Entrepreneurial context and behaviour in SMEs

An investigation of two contrasting manufacturing firms

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Introduction
This paper is concerned with exploring the interaction between context and process in determining the patterns of entrepreneurial behaviour of small and medium-sized enterprises (SMEs).

Two main conceptual assumptions serve as the basis for the formulation of the methodology in this research namely that:

1. The environmental context and the organisational attributes of power and culture define the variability of each SME’s situation.
2. Effective innovation involves parallel entrepreneurial processes:
   - of devising novel solutions to problems of organisational performance; and
   - a second process of organisational learning to appropriate the new ideas and experience into the operating organisational paradigm.

The contention drawn from the former perspective is that the nature of the firm’s economic environment dictates the rational-analysis dimension of change. The presenting problems of organisational performance recognised through this process will set the “direction” to be addressed by the innovative response. However the perspective that the entrepreneurial process requires both a project management focus and an organisational learning impact to be effective attests to the importance of organisational forces in determining the particular “what” and “how” of the entrepreneurial behaviour as practised.

Much of what is taught as education for business entrepreneurship is concerned with the first phase of business growth, typically with acquiring the skills required to align the SME with niche opportunities in the external context. More problematic is the issue of how the SME can maintain or regain strategic entrepreneurial behaviour as it matures and seeks to develop a diversified basis of continued growth. The focus of interest in this paper is with this latter phase of SME growth. The paper investigates how circumstances, which may differ greatly from SME to SME, can affect the nature of the entrepreneurial learning process.
The research draws on the experience of consultancy assignments undertaken by the researcher of two SMEs in contrasting situations. The case studies provide illustrations of how the economic context and the organisational context of SMEs affects the capacity of managers to transform their enterprises.

The context for entrepreneurial decision making
In the perspective of Pettigrew and Whipp (1991), context influences the “what and how” of change through conditioning organisational learning, which in turn, shapes the patterns of decision making made within the organisation. That is, innovative behaviour is contingent on the complex interaction of environmental and process factors.

Strategic management theory recognises entrepreneurial decision making as the activity of managers pursuing equilibrium between dynamic external forces and factors internal to the organisation. The positioning model of strategic adaptation (Porter, 1985) assumes the primacy of macro-economic change drivers, such as economic conditions and technology, in determining the competitive structure of the industry, and in turn, testing the suitability of the firm’s activities in satisfying the demands of the selected market environment. From the starting point of the need for the organisation to develop internal economic competence, the resource-based view of strategic decision making (Baden-Fuller and Stopford, 1992) identifies the prime task of managers as that of developing a unique configuration of asset capabilities which can provide the organisation with a sustainable competitive advantage. This perspective accords a degree of freedom to managers to take the entrepreneurial initiative:

In mature industries, managerial choice is more important than the structure of the industry as the prime determinant of profits and growth and innovations in strategy provide the means whereby mature firms overcome the disadvantages of fewer resources (Baden-Fuller and Stopford, 1992, p. xii).

Whereas the task of matching internal capabilities to external conditions describes the economic context of such managerial decision making, the process of entrepreneurial decision making is facilitated by organisational factors of culture and power.

Hofstede (1980) drew attention to the socialisation of managers to come to hold tacit organisational pre-dispositions as a result of their participation in the wider national culture. Miles and Snow (1978) highlighted the impact of organisational frames of reference and their impact on managerial risk-taking. Culture, implying current ways of organisational thinking, from these perspectives can be seen as reflecting external and internal experience and historic as well as recent influences.

Stacey (1996) has argued that the effect of such shared paradigms is to normalise ways of thinking and routines of decision-making which inhibit entrepreneurial behaviour, that is, until discontinuities in performance are
experienced to the extent that the old paradigm is discredited. He recognises that the organisational situations in which such fundamental questioning occurs are characterised by tension and shifting patterns of power. In such situations creativity and entrepreneurial action is required to establish a new paradigm of organisational operation. Stacey identifies this as requiring managers to engage in complex learning, a process which, he suggests, involves the creation of new knowledge by “tapping the tacit, subjective insights, intuitions and hunches of individuals and making them available for testing and use by the organisation as whole” (Stacey, 1996, p. 456).

