

Organizational learning and entrepreneurial strategy

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Abstract: *Globalization, deregulation and new information and communication technologies (ICT) are having enormous effects on all types of business. Indeed, ICT are now adding two new sources of entrepreneurial business alongside start-ups and management buy-ins and buy-outs — rejuvenated established firms and downsized, out-sourced former larger businesses. Schumpeter's five key areas of innovation (drivers of competitive advantage and entrepreneurial strategy) have taken on a new resonance as ICT have added others such as supply chain management, market information, financing and distribution. Out-sourcing and ICT have made economies of scale quicker and easier to achieve for SMEs, but deeper and more extensive knowledge is required of the capabilities of ICT and of potential partners. Economies of scope also require increased knowledge of internal organizational capabilities and of potential external partners. Various studies in the UK highlight the increased importance to entrepreneurial small firms of ICT-supported networking with other firms and of the organizational knowledge that lies behind successful strategies in these areas. Thus, the ability of individual owners and managers to learn and the capacity for organizational learning within an SME become crucial determinants of success in the new knowledge economy. This paper is based on an intensive study of organizational learning among the smaller members of the UK's Institute of Directors (IoD). It identifies different levels of organizational learning and the characteristics of SMEs at different levels, with particular attention to differences in business strategies. The findings of the IoD study are augmented by findings from the independent non-profit Small Business Research Trust (SBRT). SBRT has collaborated with the Open University Business School in studies on the determinants of management development in SMEs and has longitudinal data for analysing whether there is a connection between growth-oriented, innovative, entrepreneurial SMEs and their propensity to network, to use ICT and to support learning in their organizations. Exploring the linkages between organizational learning and SME behaviour, strategy and performance, the paper concludes with a typology of SME strategies related to organizational learning and suggestions for future research in this area.*

Keywords: *organizational learning; small and medium-sized enterprises (SMEs); innovation; information and communication technologies; small firm strategy*

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The intensification of international competition, or globalization, at corporate, factor market and trading block levels has profound effects on firms of all sizes, whether directly engaged in foreign trade or not. However, the agenda of globalization is very much driven by the larger multinational and transnational corporations that have the resources, capabilities and strategic motivation to engage in international markets and global trade. Partly because of this, and because many of the largest corporations are economically larger than many countries, public policy in the EU focuses more on the role that small and medium enterprises (SMEs) can play in innovation and in developing competitive advantage at regional, national and EU levels (Bangemann, 1994; Delors, 1994; DTI, 1994 and 1998).

Despite this central role expected of entrepreneurial SMEs in competitive and industrial policy across Europe, the patchy distribution of entrepreneurial, innovative and sustainable SMEs still concerns many policy makers. However, little is known about how SMEs develop their capabilities and learn as organizations. In many cases, particularly among the self-employed and smaller microfirms, organizational learning will be synonymous with the individual learning of the owner-manager. In other larger microfirms, small and medium-sized firms, organizational learning refers to the activities that lead to the creation, acquisition and transfer of experience, ideas and information within an organization that develops its capacity. However, it is clear from many studies that the small size and related resource constraints of most SMEs, and the need for independence on the part of many SME owners, often prevents many small firms from participating to their full economic or learning potential (Gray, 1998). This paper uses regular SME surveys conducted by the Small Business Research Trust (SBRT) to examine more closely the context in which SMEs learn and form their strategies, and then focuses on the precise issues of organizational learning through a study conducted by the Open University Business School (OUBS) among members of the Institute of Directors.

SMEs

There is plenty of evidence of important size and industry differences between SMEs, which makes it inappropriate to adopt a single approach to the challenge (Storey, 1994; Gray, 1998). The European Commission (EC) definition of small firms is based on the criteria of effective management independence and workforce categories of less than 250 salaried employees for medium-sized firms, less than 50 for small firms and

less than 10 for microfirms. Small and microfirms account for 99% of all firms in Europe. In the UK there are more than three million of these firms. They account for half of private sector employment and one-quarter of gross domestic product (GDP). At EU level there are some 18 million SMEs. Although small firms account for 99% of the EU's enterprises, they account for less than half of employment and less than half of sales (DTI, 1998; ENSR, 1997). According to Eurostat, the statistical office of the EC, some 90% of firms are microfirms and they account for one-third of all jobs (with very wide variations between member states), with roughly half of all EU jobs being in SMEs as a whole.

