✓	✓		✓	
d) Grants/Funding	✓	✓				✓		✓	✓
<b>Involved in networking activities?</b>									
Formal						✓		✓	✓
Informal	✓	✓	✓		✓	✓			✓
<b>Experienced barriers to internationalisation? Due to:</b>									
a) Lack of capital	✓	✓	✓		✓		✓	✓	
b) Lack of knowledge or skill		✓					✓		
c) Market acceptance of product									
d) Customs and legal issues	✓		✓				✓		
e) Problems with distributors							✓		
f) Exchange rates/Currency issues			✓				✓		
g) Payment issues			✓				✓		
h) Cultural/Language barriers		✓					✓	✓	
i) Gender issues	✓					✓	✓	✓	
j) Other	✓				✓				
<b>Start-up financing:</b>									
a) Self-financed	✓	✓	✓	✓	✓	✓	✓	✓	✓
b) Assisted by bank loan	✓		✓		✓	✓	✓		
c) Start-up grant	✓	✓						✓	
<b>Problems in acquiring start-up capital?</b>									
	✓		✓	✓	✓				
<b>Withdrawn from international market due to problems?</b>									
	✓				✓		✓		
<b>Found there were gender barriers to international trade?</b>									
	✓					✓	✓	✓	

financial demands of attending formal gatherings and there was a general feeling that “sometimes there is a lot of talk and no action, especially those networks set up to help women in business” (Respondent E). Some of the women used their industry networks for advice and support; however, the results indicated that 90 per cent of interviewees preferred to use informal networks. In fact, personal relationships were seen as more beneficial to the export process than seeking formal assistance through recognised networks. Many of the interviewees relied on industry peers, family and friends for financial, legal, logistic or international trading advice where possible. “I was never afraid to lift the phone and ask my friends or family for advice” (Respondent B). Certainly, those involved in the study generally believe that men are better at networking in the formal sense, whilst women are often better at informal networking because they lack the ego that men can carry with them in business.

### **Motivations for Internationalisation of Female Entrepreneurs**

Again, the results from this research indicate that the literature is accurate in reflecting the factors that motivate small businesses to internationalise (Table 7.3). Generally, these entrepreneurs were motivated to consider foreign markets like any other small business (Bilkey, 1978), i.e. by the prospect of new opportunities and the possibility of expanding their customer base. However, it was clear from many of these women that a truly global vision of business was all the motivation they needed to internationalise their organisation. Many of them recognised that they didn’t have to be based in the same country as their customer in order to do business successfully. Despite experiencing initial warnings of caution from family, friends and government start-up agencies, who suggested that a secure domestic market would provide a basis for future international activity, many of these female entrepreneurs were adamant that in order to succeed in their relative industries, a worldwide approach to targeting their clients had to be employed. Many of these women also acknowledged that at the time, they considered some foreign markets to be more lucrative than the domestic market, although some agree that profitability was not a primary consideration for them at all.

### **Barriers to Internationalisation among Female Entrepreneurs**

The most striking results, as seen in Table 7.3, were revealed in this section of the interview. Some of the issues raised by these women are barriers faced by many small businesses in international trade; they include language barriers, changes in European legislation and sometimes a lack of cultural understanding in terms of attracting new clients and vying for business. However, there were certainly distinct gender barriers that these women encountered, mainly in the domestic market. A lack of knowledge or skill was cited as being a huge barrier to these women and this, as well as problems with customs or legal issues, was one of the main barriers for most of the organisations involved. This suggests that there is a deficit in the knowledge women need to trade

internationally. However, these women have overcome many of the barriers they experienced

“... through sheer will and determination and simply asking questions constantly. I rang official departments within each of the countries we wanted to export to for information, and sought advice from our distributors. Most of the time it was a case of saying, I don't know what I'm looking for but I know what I want to do, can you help me?!” (Respondent G)

Gender barriers within foreign countries were infrequent or minor according to the sample of women in this research. In fact, many believed that being a woman made it much easier to trade in certain markets, for example the American market. However, almost half of women revealed that they had experienced problems in dealing with clients from the Far East and Africa. These particular countries were considered problematic due to these regions having a male-dominated culture. These women did not disregard these markets because of initial problems. Instead, one firm decided to compensate by sending an older male partner on the trade missions to Japan to make business contacts for her. Another asked her husband to make initial contacts with the distributors and she took over the contract after a few weeks. In Africa, the entrepreneur used a male partner to assist her with seminars. This sample of women did not feel that they experienced barriers in terms of credibility. In fact, they found their credibility was called into question much more often when dealing with clients in the domestic market than in any international market where they had done business.

In terms of financial issues, only one organisation stated that a lack of capital hindered their ability to trade internationally. Schwartz (1979) suggests, however, that a shortfall in initial start-up capital can have an adverse affect on subsequent business performance and can create a long-term disadvantage for women-owned businesses. Although every organisation involved in the study had been primarily funded by the entrepreneur in its early stages, many of the women had applied for bank loans or financial support from Invest NI/Enterprise Ireland. Almost 50 per cent of them had experienced problems in raising formal capital at the start-up phase of their business due to what they believed to be gender issues, dates range from 1987 to 1997. One woman who approached her local government support agency for funding was asked to complete a business program before she could be considered. At the interview for this in 1996, a young man from the bank asked her, “Have you finished having your family yet?” Although it is impossible to predict what international trading may have been like for these particular organisations if they had had access to start-up funding, it is clear from this research that some of the women had resisted trading in foreign markets until they were financially sound and domestically established.

There is no doubt that family commitments are also seen as a barrier for women in international business (Babaeva and Chirikova, 1997) and the

sample in this research is no exception. Five of the nine women involved have family responsibilities; two of these women made conscious decisions to wait until their company was established before having children; and another waited until her children were settled at school before taking on foreign contracts. One woman stated, "... starting your own business is 7 days a week, 14 hours a day, and while I had no children, I was able to work hard and build up an international reputation" (Respondent H).

For the other three women, it was a case of trying to balance a family with the business and only with the support and flexibility of their spouses was it possible for them to spend time away from their families in order to take the organisations into international markets. One woman described how she was lying in the labour ward the day after giving birth doing paper work. "The growth of the company suddenly took off and there was no time to recover from having a baby, the work had to get done" (Respondent G).

Finally, one of the aims of this paper was to identify if there were any key differences between the experiences of the women in Northern Ireland compared to those in the Republic of Ireland. Through this research, the first notable difference was that the women in the Republic were much less likely to use any networking in business. Bad experiences of formal networks have left many of these women believing that networks are of no direct use to them or their business growth. One further issue that the research raised was that the women in the south of Ireland had little or no international experiences before starting their own business and therefore felt no immediate desire to initiate trade in a foreign country. Obviously, the small size of this sample prevents the researcher from drawing any conclusions but it certainly highlights some points that warrant investigation in the future.

#### CONCLUSIONS AND RECOMMENDATIONS

This research has brought our attention to a number of issues and demonstrated that no one model of internationalisation can incorporate the complexities faced by the modern business. Due to the vast amount of information gathered, tabulated and analysed, the following major findings are summarised below:

- It is possible to conclude that many of the complexities faced by female entrepreneurs in Ireland are no different than any other entrepreneur or small business in international trade.
- The motivations of the women in this sample are, again, similar to the motivations of any other small business. In common with their male counterparts, the global vision that many of these women had for business was certainly a major factor in their decision to trade internationally from the start-up phase of their business.
- This sample has drawn attention to the importance of networking for Irish female entrepreneurs in establishing contacts and using those networks to



develop international strategies. It is clear that the process of internationalisation was a smoother process for those women who had a formal or informal support system to rely on for advice when they needed it.

- Although the barriers faced by these women generally resemble those faced by their male counterparts, this research has emphasised the barriers that women in Ireland face in raising initial capital for their business, which may have a long-term affect on the internationalisation of female-owned firms.
- The pressures of family responsibilities have also been brought to light by this piece of research and although it is impossible to ascertain what effect these barriers have had on these businesses, this study has highlighted these issues for future research.

In light of these results, there are certain implications for public policy makers and financial institutions in Northern Ireland and the Republic of Ireland as well as international researchers that must be considered. Female entrepreneurs who trade solely within the domestic market must be made aware of the opportunities that lie outside the UK and Ireland. They must be given the advice, support and training needed to nurture and develop their business beyond a one-woman enterprise. In many cases, funding is needed to buy computer equipment and training is essential in teaching women the importance of the Internet as a business tool in international trade. More women need to be made aware of the networking systems that are in place in their area which have been set up to assist them. In terms of recommendations for financial institutions there is one significant message that this study highlights. Each business plan must be assessed on individual merits and not on the gender of the entrepreneur. This way, it is possible to avoid issues of gender discrimination. Finance for small female-owned businesses must be made more accessible and the attitudes of some managers towards women business owners need to be addressed.

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# The Analysis of Markets in Marketing: Weakness in Marketing Theory



FELIM O'ROURKE ★

Over 30 years ago, Michael Halbert (1965: xxv) wrote:

There is a great deal of data and knowledge already available about the operation of the marketing system; there is relatively little available to marketing theorists about the conceptual and formal requirements for organising and analyzing this knowledge ... that adequate theory will present us with a much more coherent, understandable and useful picture of the entire marketing process.

Marketing theory is particularly weak in the area of markets. Marketing does not have a theory of markets comparable with the theory of markets in economics. Leading textbooks, such as Kotler's *Marketing: An Introduction* (with Armstrong) (1999), often devote less than one page, from many hundreds, to a discussion of markets. In his textbook on marketing, Baker (1996: 69) confirms that this is the norm.

## History of Marketing

Bartels (1963: 48) has described the development of marketing as an academic discipline in the first decade of the 20th century in the US. This decade saw a very strong reaction against the *trust* as a business model in the US. The trust had been used to achieve monopoly power by firms in many of America's leading industries. Marketing was central to the development of the new business model that replaced the trust as the dominant business model.

Economics played a major role in the early development of marketing by providing teachers a forum for discussion of and a theoretical base for the discipline. Many of the early teachers of marketing, including Brown, Cherington, Copeland, Hagerty and Litman, were graduates in economics. Bartels (1962: Preface) has described how "early marketing economists began to hold

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professional meetings under the aegis of the American Economic Association". These early teachers of marketing used the theory of markets from economics as the theoretical background for their "practical" discussion of markets. Litman (1950: 222) wrote:

There was one guiding principle to which I strove to adhere. It was that business courses in colleges should deal with fundamentals rooted in the science of economics.

The other major source from which the early marketing teachers drew was the actual practice of leading businessmen. The very significant efforts of Hagerty and Litman to learn best business practice are described in their *Journal of Marketing* articles (1936, 1950). In 1911 the establishment in the Harvard Business School of the Bureau of Business Research and the use of businessmen as "living cases" as described by Cruikshank (1987) can be seen as part of this effort to ensure that marketing courses and business programs were based on best business practice.

### **Market Theory in Economics**

At the start of the 20th century the theory of markets in economics was quite different to what it became in the 1920s and 1930s. Machovec (1995: 16) states that markets were seen as arenas where firms competed with each other in a variety of ways and that this "rivalrous competition" was seen as leading to improvements in living standards. The great American economist John Bates Clark (1914: 25) wrote:

With the preservation of competition is bound up that general progress in things economic on which hang the hopes of every class of men.

Cruikshank (1987: 70) argued that this market theory of economics was used as a theoretical underpinning for marketing. Converse (1951: 16) and Bartels (1963: 51) have argued that marketing in this period was a kind of "applied economics". Marketing textbooks evolved a standard approach that emphasised real-world markets including commodity markets. Brown's *Marketing* (1925), for example, has fifteen chapters dealing with important real-world markets, including nine commodity markets.

The "rivalrous competition" understanding of markets in economics was replaced in the early part of the 20th century by the theory of "perfect competition". Unfortunately for marketing as a discipline, virtually every marketing activity, including product differentiation, branding and advertising, is incompatible with the pre-conditions for perfect competition. Machovec (1995) shows that marketing, seen from the perspective of perfect competition, became a source of "market imperfections" and that a strong bias against marketing, especially advertising, developed in and became a feature of the standard economics textbook.