In this vein, Child (1972) highlighted the key role of organisational politics and divergent stakeholder interests in shaping organisational decision-making. Mintzberg (1991) subsequently developed this focus to postulate a dynamic system of power forces which shape the organisational configuration, and in which he identified the catalytic forces of cooperation in stabilising the organisational form and of political competition in provoking structural and systems change.

Thus, the context of entrepreneurial decision making is defined by the interaction of economic, cultural and political factors. The economic forces cannot be regarded as sole determinants, but rather are contextual referents for managers whose motivation for and style of decision-making will have been developed over time as a result of processes of cultural exposure and political negotiation. Organisational learning, in the sense of change in the management paradigm, is contingent upon the instability of the organisation’s situation and the creativity and acceptability of the behavioural response by the organisation’s members.

The nature of entrepreneurial activity
Zimmerer and Scarborough (1996) envisages the scope of innovation as follows:

Although entrepreneurial management is concerned primarily with the internal environment of the company (tactical decisions), entrepreneurial strategy is concerned with matching the company’s internal capabilities and activities to the external environment in which the company must compete, that is, with strategic decision-making” (my italics) (Zimmerer and Scarborough, 1996, p. 93).

As such entrepreneurial activity is novel action which is intended to reduce the gap between the firm’s goals and its realised performance.

McLoughlin and Harris (1997) illustrate the connection between responding to market conditions and the modification of workplace operations when discussing the emergence of the new production paradigm of “flexible specialisation” where the strategic response requires the implementation of innovative changes in organisational form, practices and controls.

In a situation where product markets are characterised by instability and uncertainty, firms seek to generate product and process innovations which will meet the new “fragmented” pattern of demand ... These organisations are non-hierarchical, adopt skill-based job designs, and are based on cooperative employee relations” (p. 8).
However, the stress on the intentional role of entrepreneurial strategy does not eliminate the possibility that the innovation may be an unintended consequence of tactical negotiations between individuals and groups within and external to the organisation. The classic myth of Honda's accidental discovery of the niche demand for small engine motor-cycles in the US market (Pascale, 1984) is testimony to the potential of emergent occurrences which come to be recognised as serving strategic goals.

This illustrates that what matters is that the organisation not only generates innovative moves but it is also able to exploit fully its potential. For this reason Willman (1997) highlights the issue of “internal appropriability”, which he sees as:

the firms’ ability to secure the benefits of the process and product knowledge latent in the organisation in pursuit of commercial success (Willman, 1997, p. 45).

Willman contends that for internal appropriability of innovation to be effective the management of dual processes is required:

first, the ability to combine technical competences into effective innovation, and second, the generation of effective organisational learning (Willman, 1997, p. 46).

Willman, like Mintzberg before him, recognises such organisational learning as a process advanced or constrained by the forces of power configuration. He suggests:

The problem of internal appropriability (is) not simply as a question of organisational learning but also a question of contract and work organisation; both internal to the organisation and externally, the market for tacit knowledge is more a labour market than a product market (Willman, 1997, p. 49).

For Hendry et al. (1995) the content of organisational learning has to be considered. He identifies the learning problem of the organisation as follows:

In learning terms, it has the problem of reconciling the requirements for, and the pressures of, convergent versus divergent learning. This tension is one that faces all firms. They have to be both efficient and innovative (p. 130).

Convergent learning emphasises specialisation and standardisation of the skills, control systems, and primary operations of the organisation in the interests of focus and efficiency. For Hendry there are two generic routes to adapt the SME away from the constraint of asset specificity associated with convergence. These are the divergence strategies driven by “customer-pull” influences, and second, those associated with “capacity-push” factors and aimed at obtaining a fuller utilisation of resources and capacity. Whereas “customer-pull” strategies typically involve adding capacity to exploit and build on a successful business package, the “capacity-push” strategies require the firm to create a new organisational flexibility. Hendry identifies this requirement to remain entrepreneurial as the archetypal problem for developing the SME.
Research method

The research literature identifies the complexity of the variables and linkages which define the SMEs' capacity to innovate. The main purpose of this paper is to investigate the extent to which variability in the situations of SMEs affects their entrepreneurial behaviour.