Entrepreneurial growth-oriented firms do make a positive contribution to net new employment, but these firms are very much in the minority. Most self-employed sole traders and very small family firms do not employ external capital or labour. Few small firms and even fewer of the self-employed are seriously interested in growth. Their primary motives are not financial but linked to retaining their autonomy and independence (Gray, 1998). Roughly three-quarters of the self-employed, notwithstanding that many of them are extremely energetic and inventive, function as atomized individuals never developing into more complex organizations and often finding it difficult to collaborate with other firms. Even among the very small firms that do employ other people, microfirms with fewer than 10 employees, their main business strategies are usually concerned with survival rather than growth of the firm. This does not promote an internal environment conducive to organizational learning. By contrast, successful small businesses are more likely to face challenges in the efficient management of social relations, of scarce or costly physical resources and in their ability to resolve business problems effectively. It appears that the organizational complexities associated with growth and innovation, plus the non-economic personal motivations of many SME owner-managers may pose real external and internal psychological barriers to the development of innovation in small firms, the introduction of innovations from other firms, or the development of skills and capabilities to support effective networking.

The fact that business is a social process suggests that well developed learning and social skills are of prime entrepreneurial importance. This conclusion is supported by the influential management writer, Peter Drucker (1985) who maintains that innovation no longer results from chance activities but needs to be managed — whether in a big or small firm — as an organized and systematic process. Despite this, entrepreneurs often do not feel the need to seek help for organizational problems even though they may be open to receiving outside specialist help for marketing or financial problems

(Flamholtz, 1986). There still appears to be a suspicion of the 'outsider'. Of course, this also inhibits effective networking in many cases. Nevertheless, there are signs that the era of the highly individual entrepreneur as a key economic actor may have declined as more cooperative or social forms of enterprise emerge. Indeed, there is a growing body of evidence that modern entrepreneurial businesses succeed because of their social skills, not only in obtaining a high performance from their employees inside the firm, but also in networking externally with other firms (Curran *et al.*, 1996).

Effective use of information and communication technologies (ICT) is clearly a key factor in this process and an area in which organizational learning is of paramount importance. In all these areas of policy focus (increased SME use of ICT, innovation, networking, etc) there are clear attitudinal, knowledge, resource and scale factors that influence SMEs. It is expected that these factors will also determine the extent of organizational learning among SMEs. In addition, however, the internal learning environment inside each SME must be a determining factor. This is likely to reflect the extent to which learning is a priority at board level. A high priority will not only be reflected in the values and beliefs of the directors and managers, but also in the release of constrained corporate resources to support individual and group learning. This paper examines SME values and beliefs, then analyses what organizational learning means in SMEs.

Methodology

Background issues such as attitudes to training and development in SMEs, strategic objectives and resistance to change are analysed in relation to SBRT and OUBS surveys. SBRT is an independent non-profit organization that conducts regular quarterly surveys of small firms in the UK. For the past 17 years, SBRT has monitored UK SME performance. The SBRT national database of 4,000 SMEs has been recruited from various sources including the main SME representative bodies. Like most databases in the volatile SME sector, it does not claim to be fully representative. However, experience indicates that the SBRT database represents the SME population in the UK more closely than most other large SME databases, providing robust responses that are consistent over time. The SBRT conducts a number of regular surveys of SMEs; the longest running (since 1984) is the *NatWest/SBRT Quarterly Survey of Small Business in Britain*.

This paper refers to findings from various quarterly surveys and draws mainly on the findings of the fourth quarter of 1999 on motivation, business objectives and attitudes towards growth (1,121 respondents) and the

first quarter of 2000 on changes and innovations (812 respondents). The respondents vary from survey to survey, but there is a common pool of respondents (roughly 50%) so it is possible to track responses over time and link the surveys. In addition, the paper refers to a 1995 OUBS survey of SME attitudes and behaviour (2,517 respondents) and a 1997 OUBS SME management development study.