### **Marketing Adopts a “Managerial Approach”**

During the 1920s the practice and skills of marketing were developing rapidly. Significant advances were made in many areas of marketing including market research, sales management and branding. In the area of market research, for example, Bartels (1962: 106) noted that the first book on the subject was published in 1919 and that ten more books on the subject were published during the 1920s. Marketing was starting to play a more important role in large enterprises. Business leaders such as Alfred P. Sloan of General Motors and Neil McElroy of P&G developed new thinking on the role of marketing. In 1920, Sloan took a chaotic product range and replaced it with a range of brands from Chevrolet to Cadillac focused on distinct price ranges. The editors of *Advertising Age* (1975) describe how McElroy, in 1931, just six years after graduating from Harvard, proposed the brand management system within P&G.

During the 1930s and 1940s, the management of the marketing function in the larger corporations expanded rapidly and became more professional. This created major opportunities for the expansion of marketing as a discipline in the universities to supply the professional marketing personnel – including market researchers, marketing managers and brand managers – being sought by the larger enterprises. This rapid growth of opportunities in marketing and marketing management inevitably increased the focus within marketing on the management of the function.

Bartels (1963: 63) described how a new “managerial approach to the study of marketing” started to emerge around 1940. This new managerial approach was designed to train practitioners for careers in marketing which were opening up as US business adopted the “marketing concept”, as described by King (1963: 76). The textbooks written for the new format usually contained almost no discussion of markets or market theory. One of the first books to reflect this change of focus was written by Alexander, Surface, Elder and Alderson in 1940.

### **The Role of Perfect Competition**

In the 1920s and 1930s, perfect competition theory served two distinct roles in economics. In writing about perfect competition in 1957 George Stigler (1965: 262) stated:

We wish the definition to capture the essential general content of important markets, so that the predictions drawn from the theory will have wide empirical reliability. And we wish a concept with normative properties that will allow us to judge the efficiency of policies.

Perfect competition was therefore both a model for use in analysis and an ideal market.

The context in which perfect competition emerged as an ideal market has changed and this has altered the role of perfect competition. Perfect competition survives in modern economics, primarily as a model for use in analysis. There is no widely-used modern textbook, of which I am aware, which treats perfect

competition as an ideal market. The prejudice against marketing activities, linked to the concept of perfect competition as an ideal market, has also disappeared.

### **Industry Structure**

The study of imperfect competition in economics developed into a branch of economics that is called “industrial organisation” (IO). The IO discipline began in the 1930s and since then it has developed a sophisticated theoretical framework for the analysis of real-world markets with solid empirical support.

Cabral (2000: 12) shows that the structure–conduct–performance (SCP) paradigm is central to IO. This paradigm sees the performance of an industry being determined by the conduct of the firms in the industry and the conduct of the firms being determined by the structure of the industry. According to Cabral (2000: 12), IO sees the structure of an industry as primarily determined by two variables: the number of sellers and the degree of differentiation

In contrast, marketing does not define industry structure but implicit in marketing is the belief that industry structure, in the IO sense, is determined by three variables: the number of sellers, the degree of differentiation and the nature of the relationship between a firm and its customers. The importance of the number of sellers or competitors is so obvious that it is almost never mentioned, though it is always understood. The importance of differentiation has been explicit in marketing from the early years of the discipline.

The third variable, the nature of the relationship between a firm and its customers, is one of the central themes of modern marketing. Kotler (2003: 12) stated:

Increasingly, marketing is shifting from trying to maximise the profit on each individual transaction to building mutually beneficial relationships with consumers and other parties.

The nature of the relationship between firms and their customers appears to be very important in the evolution of markets. The development of commodity markets in the US during the 19th century appears to have been closely linked to the weakening of relationships between producers and their customers. (This issue is discussed in some detail later in the paper.) If the weakening of relationships was a key element in allowing the development of commodity markets, where firms have no market power, and building complex relationships, as is argued by the marketing discipline, is a key element in building market power, then we must conclude that the nature of the relationship is a key variable in determining industry structure.

An attempt is made herein to relate industry structure to the three variables discussed above.

### **The Colour Triangle**

It is possible to represent three variables on two dimensions where the variables have defined ranges and where they have a trade-off relationship with

each other. An example of such representation is the Goethe Colour Triangle. The colour triangle is a way of representing how all the colours are related to the three primary colours. Each of the three angles of the triangle represents one of the primary colours and all positions away from the corners represent different combinations of the primary colours. In the colour triangle each of the primary colours (variables) has a defined range from 100 per cent saturation with a colour to complete absence of that colour. Each angle represents 100 per cent saturation with a primary colour and the side opposite that angle represents the complete absence of that colour.

There is a trade off between the colours with reductions in any colour, as one moves from the related angle of the triangle, being offset by increases in the other colours. Every point on the triangle represents a 100 per cent saturation with colour but this can be made up by any combination of the primary colours, for example the centre of the triangle represents 33.3 per cent saturation with each colour. All the non-primary colours are got from the combination of the primary colours, for example green is got from mixing blue and yellow and it is located on the triangle half-way between the angles representing blue and yellow on the side opposite the angle representing red.

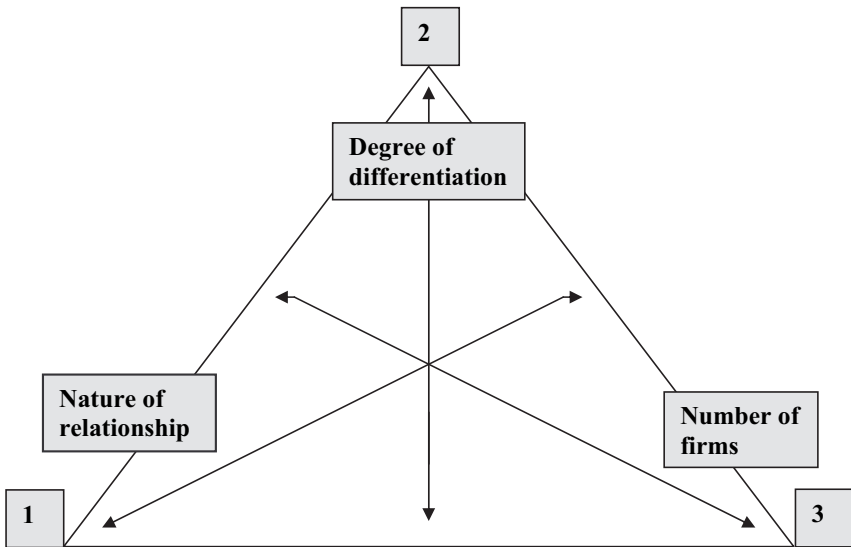
The three variables linked to industry structure can be represented on two dimensions using a triangle similar to the colour triangle. The three variables, which appear to determine industry structure, have defined ranges. The range of the number of firms is from one to a large number. The range of the degree of differentiation is from unique to identical. The range of the “nature of relationships” is from no relationship to a complex relationship. We will represent the situation where there is only one firm by one angle of the triangle and this will mean that the side opposite will represent a situation where there are many firms. We will represent the situation where the product is unique by one angle of the triangle and this will mean that the side opposite will represent a situation where products are identical. We will represent the situation where there is no relationship between a firm and its customers by one angle of the triangle and this will mean that the side opposite will represent a situation where there is a complex relationship between a firm and its customers.

The three variables determining market structure, specified in this manner, appear to have a trade-off relationship with each other. For example where a firm has no relationship with its customers the product being exchanged will normally be standardised and there will usually be many firms. Business history indicates that the role of traders and intermediaries, who emerge in markets where firms have no relationship with customers, are crucial in facilitating the entry of firms and driving product standardisation. The pressures towards standardisation in US industry, after the development of the railways, which sundered relationships between producers and their customers, are discussed below. Where the firm has a complex relationship with its customers this will facilitate product differentiation and may create barriers to entry. This means that the hypothesis that there is a trade-off between the three variables determining market structure is not unreasonable.



The market categories and the understanding of market dynamics derived from this hypothesis appear to support its validity. These market categories coincide with those widely used by business analysts. The understanding of market dynamics derived from this hypothesis is useful in interpreting the evolution of markets and is particularly applicable to the evolution of US markets over the period 1840 to 1910. We will therefore assume that there is a trade-off between the three variables determining market structure. We can represent these three variables on an industry structure triangle below.

**Figure 8.1: Industry Structure Triangle**



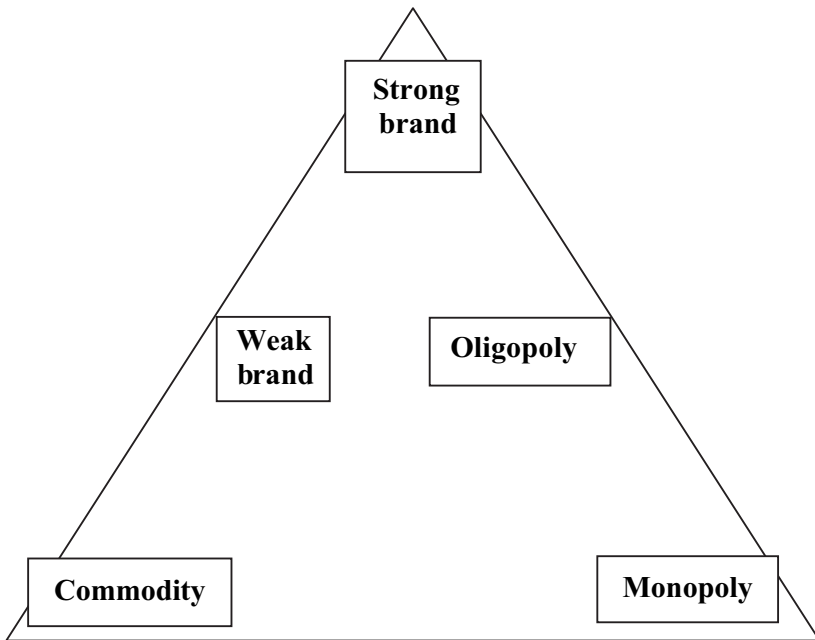
The distance from each of the three points of the triangle to the opposite side will represent one of the variables. We will use the point of the triangle at 1 to represent a situation where there is no relationship between the firm and its customers, the point at 2 to represent a situation where the firm’s product is unique and the point at 3 to represent a situation where there is only one seller. Positions opposite each angle represent the other extreme on the appropriate scale, namely: the side opposite 1 represents a situation where the firm has a complex relationship with its customers; the side opposite 2 represents a situation where the firm is producing a product identical to that of its competitors; and the side opposite 3 represents a situation where there are a very large number of competitors.

**The Market Power Triangle**

Different positions on the industry structure triangle will result in different market types. Point 1 on the triangle represents a market situation where the

firm has no relationship with its customers, where the firm's product is identical to that of its competitors and where there are a large number of competing firms. This is a "commodity market". Point 2 represents a market situation where the firm's product is unique, where the firm has a complex relationship with its customers and where there are many competitors. Marketing activities are designed to ensure that the unique product matches the needs of the target market and that the complex relationship with the customer builds customer loyalty thereby creating a strong brand. Point 3 represents a situation where the firm has a monopoly. In a monopoly, the firm always has a complex relationship with its customers but the issue of differentiation is irrelevant.

**Figure 8.2: Market Power Triangle**



We can also locate a whole range of other market types on the triangle including "weak brands" and "oligopoly". Weak brands leave the firm selling in a market type close to a commodity market. The oligopoly market represented above is "differentiated oligopoly". Differentiated oligopoly arises where a small number of firms sells competing but differentiated products – the soap powder market is an example of this. We will call this triangle the market power triangle because it can be used to illustrate the level and source of the market power held by a firm selling in a market.

Because it is based on the variables considered important by economics, industrial organisation and marketing, the market power triangle, should allow us to draw together the insights into markets from these three disciplines.

In the analysis of commodity markets we can draw heavily on the modern theory of perfect competition. Sloman (2003: 149), for example, defines perfect competitions as:

A market structure where there are many firms; where there is freedom of entry into the industry; where all firms produce an identical product; and where all firms are price takers.

In effect, for today's economists, perfect competition is merely a commodity market with no barriers to entry and exit. All that needs to be done to adapt this theory for use in marketing is to change the perspective to that of the individual firm operating in the commodity market/perfect competition. There is an enormous historical data bank available about the behaviour of commodity markets. This is especially true about basic food products that have been traded on commodity exchanges for over 150 years. The importance of commodity markets, including energy markets, is so great that it is very easy to justify their study as part of a business program and the appropriate course for such study is marketing.