For the purpose of investigating the entrepreneurial behaviour of SMEs in contrasting circumstances a simplification of the active context and process factors was adopted. To characterise the impact of external forces a simple distinction was made between conditions of favourable and unfavourable market opportunity. As a proxy for the inter-play of the internal cultural and political forces, the age of the organisation was adopted and a distinction made between the young (flexible) and the mature (asset-specific) stages of the SMEs life-span. Within the resulting matrix of possible SME positions case investigations were made of two SMEs in contrasting situations: one, a relatively young SME enjoying favourable market conditions; and the other, a long-established SME operating in an adverse environment.

In 1996 and 1997 the author undertook consultancy assignments with the two manufacturing SMEs, one, a Scottish company, and the second, a Polish company. The author, as a part of his preparation and delivery of a training consultancy at management team and operations manager levels, had a series of indepth meetings with the managing director and the resources director of the Scottish company. At these meetings the company's growth objectives, business and production strategies and performance trends were reviewed. Access to company sales and financial performance data was provided. Insight regarding the Polish company was obtained as a result of the author undertaking a business audit exercise in 1996 in the company of Polish academics who served as translators. The audit process involved indepth individual meetings with the managing director, the resource director and each functional director. Access was provided to summary sales and financial performance data.

The nature of the assignments was such that at the time of the on-site involvement there was no attempt to implement a structured inquiry to account for the entrepreneurial behaviour of the firms concerned. However, in both cases sufficient understanding was gained about their entrepreneurial behaviour such that it was subsequently possible to reflect on the information gathered in order to construct the case accounts presented in this paper.

This researcher is wholly responsible for the selection of the information reported and the interpretations made in respect of each case. The case examinations as reported are illustrative rather than exhaustive of the patterns of entrepreneurial decision-making in SMEs. The examination is intended to investigate the extent to which the entrepreneurial processes of the SMEs differ and to identify the factors which may account for the differences.
The case studies
This section reports on the contrasting situations of the two SME case studies. In the discussion of each case the following questions help guide the interpretation of their situations and entrepreneurial behaviours:

- What have been the influential economic factors?
- What factors account for the entrepreneurial decision making?
- What extent of entrepreneurial learning is apparent?

Case 1: TRAK Europe, Scotland – a young SME in a favourable market environment
TRAK Europe commenced manufacturing and trading in 1990 from factory premises in Dundee, Scotland. The company produces ferrite components and sub-systems used in micro-wave applications. Products are specified and supplied to final assembly producers in the commercial, space and military markets. Components for installation in mobile, base stations and satellite borne telecommunication equipment account for over half of TRAK sales. A largely-autonomous subsidiary of a US parent, the company serves principally UK and European markets. Sales increased more than sixfold in the period 1990-1996 and the company has operated in profit since 1995. Employee numbers grew over the period from a handful of staff to in excess of 100. TRAK production is on a hand-assembly batch basis supported by specialist technical design and engineering capabilities.

The single market, the rapidly evolving development of commercial applications for micro-wave technology and the massive growth in the telecommunications markets for both terrestrial and satellite services are the factors which provided the suppliers of ferrite-based components with highly favourable market opportunities. European manufacturers as final product producers had competed successfully in international markets, in consequence the demand for TRAK product expanded without encountering undue competition from ferrite competitors.

TRAK's entry into the industry was assisted by the role played by its US parent in providing capital and product technology transfer. TRAK's capability in design and engineering utilised specialist technical know-how available as a result of the decline of UK hi-tech companies hither-to dependent on defence-related business, and the company's production competences drew upon the manufacturing procurement, operations management and production experience and skills available in Dundee as a result of local restructuring in the electronic sector.

The dominant management style in TRAK has been that of entrepreneurial leadership. The managing director, a specialist micro-wave design engineer, has been the dynamic personality in all aspects of product development and market growth. A reaction to his career experience of large-scale, bureaucratic defence industry contractors, he pursued a strategy of customer-serving. TRAK has provided a flexible response to customer requirements...
for changes in specification and delivery schedules, and at times has offered price accommodation. This business strategy generated rapid sales growth, however, at a cost to achieving satisfactory margins on the volume product revenues.

The small management team reflected the functional activities of the business. In addition to the managing director, the core activities of marketing and sales, procurement and inventory control, technical design and production were represented in the management team. Reflecting the different design and production demands of the components, the management team included both technical managers of the high- and low-volume component production specialisms. The support activities of financial control, information systems and personnel administration were coordinated by a single support director. Entrepreneurial direction and mutual adjustment pre-dominated as the basis for decision-making and integrating the business functions.

The managing director sought to make TRAK “a different company” in the minds of its employees. In the production areas, and with the managing director’s enthusiastic backing, cellular assembly units were introduced to promote employee flexibility and responsibility for quality. A celebratory style of employee communications was promoted. Social events to congratulate the collective employee effort were held on a regular basis.

The TRAK mission statement, which was boldly displayed throughout their premises, reflects the operating paradigm which the managing director constantly promoted:

We strive to give value and receive value in all we do. Success depends on it.

TRAK has been ambitious and, located in a region of otherwise constrained employment opportunity, was able to retain a loyal management and workforce.

TRAK had an outstanding record of success. There was clear evidence that as a small team of cooperating specialists the company had been able to combine its technical competences into development projects introducing new product and production methods. However to what extent had TRAK achieved the “internal appropriability” of the “flexible organisation” paradigm?

TRAK’s growth had been out-stripping the scope of its current entrepreneurial configuration. Its US parent had expected the company to improve its profitability and there had been an increasing pressure on TRAK to become more efficient. Improved financial information management systems had provided the firm with a capacity to monitor costs. Mutual adjustment demands had challenged the responsiveness of the procurement function which had operated its external relations with suppliers largely on a traditional cost-driven basis. These were features of a maturing functional organisation with attendant functional tensions alongside convergence activity to standardise operating and control systems.

At the same time, the managing director had retained his vision for company growth to be achieved by a business strategy of product diversification. This
vision, which responded to the demand growth in micro-wave business, would require the company to recruit/acquire specialist capabilities in related technologies and to increase employee numbers. Preparatory steps to delineate profit centres and delegate and divisionalise business management responsibilities had been taken.

The developing tension within the organisational configuration between the directional intent of the managing director and the increasing emphasis of the functional managers to concentrate on their specialisms to improve internal efficiency was recognised by the managing director as a problem to be addressed if organisational flexibility was to be practised across functional boundaries.

To enhance the extent of “internal appropriability” of the “flexible specialism” paradigm he initiated the use of multi-disciplinary teams as mechanisms to improve cooperative innovation. His concern was to target the scope for improvement in cross-functional processes through the use of problem-solving teams.

This particular initiative was introduced to staff at all levels of management through a “sign-posting” event designated “Avanti 2000” in which the managing director outlined the strategic vision for the company and the dependence upon communication and cooperation of staff at all levels to make it happen. At the event a number of mixed groups led by each of the management team reviewed and reported on a range of issues relevant to the core business processes of the company. As a follow-on step a number of cross-company and multi-level teams were formed and tasked with generating proposals for improvements germane to these issues. With the aim of devolving control to the teams, management team members did not participate directly in the team investigations. At a subsequent “mile-stone” meeting with senior management the teams duly presented their proposals.

However, when the team members reviewed the experience of team performance subsequently with an external consultant, there was considerable skepticism about the value of the ideas generated and of the notice that would be taken of them by senior management. Team participants subsequently undertook training in methods of project team operation and creative problem-solving. An outcome of this was an enthusiasm to engage in further cross-functional teamwork.

Case 2: GZUT SA, Poland – a mature SME in an unfavourable environment
GZUT is a an engineering and manufacturing company located in Gliwice in Upper Silesia, Poland. In its present form the company has been manufacturing for almost 50 years and in 1991 achieved privatised status, the share-holding being held in large measure by current and former company employees.