The monopoly theory from economics can be used to explain the market situation faced by a firm which is the only seller in a market. All that needs to be changed is the attitude to profit and barriers to entry. High profits resulting from monopoly power are seen in economics as undesirable but are highly desirable from the perspective of the firm. Equally, any opportunity to create barriers to the entry of competitors is desirable from the perspective of the firm but frowned on by economics.

IO provides significant insights into the operation of oligopoly markets. These insights are supported by solid empirical research and a data bank of case studies.

The insights into differentiation and customer relationships that are at the core of marketing can be used to explain the market situation of a firm with a strong brand. Since a strong brand is a kind of monopoly, the theory of monopoly from economics can help to explain the market situation facing the firm.

### **The Market Power Triangle and Strategic Analysis**

It may be possible to use the market power triangle in the area of strategy and allow marketing to contribute more effectively to the discussion of strategic issues. Hunt (1994) has shown that leading thinkers have been pointing out the weaknesses of marketing in the area of strategy since the 1980s. In the early 1990s, Day (1992: 323) wrote that while

Marketers appear comfortable with the assertion that marketing should play the lead role in charting the strategic direction of a business...other business functions and academic disciplines don't share this assumption and have been actively eroding the influence of marketing in the strategy dialogue.

Day then goes on say:

Within academic circles, the contribution of marketing, as an applied management discipline, to the development, testing and dissemination of strategic theories and concepts has been marginalised during the last decade.

Business analysts, in the discussion of strategic issues, use the market categories identified by the market power triangle. This is especially true of financial commentary on the pharmaceutical industry. On Monday 26 July 2004, for example, the newswires reported that Mylan Industries and King Pharmaceuticals had agreed to merge. Both Dow Jones and Reuters, in reporting on the proposed merger, discussed the drug market in terms of patent protection, branding and generics. Dow Jones (Abboud and Berman, 2004) described Mylan as a “generic drug-maker” and said that generic drug-makers were attempting to expand into the “highly profitable branded-drugs business”. In discussing the problem of off-patent drugs they said “competition in this commodity business is intense, squeezing margins to razor-thin levels”. Some writers on strategy, such as Porter (1985), focus on strategies for competitive situations and therefore ignore the monopoly market. Two of Porter’s generic strategies – “cost leadership” and “differentiation” – fit in very well with the market categories of the market power triangle.

The market power triangle may therefore allow the integration of insights from marketing and business strategy and both strengthen marketing in the area of strategy and allow the strategy discipline to draw more easily on marketing.

### **US Business History**

The market power triangle can also be used to interpret aspects of business history including 19th century US business history. Historians often describe the US economy before the building of the railways in the middle of the 19th century as a set of “island economies”. These “island economies” existed because overland transport was so difficult and expensive that most production was for the local market. These “island economies” were dominated by agricultural production, as is shown by the 1840 US Census.

Bartels (1962: 22) and Chandler (1990: 52) have described how the building of the railways in the 1830s and 1840s integrated the US economy and triggered a remarkable period of economic growth which transformed an agricultural economy into the world’s leading manufacturer producing about 30 per cent of world manufacturing. The growth and integration of the economy created opportunities for large-scale manufacturing for distant markets and ushered in a completely new business era. Tedlow (1990: 10) has described this period as the “era of commodities”. In the era of commodities the retailer usually bought a standardised item in bulk from a wholesaler. For example, the retailer bought tea in “tea chests”, which held over 100lbs of tea, and soap in

large bars by the “soap box”. The retailer weighed and packed tea and cut pieces of soap from large bars according to customer requirements.

Hotchkiss (1938) shows that the growth of middlemen, including large wholesalers and myriads of agents, who acted as distributors for the large manufacturing enterprises was a feature of this “era of commodities”. Bartels (1962: 24) and Chandler (1990: 59) argue that these middlemen, especially the large wholesalers, had acquired a powerful position within the distribution system at the end of the 19th century. Koop has described in detail the operation of these middlemen around 1907. Koop (2001: 66) went on to note that the reliance on middlemen had the major disadvantage from the manufacturer’s point of view, that he remains in ignorance of the names of the customers to whom his goods are sold ... and his hold on the market is far from strong.

This era is also characterised by the rise of the commodity exchanges, including the Chicago Commodity Exchange which was founded in 1848. The link between the railways, the commodity exchanges and standardisation is illustrated by the fact that the Chicago exchange was set up in the year that the railway arrived in the city and by the very heavy focus, as described on the Chicago Board of Trade Website, of the exchange on standardisation in its early years.

The growth of commodity markets in the US and elsewhere coincided with the physical distancing of manufacturers and food producers from their customers and the emergence of middlemen. This meant that, as Koop noted, the relationship between a firm and its customers was minimal and this weakened “his hold on the market” and allowed the middlemen to standardise products and allowed markets to become commodity market.

The “cut-throat competition”, low profit margins and inherent instability of commodity markets made long-term business survival extremely difficult. Cruikshank (1987: 64) illustrates this extreme difficulty by focusing on the food industry where of the 63 major firms in existence in the US in 1873 only one, HJ Heinz, was surviving in 1900. Clark (1914: 55) argued that the difficulty of business survival created an impetus for the consolidation of US business using Rockefeller’s Standard Oil Trust as a business model. Manns (1998: 14) argues that the consolidation of the oil industry by Standard Oil was facilitated by massive overcapacity that led to a situation where “most if not all refineries were losing money”.

The last great consolidation was the setting up of US Steel (which became the world’s largest corporation) in 1901 through the merger of ten steel companies. Bittlingmayer (1996: 391) shows that the consolidation movement created a situation where most of the leading industries were dominated by a handful of firms. Clark (1914: 7) and Chandler (1977: 289) show that the power of the monopolies provoked a strong popular, political and legal reaction in the first decade of the 20th century. Bartels (1962: 26) wrote that Roosevelt was elected on a tide of movement for economic, social and political reform of the evils which had grown out of advanced industrialisation.

Roosevelt, after reviving the Sherman Anti-Trust Act by taking legal action against Northern Securities in 1902, went on to take actions against 43 other major corporations before the end of his presidency in 1909.

The reaction against the trusts forced American business to abandon the monopoly as a business model. This reaction has been studied in detail, in the case of the National Biscuit Company, by Chandler (1977: 335) and, in the case of Kodak, by Tedlow (2001: 97). Chandler (1977: 285) shows that these companies were forced to use a new business model that combined economies of scale in production with control of their distribution system. Marketing was central to this new business model. A number of firms, including Heinz and Proctor & Gamble, had developed successful brands through marketing between 1870 and 1901 as shown by Koehn (1999) and by the editors of *Advertising Age* (1975) but this business model only became high profile after 1901. A symbol of the new approach was the hiring of J. Walter Thompson in 1902 by Lever Bros, one of the world's great marketing organisations, to advertise their Lifebuoy and Lux brands of soap in the US. Koop (2001: 7) observed this new approach in its infancy during his 1906/07 tour of the US and wrote that the producer ceases to be purely a manufacturer and engages in the marketing of his products.

Marketing involved these firms taking responsibility for the distribution of their products and this involved replacing the middlemen as far as possible. Koop (2001: 7) described this process:

. . . they wish to come into closer contact with the consumer and to do away with some of those persons who stand between them; in such cases they may be said to market their own products.

The operation of competitive forces in the US over the period 1840 to 1910 can be summarised as follows. The period from 1840 to 1870 saw the sun-dering of relationships between manufacturers and their customers and the emergence of the commodity market as the dominant market type in the US economy. Businesses reacted to the difficulties inherent in commodity markets over the period 1870 to 1900 by industry consolidations designed to create monopoly power. The political and legal response to monopoly led to the emergence of branding as a business strategy and to the birth of marketing. This interpretation of US business history fits in perfectly with the market clas-sification of the market power triangle.

### **The Market Power Triangle as an Integrative Tool**

This paper opened with a quotation from Michael Halbert indicating that there was a major weakness in marketing theory. Solving this weakness may require marketing to draw heavily on other disciplines. This paper draws on economics, industrial organisation and marketing to develop a classification of markets. This classification of markets can be represented by a triangle analo-gous to the colour triangle and which we call the market power triangle.

The market categories identified by the market power triangle are useful in the interpretation of business history and in the discussion of strategic issues in business. The market power triangle may turn out to be a useful tool to integrate insights from economics, industrial organisation, marketing, business strategy and business history to give us, in Halbert's words, "an understandable and useful picture of the entire marketing process".

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# The Market for Organic Milk Products in Ireland: Irish Case Study in Comparison with Danish and Austrian Cases



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## INTRODUCTION

In recent years there has been considerable market growth for organic food products in Europe. As a consequence of, or a contributor to, this growth, the land under organic management in Europe more than tripled and further significant increases were forecast (Offermann and Nieberg, 2000). Not all countries have shown similar enthusiasm for organic products, its leaders being Austria, Denmark, Finland, Germany, Italy and Switzerland (Henchion et al., 2002; Michelsen et al., 1999).

The dairy industry is an important part of Ireland's economy, accounting for one-third of total agricultural output. The Irish liquid milk market alone is worth €457 million annually, with a per capita consumption of 143 litres per annum. Almost 98 per cent of the population consumes liquid milk; consumption of other milk products including cheese, yoghurt and butter is also high. However, the consumption of organic milk products is extremely low and there are only about 25 farmers involved.

### Objectives

The objectives of this paper are to:

- explore the factors influencing the growth of organic milk products in Austria and Denmark;

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- discover if the growth factors in Austria and Denmark are being or could be used to drive growth of organic milk products in Ireland.

#### RESEARCH METHODS

Porter's Diamond Model was the construct used to examine the drivers of growth in the three markets examined. In depth interviews were held with twelve key personnel in the following organisations in Austria and Denmark:

- The Danish Dairy Board
- The Danish Organic Centre
- FDB (major retailer)
- MD Foods (largest milk processor)
- The Danish Organic Research Institute
- The Austrian Ministry of Agriculture
- Billa (the largest Austrian retailer)
- Tirol Milch (a milk processor)
- Agrarmarkt Austria (food marketing organisation)
- Ernte (organic farming organisation)
- Institute Fur Agraroeconomik, University of Bodenculture (a university agricultural faculty)
- SGS Austria (a certification body).

Key players in the Irish dairy and retail sectors were then interviewed in person. The Delphi method was used to predict future market shares for organic milk products in Ireland.

#### PORTER'S DIAMOND MODEL

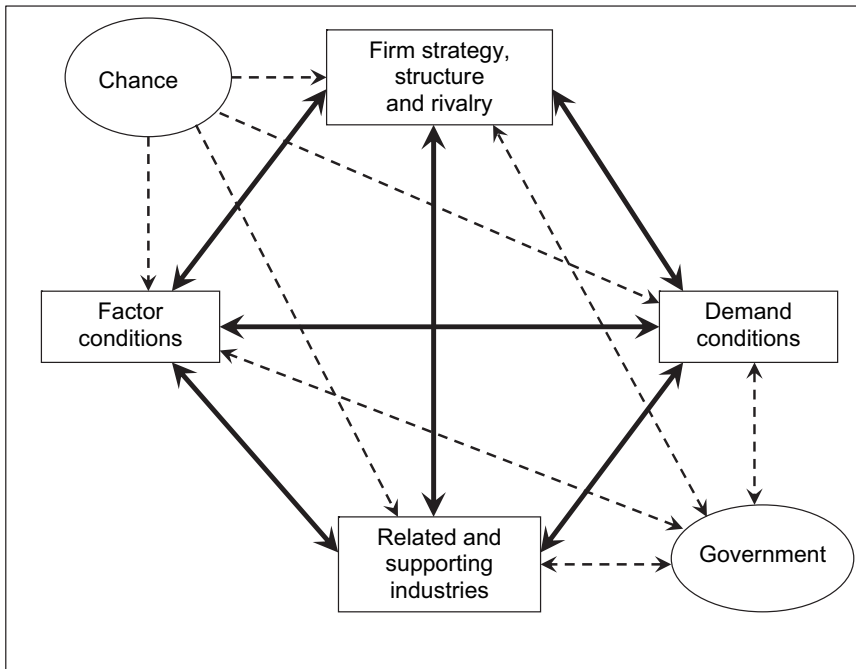
Porter's Diamond Model, consisting of six elements as shown in Figure 9.1, conceptualises how a nation can achieve success in a particular industry. While the elements work independently an advantage in one element can produce, or improve, an advantage in another. However, an advantage in all of the elements is not necessary for industry success. Individually and as a system, the determinants create the context within which the nation's firms are created and compete (Yetton et al., 1992). The elements of the model are briefly outlined below.