The company has engaged in a spread of activities, under-taking the casting of iron and bronze, the manufacture of industrial and marine pumps, the production of light over-head travelling cranes, and steel fabrication contracting.
Accountable to a supervisory board of shareholders, GZUT's management team of four directors comprised the director general and three operations managers responsible for marketing and design engineering, production and financial control respectively. Quality control, information systems and personnel activities were directly overseen by the director general. The foundry had been recently separated out as an autonomous profit centre; its director reported to the director general.

Of the total workforce of 452 employees, 222 were engaged in manufacturing activities and a further 57 worked in the foundry. The workforce had reduced as a result of natural wastage in recent years, but employee turn-over was low and the majority of the workforce were middle-aged. All of the managers had long service with the company.

GZUT's sold its products largely to the domestic Polish market and the former CMEA countries. In the period following 1992 demand for its crane products collapsed and sales of the other products stagnated. A modest recovery in all business areas save the foundry business was achieved in 1995. In that year cranes accounted for 35 per cent of total final sales, pumps, steel erection and foundry work for 30 per cent, 25 per cent and 10 per cent respectively. Albeit with considerable under-employed capacity, GZUT remained marginally profitable.

Approximately one-third of GZUT production was formerly exported to the CMEA countries. This trade had largely ceased since the break up of the Soviet Union and the dissolution of the CMEA. GZUT's crane and pump products were particularly niched to serve the mining and ship-building industries. For reason of their huge significance in the Polish economy these industries were initially protected from the main force of the Balcerowicz Programme of economic reform began in 1990. However after 1992 reduced subsidies and falling export demand affected these industries and the impact fed through to shrink GZUT's order book. Restructuring of the coal-mining and ship-building industries in Poland has commenced and a full recovery of orders from these industries is unlikely. The improvement in GZUT's order book in 1995 was rather the result of increasing foreign direct investment in Polish industry creating demand for new industrial building and re-equipping. Although GZUT had few domestic competitors, in the face of competitors in Western Europe the company had little export potential but rather faced the threat of foreign entrants attacking their home markets with newer product designs.

GZUT possessed core competences in metal casting, metal machining and welding, and the design and production capacity to manufacture complete industrial products. However, their products were out-moded. Additionally their premises, furnaces and machine plant were old and the firm lacked a CAD-CAM capability. The availability of internal funds for re-investment had been very limited and the cost of borrowing had been prohibitive.

In short, structural change in the pattern of Polish foreign trade and domestic economic reforms had adversely affected the company's markets.
Although requiring to modernise and to undertake product renewal, GZUT had had to function on a survival basis since its privatisation.

GZUT was organised into a number of specialised hierarchies co-ordinated by a small team of directors. The GZUT value chain was a vertically linked set of concentrated specialisms related to metal casting, machining, and fabrication. At each stage end-product opportunities had been developed additional to demand within the internal supply chain. The engineering ethos dominated. Compensating for the relative lack of standardisation of systems there was a high reliance on craft proficiency at the task level.

GZUT’s expressed development strategy was to increase its market penetration and to develop new markets. To accomplish this the company required to undertake new product development creating a new generation of overhead cranes and a new series of enlarged capacity pumps. New marketing activity was anticipated involving direct crane sales and attacking domestic and Western market segments with the planned new pump series. Additionally it was intended that each core specialism would maintain and develop specific market opportunities, for example, in monumental bronze casting and steel fabrication.

This “capacity-push” strategy maintained the existing status quo of specialisms within the company, albeit that its investment requirements exacerbated the forces “pulling apart” the organisation. The pattern of company investment provided evidence of this competitive pressure upon the deployment of resources. Obsolete furnaces had been replaced with new which had the capacity to cast the larger pump sizes. However engineering design and machining resources had mean-time been deployed in the production of a prototype mobile wood-chipper for which little market research had been undertaken. The sourcing of a replacement pump motor of requisite size and reliability remained unresolved. A cost-information system had been introduced, but the female financial director confided that little regard was paid by the functional managers to the monitoring reports she produced.