#### **Factor Conditions**

These are the factors of production, such as land, labour or infrastructure, which are needed to compete in an industry. Factors can be basic or advanced, generalised or specialist and so assist or hinder a firm's potential.

Factor conditions are most strongly influenced by domestic rivalry. Local competitors will stimulate development of skilled human resources, related technologies, market-specific knowledge and specialised infrastructure.

**Figure 9.1: Porter's Diamond Model Showing Interdependent Variables that Determine the Competitiveness of an Industry**



Competitors will attempt to develop appropriate factors to gain competitive advantage. When factors are advanced and specialised in these markets, it is possible to gain sustainable competitive advantage. Production and processing are the main factor conditions considered in this study.

### **Demand Conditions**

This means the type of market for products or services. It is in the market where the essential advantages of the enterprise are created and sustained and where a firm's strategy is developed and implemented to take advantage of demand conditions. Naturally, the existence of large and/or growing market segments for the products in question results in favourable market conditions. For smaller firms, competitive advantage can be achieved in smaller niche markets in which larger firms may not be interested.

Another characteristic is sophisticated and demanding buyers, who surprise firms within the industry to produce specific products. In this study, consumer demand, market size and retailer premia and promotion are the main entities considered under demand conditions.

### **Related and Supporting Industries**

The existence or non-existence of related and supporting industries may assist or hinder the development of the industry in question. Examples would be

cost-competitive suppliers, supportive public R&D and distribution channels eager to support the products in question. As will be seen later, there is a network of a small number of supportive players pursuing the same goals in Austria and Denmark.

### **Firm Strategy, Structure and Rivalry**

This deals with the conditions that govern the creation, organisation and management of companies, as well as the domestic rivalry of firms. It includes strategies, structures, goals, managerial ways, individual attitudes and intensity of rivalry in the industry. The strategies and roles of dairy processors and retailers in Denmark and Austria were analysed to identify whether similar strategies are feasible in the Irish situation.

### **Government**

Government policy can have a critical influence on the success of an industry. For instance, subsidies and other support schemes affect factor conditions. Demand conditions too are affected by such issues as product regulation and standards. Fiscal and tax policies affect industry potential. Apart from this, government policy, as is evidenced in Austria and Denmark, was a key driver of development of the organic food industry.

### **Chance**

Certain events occur outside the control of firms, such as pure inventions, breakthroughs in technologies, wars, external political developments and major shifts in foreign market demand. The BSE scares and the “foot and mouth” problems were chance events that had huge impacts on the food industry. Chance creates discontinuities that change the competition. Exploiting chance may turn a situation to advantage.

## **THE DANISH ORGANIC MILK MARKET**

As early as the late 1970s Danish farmers detected consumer interest in organic foods and so established the Danish Association for Organic Farming in 1981. However, by 1986 there were only 8 organic farms in Denmark. By 2002 this number had risen to 750 and organic dairy farms now account for about 6 per cent of all dairy farms.

### **Factor Conditions**

While a small country, Denmark has excellent arable land and, allied to its climate, is well suited to dairy production. Danish farmers have adapted well to new farming techniques, including introducing new milking herds; they are productive and have achieved an international reputation for producing quality food products.

Until the mid-1980s, the farmers processed their own organic milk, selling it at the farm gate or to local markets. Some was also sold to conventional milk

processors. A key development, as explained by Boon (1999), occurred in 1988 when MD Foods (now Arla Foods), Denmark's largest conventional dairy company, began processing organic milk. Further impetus was added in 1992 when Klover Maelk (since merged with MD), then the second largest conventional dairy company, also began processing organic milk and, like MD Foods, supplying organic liquid milk and related products to the market (Boon, 1999). The entrance of these significant players provided a major kick-start to the Danish organic milk market. Added to this, farmers received a 30 per cent premium for organic milk, ensuring that organic dairy farms could outperform conventional farms. These factors incentivised farmers to convert to organic production (Boon, 1999).

### **Demand Conditions**

The profile of consumers of organic foods has changed considerably over the years. In the early 1980s the pioneering customers were a mixture of the health conscious, traditionalists, ecologically aware artistic types, trendies and yuppies. Now consumption occurs across all market segments, the more frequent purchasers being families with children resident in cities and large towns.

By 1997 a much smaller percentage of people (13 per cent) said they never bought organic food (compared to 70 per cent in 1990) (O'Doherty Jensen et al., 2001). The review of Torjusen, Sangstad, O'Doherty Jensen and Kjaernes (2004) provides considerable insight into European consumer perceptions. The motivations to use organic foods are many, including healthier living, and environmental considerations are highlighted in a number of studies (Arve, 1999; Beckmann et al., 2001; Danmarks Statistik, 2002; O'Doherty Jensen et al., 2001; Wier and Calvery, 1999). Animal welfare concerns are mentioned by many consumers (Beckmann et al., 2001; Danmarks Statistik, 2002). Quality and sensory aspects are also frequently mentioned by most of the reports. One study mentions curiosity and desire to be fashionable (Arve, 1999). With the increase in purchasing, market shares have grown also and these vary considerably across different foods. Organic liquid milk is one of the most popular purchases; among purchasers dairy products had been bought by over 90 per cent in the last week (Fibiger Norfeldt, 2000). Organic products with large market shares include wheat meal flour (22 per cent) and eggs (13 per cent).

### **Firm Strategy, Structure and Rivalry**

In the early 1990s, farmer representatives approached FDB, a major retailing group, to persuade them to stock organic milk products. They found a consumer interest related to motivations about their own health and environmental concerns. Subsequently, FDB and the dairy processor MD Foods became key drivers in the development of the Danish organic milk market. Both companies developed specific marketing plans for organic milk products. Klover Maelk, then the second largest conventional dairy company, began processing in 1992.

Initially, "green" consumers interested in an alternative to conventional milk were targeted. Niche strategies were used to focus on specific target

markets emphasising product quality. The product went through a niche life cycle but quickly developed to a mainstream product.

In October 1993, FDB dropped organic prices from 40 per cent to 20 per cent above conventional prices and increased advertising and in-store promotions to promote organic foods. As a result significant increases in organic milk sales were achieved. This marketing approach is claimed to have been a major influence on the development of the organic market in Denmark (Torjusen et al., 2004). It allowed the mainstreaming of distribution, centralised wholesale purchases and related economies of scale. Nielsen, Linnenberg and Vestergaard (2004) point out that a minimum premium was charged in the same way as for conventional foods which, along with the overall distribution and marketing strategy, meant prices could be kept reasonably low for many products.

By the mid-1990s the strategy of both companies was so successful that demand exceeded supply. Some of the FDB stores such as Kvickly and Irma began to specialise in organic foods.

FDB, confident that they had successfully established a loyal market, encouraged other processing companies to produce organic milk products and assist in further developing the market. Specifically, MD Foods and Klover Maelk developed strong advertising campaigns highlighting organic milk as a natural premium product. In 1996, as part of their campaign, MD Foods launched the “Harmonie” organic milk brand. This and the lower prices helped develop consumer loyalty such that “Harmonie” is now the principal brand in this category in Denmark. By the year 2000, it was estimated that MD Foods had 80 per cent of the market. Promotion continues to stress the healthiness and environmental friendliness of organic products.

### **Related and Supporting Industries**

Different organic food markets have also helped the organic milk market grow. All other sectors are growing, especially the fruit and vegetable market and the bakery market and each of these is supporting the other. This is largely because consumers satisfied after trying one type of organic product are more likely to purchase another.

### **Government**

In 1987 the Danish government introduced legislation to regulate the organic industry. In 1995 the Ministry of Agriculture devised an Action Plan (Mathiesen, 1999) which set objectives for development including strengthening R&D, increasing the market within the public sector and making farmer conversion more attractive. The government developed a second plan in 1999 (Organic Foods Council, 1999).

The government also introduced the ø label, the national organic certification mark (Mathiesen, 1999). The government actively promoted organic food including the certification mark with a focus on creating brand awareness. Brand recognition is now very high and Danes see the brand as a symbol of quality.

Organic production by farmers is subsidised in Denmark. Policy debate suggests that a tax on polluting inputs would help reduce pollution and encourage a move to organic production.

Thus, the Danish government was among the first in Europe to introduce legislation on organic farming and also subsidised farmers to bridge conversion to organic farming, supporting farmers with R&D and public sector purchasing.

### **Summary**

Farmers, processors and retailers, and government support all working together have acted to develop the market for organic milk. Danish farmers established the Danish Association for Organic Farming in 1981. Consumers were becoming increasingly concerned about conventional methods of farming, specifically about the affects of the over-use of fertilisers on the environment and general health. Economic analysis showed organic dairy farms could outperform conventional farms due to price premiums and government subsidy support. Farmers perceived organic foods as a means of differentiating themselves from competitors and earning increased profits. As a result, output of organic foods increased from 1986 onwards.

While in Denmark in the 1980s there was a growing public support for organic foods and farmer interest, three organisations stand out as the main drivers of the successful development of organic foods and specifically organic milk. These organisations were MD Foods (now Arla Foods, Denmark's largest conventional dairy), the retail group FDB and finally the government.

In Denmark, many unorchestrated forces came together to move public opinion towards organic foods. The initial push came from farmers and a health/environmentally conscious public. At the same time two astute businesses sensed the market attractiveness of organic milk products. While government support played its part, it was the combined movement towards organic food that fostered the growth of the sector.

### THE AUSTRIAN ORGANIC MILK MARKET

Much of the interest in organic farming in Austria came from the fear that, following EU membership, Austrian agricultural products would not be as competitive as those from other EU countries. In 1991 the Austrian government started a subsidy scheme to organic farmers (Austrian Ministry of Agriculture, 1999 No. 93). In 1995 Austria joined the EU, thus allowing the government to make payments to organic farmers under Regulation 2078/92.

### **Factor Conditions**

Austrian farms are not large, with most farmers in the country having less than 50 cows. However, the farmers are recognised as capable. In 1993 there were 7,000 organic farms in Austria and by 2002 this had grown to around 20,000, nearly half of which had a dairy quota (9,150 farms in 2002).

Many organic farmers in Austria are members of organic farming associations. These associations have even stricter guidelines than EC 2092/91 or the codex Alimentarius Austriacus. Being part of an association gives the farmers the right to use that association's label for marketing their products. More than half of the organic farmers are part of the ERNTE organisation that negotiates prices on their behalf. The ERNTE label is displayed on products sold by member farmers. In 1995 the organisation negotiated contracts with Billa, a major retailer, to guarantee farmers a market for five years.

### **Demand**

While there was a strong consumer demand for organic products in Austria, large promotional campaigns undertaken by retailers has driven market growth. The strategy of Billa, the main retailer, was a differentiation focus strategy. They focused on the different type of milk that they were offering. The product developed a niche in the market, focusing on high quality as well as its organic attributes. Billa were trying to fulfil the needs of a certain customer in the market. They were trying to satisfy the growing consumer interest in organic food. They also ensured that a correct understanding of the word organic was portrayed to consumers. Advertising was introduced in the stores to promote the organic milk and introduce consumers to it.

There is a concern about food safety in Austria and the BSE and salmonella scares have caused distrust among consumers (Datamonitor, 1999). This has contributed to the growth in organic food. Nonetheless, the main reasons for Austrians purchasing organic food are no different to other parts of Europe. As Klasz (1999) found for Austria, Jones and Tranter (2004) recently outlined the two main reasons for five other European countries (UK, Italy, Ireland, Denmark and Portugal), i.e. consumers perceive organic food to be better for their health and also more environmentally friendly due to a reduction of artificial fertilisers, pesticides and herbicides. The environmental considerations appear to be less important than health and safety. Other reasons for Austrians include knowing where the product came from, a better taste and a concern for animal welfare (Klasz, 1999). However, if the advertising campaigns had not been undertaken, many of those interviewed believe that consumer demand would not have been strong enough to drive the market.

Klasz (1999) also profiled the types of consumers who were buying organic food:

- People who see a strong link between food and health and who generally have a healthy lifestyle;
- People for whom environment protection is important and who prefer to buy food that is environmentally friendly;
- Well-educated people;
- Women (with children);
- Town dwellers;
- People who enjoy cooking.



Supermarkets are the main outlets for organic sales (87 per cent of organic sales (Datamonitor, 1999)). The main retailers in Austria are Billa and Spar, controlling over 50 per cent of the market between them.

In Austria, organic natural yoghurt has the highest share of organic milk products – over 10 per cent, closely followed by organic liquid milk at 9 per cent. The cheese and butter markets are still very small. The price premium for organic liquid milk fell from 30 per cent to about 18 per cent above conventional prices in recent years. The higher price premium has been a factor deterring consumers from changing to organic milk consumption. It is believed that the premium may fall a little lower in coming years due to over-supply.

### **Related and Supporting Industries**

Other organic food sectors have assisted the growth in organic milk products. In Austria, three segments have high market penetration – bakery and cereal, dairy products, and fruit and vegetables – though all segments have similar growth rates. The demand for each type of conventional food has helped stimulate the other.

The conventional dairy industry is also strongly related to the organic industry and organic milk products have become a part of the established dairy market.

### **Firm Strategy, Structure and Rivalry**

The role of Billa, the largest Austrian retailer, was a key market success factor in the growth of organic milk products. In 1994, recognising a trend towards healthier food and an increasing concern for the environment, Billa approached ERNTE, the farmers' organisation, to persuade farmers to produce organic foods. Starting with organic milk in 1995, Billa negotiated five-year supply contracts with organic farmers. While the processor's role was less important, three different dairies agreed to collect and process the organic liquid milk for the retailer. Billa anticipated that liquid milk products would gain a 10 per cent market share by the year 2000.

Billa produced and implemented a focused marketing strategy for organic liquid milk. The brand name "Ja! Natürlich" was developed to identify organic products and promotion, including advertising, clearly positioned the meaning and benefits of organic milk products. Starting with liquid milk, the organic milk products range quickly included yoghurts, butters and cheeses.

By the year 2000, just five years after launch, these products were well established and have become common products. Within Billa stores, organic milk products are sold alongside their conventional counterparts, targeting the health conscious, mainly women and children. Organic products command premium prices with organic liquid milk achieving approximately a 20 per cent share of all Billa's liquid milk sales.

While Spar has entered the market and introduced its own brand "Naturpur" for its organic range, Billa retains its outright leadership in sales of organic foods.

### **Government**

The Austrian government was the first in the world to fix guidelines for organic farming. In 1983 the Federal Ministry for Health and Environment Protection introduced organic rules (Hagg, 1999). In 1989 official guidelines for organic farming were introduced into the Austrian Food Codex. In 1991 Austria outlined the first regulations for organic production of animal-derived products. Since joining the European Union in 1995, Council Regulation 2092/91 has also applied to Austria.

In 1995 the government set up Agrarmarkt Austria, an organisation to promote Austrian food. A subsidiary group of AMA, Agrarmarkt Austria Marketing (AMA, 2000), ensures that farmers comply with food regulations. AMA Marketing also introduced a national organic label, the BIO label, which deals with subsidy payments to farmers for organic production.

There are two variations of the AMA organic label, one with indication of origin and one without. One label guarantees that the raw materials of the product originated in Austria; the other, without indication of origin, certifies that a product is organic though it may not have been grown in Austria. Imported raw materials can only be one-third of the finished product. The national label for organic food has been another positive influence on the growth in the market.

### **Chance**

Two chance factors were very influential in the organic milk market in Austria. Firstly, entry to the EU meant farmers had to find a more profitable means of farming and organic farming was chosen as one option. The second was the entry to the market of the retailer Billa, who was, like any business searching for competitive advantages, interested in developing a separate niche, and chose organic food to be one means to do so.

### **Summary**

The Austrian government was the first government to introduce legislation on organic farming. They have also subsidised farmers to help them through conversion and to establish themselves in organic production. This type of aid has resulted in almost one in every ten farmers in Austria farming organically. The retailer push was very important. Billa, a major retailer, set market targets and introduced an organic own-label brand, "Ja! Natürlich", positioned as a high-quality organic brand. Billa encouraged and contracted farmers to get involved in organic production. Billa's marketing has driven market growth and it continues to dominate retail sales. Without this drive consumer requirements for organic milk products would probably remain unsatisfied.

#### THE IRISH ORGANIC MILK MARKET

The Irish agriculture and food industry has long been a major contributor to the Irish economy. It is still one of the country's most important industries and remains a major contributor to Ireland's impressive export performance.

### **Factor Conditions**

The basic factors of production are the farmers producing organic products and their land and resources. In Ireland there are about 1,000 organic farmers (Department of Agriculture and Food, 2003). This includes those already converted and those in the process of conversion. The organic farms are generally smaller than conventional farms; almost 70 per cent of organic farms are smaller than 40 hectares, mainly producing vegetables and beef. Organic milk volumes are very low, with production less than 0.01 per cent of conventional milk production from about 25 farmers including conversion farmers.

There is only one processor of organic liquid milk in the country, Glenisk Dairies in Tullamore, Co. Offaly. They also process organic yoghurt. Donegal Creameries process organic UHT milk. Other small companies make some butter and cheese (WDC, 2001). For logistical reasons, all of the organic milk produced is not used in organic processing but sold to conventional processors. The farmers receive a higher price for their organic milk than they would receive for conventional milk. Even so, farmers are slow to convert due to increased labour and higher farm costs. There are more summer organic milk producers than winter milk producers because conventional winter milk prices are attractive to farmers. This causes problems for the processor who needs a stable supply to maintain shelf space in the retail outlets.

### **Demand Conditions**

The Irish organic market is in the early stages of development, yet in the last couple of years there has been an increase in consumer interest in organic products. This growth in interest has been associated with health and also with the taste of organic food.

Irish consumers of organic food are more likely to be in the ABC1 socio-economic group, female, married, from a small to medium-sized household and more likely to live in urban areas (Bord Bia, 2000). A more recent Bord Bia study found three distinct types of organic food buyers: those who purchase a lot, those who purchase a narrow range frequently and those who buy on an *ad hoc* basis (Bord Bia, 2003).

Organic milk is 20–30 per cent more expensive than conventional milk. The price premium for organic yoghurt is much lower. Organic cheese and butter premiums are generally a little higher than those of yoghurt or milk.

Bord Bia (2003) found most Irish consumers did not recognise any of the main organic certification symbols with only 19 per cent of consumers claiming to be familiar with the symbols. The main outlet for organic purchases is supermarkets, followed by health stores and specialist shops. Supermarkets control two-thirds of the market and most of these purchases are in the major urban stores. The demand for organic liquid milk and milk products is still quite small but increasing over time.

### **Related and Supporting Industries**

The Irish organic food market, worth about €38 million (Bord Bia, 2003), is in the early stages of development. In the last couple of years there has been an increase in interest generally in organic products. Fruit and vegetables emerged initially as the most important market and have maintained their importance (Roddy et al., 1994). The organic meat market is the next largest, followed by the dairy market. As yet, there is no evidence that other organic sectors have helped growth in organic dairy product markets.

For many years the Irish dairy industry has been a strongly competitive industry. Growth rates, productivity and investment for dairy products have been one of the highest in Europe (O'Connell et al., 1998). Nonetheless, more recently the need for rationalisation and product development has become a focus for discussion on the future of the sector (Promar, 2003). In this context, market development of organic milk products has been hindered by lack of market entry by any of the major processors.

### **Firm Strategy, Structure and Rivalry**

The largest dairy processor, Glanbia Foods, controls almost 70 per cent of the liquid milk market but has no organic products. The only major player to have entered the organic dairy market is Golden Vale, with an organic cheese. Thus, the two main rivals in the Irish market are the Tullamore-based Glenisk Dairies and Yeo Valley, an English-based company. Both companies are concentrating on organic yoghurt, which has the largest market share of all the organic milk products. It is estimated that organic yoghurt has over 5 per cent market share with a market value of about € million.

The other principal firms in the organic dairy market in Ireland are the super-market multiples. The multiples are gradually stocking more organic food. All the stores appear to have a positive attitude towards organic products. Organic products are usually placed beside the conventional equivalents. However, some stores are operating strategies where the organic dairy products are separated from the conventional products and given a special section. The range of products is limited and many stores in rural areas do not stock any organic dairy products.

Firms in the Irish organic milk industry have not been aggressive in developing the market and many of the firms are recent entrants. As yet the market has not been developed beyond a small niche market.

### **Government**

In 1990 the Department of Agriculture and Food set up an Organic Farming Unit to develop organic farming in Ireland. The Department authorised private inspection bodies to carry out inspection and certification (Mackin, 2002). There are three certification bodies in Ireland and discussions are ongoing on future certification in the context of new EU regulations.

The Department of Agriculture, Food and Rural Development operate the following two support schemes (Department of Agriculture, Food and Rural Development, 2002a):

1. Supplementary Measure 6 of the Rural Environment Protection Scheme (REPS). The financial assistance offered to organic producers is mandatory EU support.
2. Scheme of Grant Aid for the Development of Organic Farming under the National Development Plan 2000–2006. This offers financial assistance to farmers, groups, companies or cooperatives for grading, packing, storing and distributing organic products. This is the first major indication of a more active role being taken by the government in the sector.

The government has recognised the potential of the sector with the setting up of an Organic Development Committee. In a report in 2002 (Department of Agriculture, Food and Rural Development, 2002b), the committee recommended that major dairy processors give more serious consideration to allocating processing facilities to organic milk and encouraging some of their larger suppliers to convert. They also recommend the processors who take positive steps to develop the organic dairying sector be given practical support as needed by relevant agencies.

The Organic Development Committee recommended that a Steering group be set up to drive development of the sector. They also recommended a partnership working group be established to coordinate, facilitate and monitor training, education and advice for the sector and an organic Market Development Group be established with responsibility for developing a national marketing strategy for organic food. These groups have now been set up and are expected to facilitate developments in the coming years. Market developments of relevance to organic milk will include the design of a national organic label and establishing the feasibility of a new distribution channel linked to central distribution systems.

### **Chance**

The most significant chance events have been the BSE and the “Foot and Mouth” situations. It appears that they have not impacted the Irish organic milk market but BSE impacted negatively on conventional food production, reducing meat and in particular beef consumption. However, organic beef consumption probably rose (Mannion et al., 2000).

### **Expert Opinion**

In Ireland, additional research was undertaken with two separate industry panels, a Delphi and an in-depth interview panel. The panels included experts from dairy manufacturers and retailers. With the first panel, growth expectations were determined by the Delphi method (Ní Ghraith et al., 2004). The findings were later supported by in-depth interviews with industry experts in the second panel.

The organic liquid milk market in Ireland is expected to grow from almost zero to a 1 per cent market share in 2006. The organic yoghurt market is expected to have an 11 per cent market share and the organic butter and organic cheese markets will grow to 0.7 per cent and 2 per cent market shares by 2006 (Table 9.1).

**Table 9.1: Market Share 2000 and Predicted Shares 2006 for Organic Dairy Products**

	2000	2006
	%	%
Organic Milk	0.1	1
Organic Yoghurt	5	11
Organic Butter	0	0.7
Organic Cheese	0	2

Experts believe there is considerable consumer interest in organic milk products but a lack of supply is curtailing retailer involvement. They also feel that if farmers were paid more for milk and a large processor entered the market, they would be more encouraged to convert to organic production. The somewhat higher price of organic milk will not deter consumers provided the premium is not too high, but they believe a strong brand is needed for market development. Finding the right balance between farmer and consumer prices will be important for market growth and supply stimulation.

### Summary

The production situation in Ireland will not improve if retailers and processors do not become much more involved in market development. Unless there is a constant supply of organic milk, large processors will not enter the market, retailers will be unable to stock the products and therefore unable to satisfy consumer demand. While the new Steering Group recommended by the Organic Development Committee is expected to facilitate development, at present all the determinants and variables work individually. For a system to show competitive advantage, the determinants and variables discussed must work more closely and push the market to its true potential.