In short, there appeared to be directional drift in the implementation of company strategy. Each specialism had pursued its own scheme of improvement without effective cooperation over resource planning.

The company had survived in a period of dramatic economic change and had had to adapt to the adverse consequences of rapidly declining markets. In this context GZUT’s managers had adjusted to a changing climate of external relations. Within their individual specialisms they had also shown an innovative orientation towards improvement.

However, this learning had facilitated only the most limited transformation of corporate management culture. The company had chosen to develop on the basis of an optimistic business strategy of “capacity-push” which, albeit rooted in its technical competences, would require the company to re-position into new market segments and territories with new product. However, to implement their strategy, GZUT had not developed an effective process of project management
with which to combine its technical competences flexibly into the required company-wide innovation.

GZUT’s organisational configuration would appear to have been the main barrier to organisational learning. The company had yet to develop an internal cross-functional flexibility. There was competition between the diversified core specialisms but the internally-established consensus about GZUT’s purposes as an engineering and manufacturing business had been maintained. There had been no successful challenge of the premises on which the business strategy was founded.

Evaluation
The observations drawn from this researcher’s involvement with the two companies featured in this paper do not support an unequivocal evaluation. The perceptions of the situations of the companies and the interpretations made as to the extent of their organisational learning are inevitably partial but consistent with the conceptual model identified in the review of the research literature. The case studies serve to highlight the entrepreneurial behaviour of SMEs in contrasting situations.

TRAK’s growth can be accounted for by the favourable economic circumstances in which it had become established and the entrepreneurial vigour and competence with which the managing director infused the young company. In favourable market circumstances his introduction of new product and production methods in line with his operating paradigm of “flexible specialism” had served to deliver sales growth. On the other hand it can be seen that GZUT, as a mature organisation operating in a deteriorating economic situation, had learned to adapt for survival, but not yet to adapt for recovery and growth.

There are similarities in the entrepreneurial responses of each SME. The managing directors of both companies had adopted “stretch” growth goals and had formulated development strategies of “capacity-push”. Both required new and enhanced capabilities to be developed to enable the companies to realise their market ambitions. This would require them building and re-deploying organisational resources.

In the face of this within the individual functional specialisms of both companies there were convergence tendencies at work to realise economy and efficiency gains through tactical improvements.

The emerging entrepreneurial problem for both companies was that of gaining the required cross-functional flexibility in their operations. TRAK had to remain entrepreneurial in parallel with gaining the benefits of scale and diversification, whereas GZUT had to de-mature and regain corporate entrepreneurial dominance. For both managing directors this posed the issue of how to ensure the diffusion of corporate entrepreneurial practice across functional specialisms and levels of management.
Management of such change would require both managing directors to progress strategic development projects and to promote the internal appropriability of requisite organisational learning.

A difference in how far the companies had responded to this challenge is apparent.

GZUT had so far failed to implement its strategy of business recovery. A stalemate in the defensive competition between the core specialisms prevented a re-distribution of resources. Development projects had been largely restricted to uni-functional specialisms. Organisational learning on a cross-functional basis had been on the basis of sharing the pain of under-utilisation, rather than transformation.

At TRAK the issues which arise with organisational growth and maturity had been recognised and, in preparing for the restructuring and devolving of responsibilities, the managing director had taken action to promote cross-company flexibility in the search for improving functional linkages. The Avanti 2000 represented an attempt to promote the use of “parallel teams” (Kanter, 1989) to devolve corporate project initiative and to gain wider “internal appropriability” of organisational learning.

In the cases considered, the external conditions provided the opportunities and pressures for transformation. They were important contextual referents. However, the power-behavioural balance of the SMEs internal configuration had accounted for the nature of the entrepreneurial activity evident and the extent of organisational learning pursued. Of both companies it may be said that the use of strategic development projects and “parallel teams” to create new knowledge will depend on the acceptance of this information by individuals in pre-established functional positions. The dominance of the entrepreneurial direction will be critical in this regard.

References