### IRELAND, DENMARK AND AUSTRIA COMPARED

Market share for organic liquid milk in Ireland is less than 0.1 per cent compared with over 20 per cent in Denmark and 9 per cent in Austria. Certain similarities present in the Austrian and Danish markets are not yet present in the Irish market. Both the Austrian and Danish markets are advanced organic markets. All the factors of the Diamond Model worked to grow the organic food market in Denmark and Austria. One of the dominant features of the Austrian and Danish organic milk industries is the strength of the key players in the market. Although farmers and consumers are very important, the influence of government and the firms in the industry has been the key success factors. The Austrian and Danish governments were the first in Europe to introduce legislation on organic farming and also subsidised farmers to bridge

conversion to organic farming. In Denmark, government action plans have encouraged and supported development. In both Denmark and Austria retailers have driven the market. For example, in Denmark, following approaches in 1993 from farmers' representatives, the major retail group FDB lowered organic milk prices to entice consumers to switch from conventional milk. This strategy increased sales and many consumers became loyal organic milk purchasers. The main processor in Denmark, Arla Foods, also supported the move to organic milk and successfully launched the "Harmonie" organic brand and moved the market from niche to mainstream. In Austria, Billa, a major retailer, was very influential. They set market targets, introduced an own-label brand – "Ja! Natürlich", positioned as a high quality organic own-label brand, and encouraged farmers to switch to and increase organic production by offering them five-year contracts at fixed prices.

At present in Ireland the elements of the Diamond Model, i.e. factor conditions, demand conditions, firm strategy, structure and rivalry, related and supporting industries, government and chance, are operating as individual factors in the industry. Due to this lack of integration, the development of the organic milk industry is restricted. The Irish market is underdeveloped. The strategies Irish firms, both processors and retailers, choose will be critical to market development.

To achieve high growth, processors, retailers and the government need to invest in the market. All of the Diamond elements are dependent on each other and the strengthening of only one of the elements will not necessarily lead to success. Production of organic milk products will not increase unless consumers, retailers, processors and government drive this development. Unless there is a constant supply of organic milk, large processors will not enter the market, retailers will be unable to stock the products and therefore unable to satisfy demand. Major expansion of the existing processor base or investment from large conventional firms will be necessary to develop brands and promote organic milk to consumers. If the Irish organic milk market is to develop to the stage that Austria and Denmark have reached, a strong and easily recognisable brand is required, such as the "Ja! Natürlich" or "Harmonie" brands.

High growth requires the Diamond elements to work interdependently to achieve a sustainable competitive advantage. The current situation in Ireland lags behind much of Europe. At present, countries such as Austria and Denmark are exporting organic milk products. This could adversely affect the strong conventional export market that Ireland holds. The conventional milk sector in Ireland is very competitive but has not shown an interest in organics, whereas in Denmark the largest conventional milk processor is the main player. The small size of the organic milk market means it is not a major area of rivalry at retail level. However, this could change if importers perceived that organic products provided an opportunity. The Irish dairy industry should consider the need to meet Irish and European consumer demand for organic dairy products to maintain its strong competitive position.

An increased role by government is a necessary but not sufficient condition for market growth. It will stimulate production-factor conditions but more interest from management in the dairy and retail industry is crucial to achieve even some of the growth of Austria and Denmark. The potential of the Irish market will ultimately depend on how the relationship between the elements in the Model develops.

#### CONCLUSION

Denmark is one of the most developed organic food markets in the world and Austria, one of the most significant in Europe. Using Porter's Diamond as a framework for analysis, detailed case studies of these countries were undertaken to identify the key drivers in the growth of consumption of organic milk products, particularly organic liquid milk.

In Denmark and Austria, most, if not all, of the elements of the Diamond Model worked independently but cohesively to drive growth in organic milk product markets in those countries. In Ireland there is considerable consumer interest in organic foods. However, none of the main players seems to be ready to champion the introduction and development of organic milk products. If it were otherwise, faster growth rates could be achieved than those currently forecast. The recent decline in production in Denmark and Austria suggests the market has matured in those countries and renewed growth is unlikely. The challenge for Ireland is to realise an overall 3 per cent target of agricultural land for organic output in the coming years and achieve a market share much lower than the 15 per cent and the 10 per cent at which the market is stabilising in Austria and Denmark, respectively. For milk, achieving even 1 per cent will require much greater interest from industry players.

#### **Recommendations for Management Consideration**

Existing liquid milk suppliers and processors need to consider this analysis and examine the technical, economic and market feasibility of market entry. For example, offering an organic alternative at the doorstep should be examined.

Guaranteed markets, such as those developed by Billa in Austria, could be the push farmers need. Without constant supply, firms and retailers cannot invest in the market and develop brands. Retailers should consider whether the organic sector might offer an opportunity to differentiate them for their competitors.

Organic milk is a new product and not fully understood by the majority of Irish consumers. Therefore, advertising campaigns are necessary and the product and its attributes must be explained in an effective manner for product acceptance.

Government and support agencies are developing a new strategy for supporting the development of the Irish organic sector. Managers need to be informed about these developments. They could also provide some of the impetus needed for interested parties to enter the market.



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# An Examination of the Leaving Certificate Accounting Syllabus



PETER CLARKE AND AOIFE HESSION\*

## INTRODUCTION

The Irish education system at secondary level consists of a three-year junior cycle, at the end of which each student sits the Junior Certificate examination. In senior cycle there is an optional Transition Year programme followed by a two-year programme consisting of a range of distinct subjects. The Leaving Certificate examination is the terminal examination of post-primary education. The Department of Education and Science (undated: 1) states that the emphasis of the Leaving Certificate programme is to prepare “students for the requirements of further education or training, for employment and for their role as participative enterprising citizens”.

Accounting as a separate subject was introduced into the Leaving Certificate programme in 1969. The syllabus concentrated on financial accounting principles and was first examined in 1971. The syllabus was revised in 1995 and was assessed for the first time under a new examination format in June 1997. Some topics were omitted and new topics were added, including information technology and computer applications;<sup>1</sup> the conceptual and regulatory framework of accounting; appreciation of annual reports of limited companies; cash flow statements; management accounting; farm accounts; Value Added Tax, PAYE and PRSI. At Leaving Certificate, accounting, like other subjects, is offered at two levels: ordinary and higher. The Leaving Certificate accounting examination is a three-hour written, closed-book examination and the format and time allocation for both levels of examination are identical.

This research focuses exclusively on the Leaving Certificate programme in (honours) accounting. Specific issues addressed in this paper include the extent and possible implications of “mixed ability” teaching in secondary schools, i.e. teaching both higher and ordinary levels in the same class; whether teachers feel that they have sufficient time to cover the syllabus adequately and whether students have adequate time to complete the examination paper; the perceived

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predictability of the Leaving Certificate (honours) accounting examination paper; and whether the Leaving Certificate accounting syllabus provides students with adequate life skills. Finally, this research aims to provide explanations for the significant decline in the popularity of the subject in recent years, although there was a slight increase in overall numbers in 2004. It is intended that this research may have important implications both for teachers at secondary and third levels, and for those who review the educational activities of secondary schools. The paper is divided into three main sections. The next section briefly reviews the main literature in the area of accounting education relating to Ireland. The research methodology section follows this, and a presentation and discussion of the research findings is then provided. The paper ends with a summary and conclusion.

#### LITERATURE REVIEW

Over the past few years a considerable body of literature on accounting education has developed in other countries and this has been comprehensively reviewed elsewhere (see Apostolou et al., 2001; Rebele et al., 1991; Watson et al., 2003.) In Ireland, as far as can be ascertained, the first specific study on accounting education in Ireland was conducted by Clarke (1989), who focused on the benefits of prior exposure to accounting in university examinations. He found that there was a significant relationship between Leaving Certificate accounting results and performance in first year accounting examinations (at third level) for both males and females. In a subsequent study, Clarke (1995) extended his research and found that the benefit of prior accounting study (at second level) in first year university examinations (at third level) had disappeared for male students only in second year examinations in both financial and management accounting. More recently, Rigney (2002) found that there was a positive correlation between students' overall academic performance in the Leaving Certificate and performance in business studies at third level, which indicates that the predictive validity of the Leaving Certificate examination is reasonably high. Rigney (2002) also found that students who studied accounting for the Leaving Certificate achieved higher overall performances in first year than students who had not studied the subject. However, this trend did not continue after first year.

Byrne and Willis have undertaken a number of empirical studies in relation to accounting at secondary school level in Ireland and initially reported that the majority of teachers do not cover the full syllabus and that many students decide themselves to omit further topics when revising for the Leaving Certificate examination, due to its predictability (Byrne and Willis, 1997). The Department of Education proposed to address these existing deficiencies through the introduction of the revised Leaving Certificate accounting syllabus in 1995. Byrne and Willis (2001) subsequently investigated whether these deficiencies were appropriately addressed. The research revealed a more comprehensive coverage of the new syllabus with a greater range of topics being examined. It also revealed that

the students' ability to predict the examination paper is diminishing, although a substantial percentage of students still consider the examination to be highly predictable. They found that there was little variation in the content of questions on many topics common to both the original and the revised Leaving Certificate accounting syllabi. Thus, it is argued that this form of examining encourages students to engage in rote (i.e. surface) learning, which may result in poor conceptual understanding of the subject (Prosser and Trigwell, 1999).

Byrne and Willis (2003a) extended their previous research by examining teachers' views on the accounting syllabus and examination papers. They found that two-thirds of the teachers believed that the standard of the higher-level paper is too high and that the majority of teachers believed that the examination paper cannot be answered in the allotted time. They also reported that two-thirds of the teacher respondents were of the opinion that the Junior Certificate business studies syllabus is not a good foundation for the Leaving Certificate accounting course. In addition, they found that the decline in the popularity of accounting as a Leaving Certificate subject was due to problems with the content and teaching of accounting within Junior Certificate business studies, the perceived difficulty in obtaining high grades in the Leaving Certificate, the volume of material to be covered and the active promotion of other subjects, particularly science.

While not directly related to the overall thrust of this paper, it is worth noting some additional studies on accounting education in Ireland. Clarke (1990) investigated perceptions of the curriculum by accountancy practitioners and discovered that communication skills (both oral and written) were considered to be most important to accountants in industry and practice. He also reported that, in the future, less emphasis needs to be placed on some topics that receive much emphasis on traditional accounting programmes. Eynon et al. (1996) compared the ethical reasoning abilities of Irish and American accounting students and found them to be similar, but reported that female students, in general, displayed a higher level of moral reasoning than male students. Byrne and Flood (2003) provided an historical perspective to contemporary accounting education in Ireland, whereas Clarke (2004) highlighted the story of the first professor of accounting in Ireland, and therefore the UK, who was appointed to University College Galway in 1914.

#### RESERCH MEHTODOLOGY

The objective of this paper is to provide an up-to-date analysis of teachers' views on aspects of Leaving Certificate (honours) accounting. The primary method of obtaining data for this study was by way of postal questionnaires for teachers who are currently teaching Leaving Certificate accounting at secondary schools. A postal survey was considered to be the most appropriate research method for this particular study as it facilitates the gathering of a substantial amount of information, through structured questions, at a reasonable cost, from a sample that is widely dispersed geographically (Sekaran, 2000).

Secondary school teachers were specifically selected as the target group of this questionnaire as they are the group directly involved in preparation for the Leaving Certificate accounting exams. There are about 400 secondary schools in Ireland but the Department of Education and Science does not have a full list of accounting teachers at secondary schools. Therefore a sample of 50 was considered appropriate to obtain a representative sample of the population. Thus, it was necessary to individually contact secondary schools throughout the country through a random selection process. Each school was contacted by phone and the names of the Leaving Certificate accounting teachers (if any) were received from the school's secretary. The majority of schools only had one Leaving Certificate accounting teacher, which was probably due to the small size of some rural Irish schools. Significantly, during this process it was discovered that two schools contacted did not have accounting on their Leaving Certificate syllabus. Official statistics indicate that about 88 per cent of all secondary schools offer a Leaving Certificate programme in accounting (Department of Education and Science, 2000/2001). This leaves a minority of students at a great disadvantage and may discourage them from studying accounting at third level.

A questionnaire consisting of both open-ended and closed questions was designed. It was four pages in length and consisted of two sections. Section A required the respondent to complete some background information of a personal nature. Section B generally asked respondents to express an opinion on a range of issues according to a 5-point Likert scale, where 1 = strongly disagree and 5 = strongly agree. An open-ended general question at the end of the survey instrument provided the respondent with the opportunity to further comment on areas covered throughout the questionnaire or areas not covered by the questionnaire that the respondent deemed important. To further encourage a higher response rate, the respondent was given the option to include their name and address at the bottom of the questionnaire if they required summarised results of this study. This encouraged interested participants to respond and anonymity was guaranteed to all respondents. The questionnaires, together with a covering letter and a stamped addressed envelope, were distributed during the last week of May 2003, before the annual school closure for summer holidays; 50 questionnaires were distributed and 29 completed questionnaires were received back from the sample contacted. Out of this 29, 2 were not completed by Leaving Certificate accounting teachers (i.e. the target group) and thus found to be unusable. Thus the 27 usable replies represented a satisfactory response rate of 54 per cent, which shows a high level of interest in this study. No follow-up approach was made to non-respondents as it was considered that most teachers would be on holidays.

Additional information for this study was compiled from published sources. The Department of Education and Science was contacted and efficiently provided statistics for the years 1995 through to 2004. Past Leaving Certificate accounting examination papers were obtained from the Department's website (<http://www.education.ie>), which also included very comprehensive marking schemes and detailed examiner's reports.

## RESEARCH FINDINGS

**Teacher Profiles**

Seventy-eight per cent of teachers stated that it has been more than ten years since they completed their primary degree. This indicates that the respondents were a very experienced group of teachers with a good knowledge of both the old and new Leaving Certificate accounting syllabi. Of the respondents, 59 per cent were female and 41 per cent were male. Out of the 27 respondents, 41 per cent of them teach in an all boys' school, 37 per cent teach in an all girls' school and 22 per cent teach in a mixed gender school.

**Mixed Ability Teaching**

Mixed ability teaching (also called joint teaching) refers to teaching both higher and ordinary level students in the same class. This may occur due to a lack of accounting teachers in the school, lack of resources within the school or because it is more practical to teach both levels in the one class due to the declining number of students taking accounting. The importance of mixed ability teaching has been recognised by the Department of Education and Science and it has been taken into consideration in developing the current Leaving Certificate accounting syllabus. The Department of Education and Science has stated, "the [new] syllabus is designed with mixed ability students in mind as it is understood that in many schools ordinary and higher level students are taught in the same class" (Department of Education and Science, undated: 6).

This survey found that 89 per cent of respondents teach accounting classes that include students studying at both higher and ordinary level. Earlier research by Byrne and Willis (2003a) revealed an even higher percentage (92 per cent) for a bigger sample size. It is pertinent to suggest that this phenomenon of mixed teaching will continue to be widespread in the future due to the declining popularity of the subject at Leaving Certificate level. In this study, nearly two-thirds (63 per cent) of respondents found this mixed ability teaching to be a problem. Specifically, the majority of respondents felt that the main problem with joint teaching was the differing levels of ability and time management between the two levels in the one class. One respondent remarked that mixed ability teaching "is like teaching two different courses in the one class". Another respondent remarked that "the pace is too slow for higher and too fast for ordinary", while another noted that teaching both levels in one class is "difficult on the weak student". It was also noted that joint teaching "increases preparation time and means less time on each topic".

To overcome the problems associated with teaching both higher and ordinary level students in the one class some respondents indicated that they give extra classes at lunchtime and after school. One respondent noted, "students who opt for accounting always take higher despite their ability". This could be a reflection of the "points" differential between the higher and ordinary level papers but the reality is that the numbers taking Leaving Certificate ordinary level accounting is declining.

### Syllabus Coverage

The previous syllabus was based on financial accounting principles, whereas the new syllabus, while retaining the relevant financial aspects and introducing other areas, places greater emphasis on decision making and management accounting, while retaining its financial accounting orientation. Previous research has revealed that the majority of teachers do not cover the entire accounting syllabus and that many students decide themselves to omit further topics when preparing for the Leaving Certificate examination. Such omissions run contrary to the overall aims of the Leaving Certificate programme and warrant further investigation through empirical study. This research discovered that 93 per cent of the respondents indicated that they covered 81–100 per cent of the syllabus, with the remaining 7 per cent of respondents covering 61–80 per cent of the syllabus. Given that 93 per cent of the respondents teach over four-fifths of the higher-level course and given the choice of examination questions, it is reasonable to argue that the syllabus is adequately covered by the majority of teachers in terms of preparing their students for the Leaving Certificate examination. However, one must be conscious that some respondents may have, for whatever reason, over-reported their coverage of the syllabus.

To investigate this area further, we asked the teachers to indicate, in their opinion, the three main factors in the Leaving Certificate accounting course not being covered in its entirety. Their summarised responses are listed in Table 10.1, with minority responses being omitted. About three-quarters of respondents (77 per cent) indicated that time constraints were a reason the course was not covered entirely, whereas 59 per cent of teachers cited mixed ability classes as a factor. Nearly one-third (30 per cent) of teachers stated that the omission was due to the overall length of the new syllabus, whereas almost one-fifth (19 per cent) highlighted the difficulty of teaching certain topics, and 15 per cent indicated the option to omit topics that were not regularly examined. Typical comments included, “Avoid topics which do not feature regularly, if at all, on the exam paper,” and stated that some topics can be avoided since, “due to the exam structure there is a choice of questions”. It is surprising to discover that factors such as inadequate time, joint teaching, length of syllabus, difficulty of certain topics and the predictability of some topics are reasons given for non-coverage of the Leaving Certificate accounting course, considering that the current syllabus is relatively new and was introduced after widespread consultation with interested parties. It is also difficult to see how the intended “computer applications” module can be successfully taught and examined in such circumstances.

**Table 10.1: Reasons Why the Syllabus is not Covered in its Entirety**

	% of respondents
Time available	77
Mixed ability classes	59



Length of course, i.e. too long	30
Topics too difficult	19
Avoid topics which are not examined	15
Adequate choice of questions	15

### Time Constraints

It should be noted that over three-quarters (77 per cent) of respondents to this survey indicated that time constraints resulted in the accounting syllabus not being covered entirely by teachers. Accordingly, respondents were asked how much additional time, if any, they would require to adequately cover the current syllabus. The vast majority of respondents felt that they required additional time to complete the syllabus to adequately prepare the students for the Leaving Certificate accounting exam: 7 per cent of respondents required less than 10 per cent additional time, 48 per cent required 11–20 per cent extra time, 22 per cent of teachers required 21–30 per cent extra time and 4 per cent required 31–40 per cent additional time, with one respondent noting that this additional time was required “to comfortably cover the full course and do thorough revision”. Again, the strength of these responses may have significant implications for teaching accounting at third-level institutions. It suggests that some Leaving Certificate accounting students may not have covered the syllabus in the depth that is assumed by third-level lecturers, which is particularly significant if such students are assigned to a first-year class that assumes an accounting background.

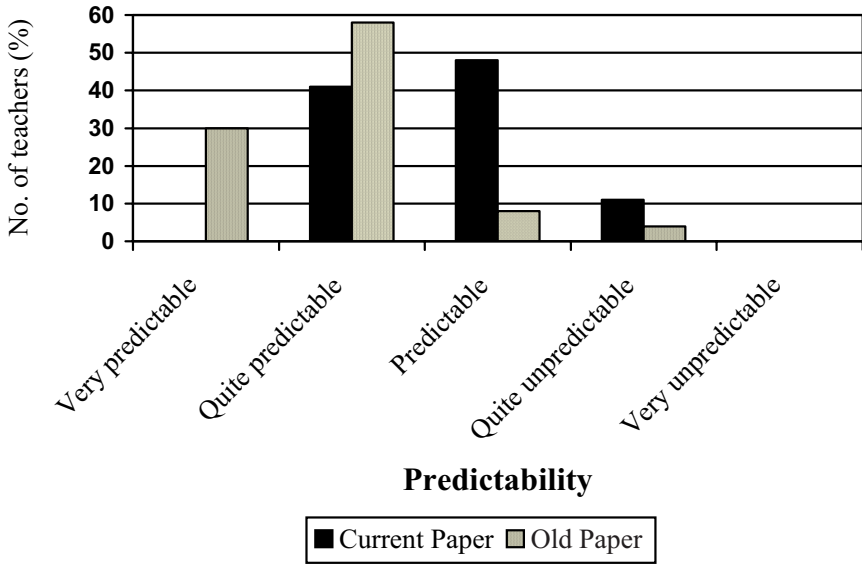
Another aspect of the overall time constraint is the time available to complete the Leaving Certificate accounting paper. This research indicates that the majority of respondents believe that the Leaving Certificate accounting higher-level examination paper cannot be answered in the allotted time of three hours. Specifically, over three-quarters of teachers believed that the examination paper cannot be completed successfully in the existing time-frame. About one-quarter (23 per cent) of the respondents were happy with the existing time allocated to the paper and said that no extra time would be required. One-quarter (23 per cent) of respondents said that not more than 15 additional minutes were required to complete the exam paper; over one-third (35 per cent) of respondents felt that students needed between 16 and 30 extra minutes for the examination; and nearly one-fifth (19 per cent) of respondents believed that 31 to 45 minutes would be appropriate additional time for the exam to be successfully completed. Thus, the majority of teachers felt that at least an extra 16 to 45 minutes is required to complete the accounting paper successfully and this represents an additional 9 per cent to 25 per cent of the time currently available (180 minutes).

### Predictability of the Examination Paper

Prior studies have indicated a certain predictability with regard to past accounting examination papers, resulting in students concentrating on what is regularly

examined. Respondents were asked for their perceptions about the predictability of both the revised (i.e. current) and the old Leaving Certificate accounting higher-level examination paper. Their responses are summarised in Table 10.2. Respondents generally felt that the old paper was viewed as being more predictable than the new paper, with nearly one-third (30 per cent) of teachers indicating that the old examination paper was very predictable. In contrast, almost one-half (48 per cent) of teachers did not consider the current paper to be predictable and 11 per cent rated the existing paper as quite unpredictable. The tentative finding here is that respondents perceived the old paper to be considerably more predictable than the current one. The increased range of topics currently being examined under the new syllabus could be one of the main reasons why the teachers view the existing exam paper as being less predictable.

**Table 10.2: Predictability of the Leaving Certificate Accounting Higher Level Examination Paper**



To supplement these perceptions, Table 10.3 displays the different topics included on the higher level papers since the introduction of the new syllabus in 1997 and shows the total number of times each topic has appeared along with the marks awarded to the topic. It is apparent from this table that certain topics are very popular and appear frequently or at regular intervals on the paper while other topics rarely, if ever, appear. For example, farm accounts have only appeared once in the past seven years while tabular statements have occurred five times. The final accounts question appears every year and it can come up as either a sole trader, company or manufacturing question. Published accounts has occurred in five out of the seven years: three times it has been examined as a one-hundred-mark question and twice it appeared as a

sixty-mark question. A question on interpretation of accounts has appeared every year on the paper as a one-hundred-mark question. Indeed, anecdotal evidence suggests that the 2004 examination was entirely predictable. However, in contrast, the product-costing question in 2003 appeared in a format that had not been previously examined and the same paper also asked the candidate to explain the Principal Budget Factor. One teacher was reported as saying that this topic “had never been asked before and could have thrown some students as they didn’t know if it was worth 10, 20 or 30 marks out of 80. This should have been pointed out to students” (Heffernan, 2003).

**Table 10.3: Topics on LC Higher Level Accounting Papers and Marks Available\***

Topics Examined	2004	2003	2002	2001	2000	1999	1998	1997
Final accounts:								
Sole trader		120				120		
Company	120		120		120		120	
Manufacturing				120				120
Published accounts		60	100		60	100		100
Control accounts		60			60		60	
Revaluation of fixed assets	60	60		60			60	
Depreciation of fixed assets			60			60		
Correction of errors/ Suspense	100		60		100		100	60
Tabular statement	60		60	60		100		60
Cash flow statement	60			60		60	100	
Farm accounts						60		
Interpretation of accounts	100	100	100	100	100	100	100	100
Service firm accounts		100		100	60			60
Incomplete records		100		100	100			100
Club accounts	100		100				60	
Product costing		80	80		80		80	
Marginal costing/ CVP analysis	80			80		80		80
Flexible budgeting		80				80		
Cash budgeting	80		80		80			80
Production budgets				80			80	

\*Candidates must complete questions totalling 400 marks.

### Life Skills

The Leaving Certificate accounting guidelines state that one of the principles behind the syllabus is the “preparation of students for further education as well as for the world of work and adult life” (Department of Education and Science, undated: 6). Therefore, respondents were asked to rank, on a five-point Likert-type scale, the perceived importance of the higher-level syllabus (condensed into eighteen topics) both in terms of the Leaving Certificate exam and in terms of necessary “life skills”. There is a strong contrast between some areas that teachers regard as important in preparing for the Leaving Certificate examination and what they view as necessary to equip students for their future life. Chiefly, topics such as control accounts, accruals and prepayments, tabular statements, depreciation and revaluation of fixed assets are considered very important for exam purposes and represent the area that teachers, understandably, will focus on; but they are considered less important in providing for “life skills”. The teachers’ responses are listed in Table 10.4 and indicate that virtually all items were considered to be much more important for exam purposes than for providing “life skills”. The topics that were considered more important for the purpose of “life skills” were bank reconciliation statements, VAT, the role of auditors and the Directors’ reports. Moreover, it is interesting to note that low overall marks, in both categories, were awarded to both the

**Table 10.4: List of Topics Ranked in Importance (mean scores)**

List of Topics (18)	LC Exam	“Life Skills”
Preparation of final accounts	4.81	3.50
Ration analysis/Interpretation of accounts	4.70	3.84
Budgeting	4.69	4.00
Club/Farm accounts/Incomplete records	4.56	3.68
CVP analysis	4.46	3.04
Product costing	4.42	3.16
Cash flow statements	4.37	2.92
Suspense/Control accounts/Correction of errors	4.22	2.68
Accruals and prepayments	4.15	2.48
Depreciation of fixed assets	4.12	2.56
Tabular statements	3.81	2.08
Revaluation of fixed assets	3.69	2.12
Bad debts	3.32	2.24
Bank reconciliation statements	3.04	4.22
Value Added Tax	2.27	3.65
Directors’ reports	2.04	2.42
The role of auditors	2.04	2.44
The role of accounting standards	2.00	2.00

Directors' reports and the role of auditors. This finding is important (and surprising) given the current debate about the various accounting scandals in recent times and attempts to improve the credibility of financial statements through financial reporting standards and corporate governance.

### Popularity of Leaving Certificate Accounting

The official statistics reveal a significant drop in the popularity of accounting as a Leaving Certificate subject choice in recent years, although there has been a slight increase in 2004 (see Table 10.5). Since 1998, the total number of students, including repeats, taking accounting has fallen from just under 10,000 to 6,847 in 2004 – an overall decline of about 30 per cent. However, it should be noted that there was a small increase in numbers for 2004. The decline is even more dramatic if one extends the time-frame to 1995 and the introduction of the new syllabus, when Leaving Certificate accounting had 11,663 candidates, representing about 19 per cent of total candidates. Much of this decline is attributable to the falling number of Leaving Certificate candidates in general, but it is also disturbing to note the declining proportion of candidates who elect to sit the accounting paper – now down to 12.4 per cent in 2004. The overall number of accounting students is comparable with the number sitting chemistry, for example, and the overall decline in science subjects has attracted adverse comment in the media. Secondary teachers and school principals should be concerned with this decline as it may further justify joint teaching. The decline in popularity also has important implications for lecturers at third-level institutions, since it is likely that an increasing number of first-year students may not have taken the subject at school. This may require a reorientation of teaching methodology and syllabus. Furthermore, as Clarke

**Table 10.5: Numbers of Students Taking LC Accounting (LCA)**

Year	Higher Level	Ordinary Level	Total students (LCA)	Total number of LC candidates*	LCA as % of total LC candidates
2004	4,859	1,988	6,847	55,224	12.4
2003	4,694	2,005	6,699	56,237	11.9
2002	4,706	2,364	7,070	55,496	12.7
2001	4,941	2,458	7,399	56,670	13.1
2000	5,665	2,929	8,594	60,737	14.1
1999	6,045	3,279	9,324	62,844	14.8
1998	6,520	3,368	9,888	64,155	15.4

\*Total number sitting the Leaving Certificate examination, including repeat and external candidates but excluding Leaving Certificate Applied candidates.

Source: Department of Education and Science, Statistical Reports (various)

(1989, 1995) has clearly demonstrated, prior exposure to Leaving Certificate accounting is a significant determinant of performance in first-year university examinations in accounting.

Respondents were asked to rank seven reasons for this decline along a five-point Likert scale, with additional space provided for other factors suggested by the respondent. Overall responses are presented in Table 10.6 and this reveals that the key factor, in the opinion of teachers, contributing to the downturn in the popularity of accounting is the perception that accounting is too difficult a subject to achieve high marks in and therefore too difficult to obtain high CAO points in for third-level admission. Typical comments by respondents relate to other subjects being “seen as far easier to score higher marks”. Poor introduction to the basics of accounting at Junior Certificate level was also a significant factor. Both of these factors were also important in the prior research study by Byrne and Willis (2003b). The unsatisfactory implication of this finding is that students who do not select business studies at the Junior Certificate level, for academic or timetabling reasons, may be reluctant to choose accounting at Leaving Certificate level. Another significant factor was that there is too much material included in the syllabus, which is surprising given that the syllabus is relatively new. Other explanations include the perception that the subject is boring and that there is a lack of good accounting teachers. Another perception is that the material will be covered at third-level: one respondent suggested that the decline in the popularity in accounting is strongly linked to “third level suggestions that the subject is unnecessary at second level”, leading to less students taking the subject at Leaving Certificate level. A small number of respondents suggested that the syllabus is (already) out of date!

**Table 10.6: Reasons for the Decline in Popularity of Accounting**

	<b>Mean</b>
Perceived as too difficult to achieve high marks	4.16
Poor introduction of basics at Junior Certificate level	3.76
Too much material included in the syllabus	3.52
Subject perceived as too boring	2.67
Lack of accounting teachers	2.26
The material will be taught at third-level institutions	2.13
Out of date syllabus	1.63

It is important to stress that we are noting people’s perceptions about the difficulty of achieving high marks in Leaving Certificate accounting. Of course, people’s perceptions may not be matched by reality but a discussion on this issue is beyond the focus of this paper. Nevertheless, given the importance of this factor, it seems to be an area requiring urgent attention if the current decline in popularity is to be halted. Table 10.7A presents overall student

numbers taking accounting together with numbers (and percentage) obtaining an A1 or A2 grade (in the higher level paper). The table reveals that the overall percentage of students obtaining a grade A has increased by 50 per cent over the past five years. This improvement could be due to potentially weaker students selecting other Leaving Certificate subjects in order to improve their overall grades or better teaching of the subject; alternatively, it could represent a more relaxed marking scheme on the part of the examiners or indeed it could be a combination of several factors.

**Table 10.7A: Grade A Distributions of Students Taking Higher Level Leaving Certificate Accounting**

	<b>Males Grade A1/A2</b>	<b>Males Total</b>	<b>% of A1/A2</b>	<b>Females Grade</b>	<b>Females Total A1/A2</b>	<b>% of A1/A2</b>	<b>Overall % of A1/A2</b>
2004	453	2,328	19	551	2,531	22	21
2003	481	2,290	21	506	2,404	21	21
2002	417	2,259	18	471	2,447	19	19
2001	406	2,348	17	514	2,593	20	19
2000	472	2,791	17	522	2,874	18	18
1999	407	2,996	14	430	3,049	14	14

However, it should be noted that accounting is an elective Leaving Certificate subject and the issue of whether it is more or less difficult than other subjects can only be discussed in relative terms. Table 10.7B presents comparative data in relation to other elective subjects, which have comparable numbers, for select years. This limited table, focusing only on those who obtained a Grade A (A1 or A2), cannot be used to prove the argument one way or the other. There are many factors associated with exam performance in any given cohort and these need to be identified and controlled for before valid and reliable statistical inferences can be made. Nevertheless, parents, students and their advisors make subject choices on their perceptions about subject difficulty and the possibility of scoring high CAO points. The preliminary evidence presented below in Table 10.7B suggests that those who study German may feel even more aggrieved than those who study accounting or chemistry.

**Table 10.7B: Grade A Distributions of Students Taking Comparable Higher Level Leaving Subjects (Selected Years) (%)**

	<b>2004</b>	<b>2003</b>	<b>2002</b>	<b>2000</b>	<b>1998</b>
Accounting	21	21	19	18	14
Chemistry	23	26	23	20	16
German	14	12	11	13	9

Source: Department of Education and Science, Statistical Reports (various)

### **Possible Changes to the Examination Paper**

Respondents were finally asked to make suggestions regarding changes they would like to be made to the structure of the Leaving Certificate (honours) accounting paper. Because this was an open-ended question, overall responses were rather varied. The majority of teachers felt that the students' options were limited in the exam and that the paper should have more choice. Also, a common response was to make the exam paper shorter, for example by setting shorter questions, or to allow candidates extra time. Indeed, one respondent colourfully suggested "losing the published accounts question". An innovative suggestion was the provision, as part of the exam paper, of "specialised accounting paper", i.e. answer templates, which would aid students by increasing the length of time the student would have to complete the actual questions. The availability of such "specialised paper" would decrease the amount of preparatory work students have to do before starting to answer a question. Another respondent suggested that "more emphasis should be given to topics which have a greater life skills value attached to them".

### SUMMARY AND CONCLUSIONS

Before drawing conclusions from this study it is important to specify its limitations. Firstly, the small size of the sample may mean it is not representative of the teacher population as a whole and, therefore, any attempt to generalise these findings to the full spectrum of teachers is not warranted. However, the results presented here confirm the findings of a similar but earlier study undertaken in January 2001 (Byrne and Willis, 2003b). Secondly, a postal questionnaire suffers from the disadvantage of potential misinterpretation or ambiguity of questions, though it does allow reflection before responding. Thirdly, responses reflect attitudes at a particular point in time and these may change in future years. Thus, in ideal circumstances, a longitudinal study would have been preferable. However, it should be noted that respondents were experienced teachers and their views should be taken seriously.

This study reveals that a very high proportion of classes (89 per cent) are jointly taught to students studying at both higher and ordinary level. Of the teachers, 63 per cent found this mixed ability teaching a problem. The majority of respondents felt that the main problem with joint teaching was the differing levels of ability and time management between the two levels in the one class. Moreover, while the majority of respondents indicated that they "cover" the syllabus, they expressed opinions as to why teachers in general might not cover the entire course. Over three-quarters (77 per cent) cited time constraints and more than one-half (59 per cent) cited mixed ability classes as a reason for not finishing the course. Nearly one-third of respondents (30 per cent) felt that the syllabus was too long. In addition, over three-quarters of teachers felt that the exam paper cannot be completed successfully in the existing time allotted. While still predictable, the current Leaving Certificate accounting examination papers are less predictable than with the previous syllabus.



The vast majority of respondents agreed that the popularity of accounting is in decline, although they would not have been aware of the overall increase in numbers for 2004. The key factor contributing to the downturn in the popularity of accounting is the fact that it is perceived as too difficult to achieve high marks in this subject. Poor introduction of basics at Junior Certificate level and too much material included in the syllabus were also highlighted as significant factors. Suggestions for improvement included introducing more choice for students and making the paper less demanding, which would make the subject more attractive to students. In addition, the survey revealed that certain topics that are essential “life skills” are not seen as important from the teachers’ viewpoint in terms of studying for the Leaving Certificate accounting examination.

The findings of this paper suggest a number of areas for future research. The phenomenon of joint teaching could be investigated in the context of equality of educational opportunities. For example, do students in “segregated” classes perform better than those in mixed ability classes? If so, this is a form of discrimination and has the potential to significantly influence a student’s university allocation through the CAO processing system. In addition, further research needs to be carried out on the extent of syllabus coverage by teachers. It would also be beneficial, in terms of syllabus review and revision, to investigate whether syllabus topics have a long-term benefit for the student; and in this context it would be useful to seek the opinions of potential employers. Further research also needs to be carried out on students’ views of the existing syllabus and their reasons for choosing to study accounting. This is an issue that clearly merits attention in order to rectify the gradual decline, admittedly reversed in 2004, and possible adverse implications for overall enrolments and the teaching of the subject at third-level institutions.

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1 Computer applications will not be introduced until a feasibility study has been completed.

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