The key issues on the nature and determinants of organizational learning were studied as part of a joint project on organizational learning carried out by the Institute of Directors and OUBS. The survey was based on the participation of directors from 362 SMEs between January and July 1999. Three different core dimensions of organizational learning were measured through specially constructed scales — personal cognitive learning (PCL), social constructive learning (SCL) and institutional constitutive learning (ICL). Almost three-quarters of contributors (71%) were from private limited companies and most came from both the manufacturing and service sectors. Three-quarters of contributors were from business-to-business firms and a quarter from consumer-oriented firms. Some 28% of the sample was excluded from the analysis on the grounds of being too large (over 250 employees) or too small to be considered as organizations. There were no significant differences between the above respondent profiles and non-respondent profiles.

Findings

Attitudinal factors

The overriding motivation that inspires small firms, especially the self-employed, is the desire to be independent (Gray, 1998). The surveys conducted by the SBRT also confirm this as the dominant feature of SME motivation in general, as demonstrated by Table 1. The need for independence is a long way ahead of financial gain as a motive reported by SME owners. Further analysis of these SBRT surveys reveals strong age and size effects, with older owner-managers of microfirms feeling this need particularly strongly, and the self-employed even more. In contrast, younger SME owners seem to be more self-confident about taking risks and expect to build their businesses in the longer term. The effects of size differences, measured in terms of workforce size, underlie these patterns and are also clear in SME attitudes towards introducing changes. Table 2 shows the size differences with respect to propensity to introduce changes/resistance to change in the firm.

Although only 8% are strongly resistant to change (and another 8% reluctant to change), this is linked to size. It is clear that these smaller firms are less likely to

Table 1. SME main personal career motivation, 1990–99 (column percentages).

Main career motive	1990	1996	1999
Independence/be own boss	50	52	46
Make money	19	16	17
Security for future	9	10	14
No alternative/avoid unemployment	6	11	8
Family tradition	5	5	5
Other	11	8	10
Sample size	1349	753	1121

Table 2. SME attitudes to change by workforce size, 2000/Q1 (column percentages).

Number of employees	Constantly introduce change	Occasionally introduce major changes	Occasionally introduce minor changes	Change only when necessary	Avoid change	Total
Sole trader	6	11	16	22	16	13
Microfirm (<10)	51	52	55	47	66	54
10–24	22	25	18	25	13	21
25–50	14	10	9	6	3	10
50+	6	2	2	–	2	3
Column totals	219	155	302	64	68	808
Row % (n = 808)	27	19	37	8	8	100

Note: $\chi^2 = 45.407$; $df = 16$; $p < 0.0000$.

be constantly introducing change. Indeed, they display a stronger aversion to change, probably a reflection of resource and time constraints as well as personal capabilities. Small firms (10–50 employees) have a stronger tendency to introduce constant or major changes. Given their non-economic work motivations and a stronger aversion to change, it is clear that many self-employed and microfirm owners will not be supportive of training and development, a key condition for successful organizational learning. In 1995 the UK's employers' organization, the CBI (1995), surveyed its small business membership on management development, and extended its range of enquiry beyond a narrow focus on training.

Management development activities surveyed fell into three categories — training, recruitment practices and the use of consultants and business advisers. Training programmes were the most widely used management development technique across all functional areas of management, followed as a distant second by the use of consultants (except for financial management, in which recruitment from external sources was the second preferred method of management development). Roughly half the sample intended to strengthen their core management teams through a mix of training, consultancy and recruitment, although there were clear size effects, with the smallest firms doing the least of any of the development activities (not just training). This

was also confirmed by an SBRT survey in 1995 (see Table 3).

The survey covered both management and staff development, and it is clear that microfirms with fewer than five employees are significantly less active than larger SMEs. Even excluding them from the sample, however, the expected size effects remain. There is a direct relationship between firm size and the provision of internal and external training courses, as there is in allowing employees time off to pursue their own development. These are all activities that support organizational learning. However, these are formal measures and the wider issues concerning management development as opposed to training were not explored. A 1996 survey by the University of Kingston found that some 80% of small firms provided informal training for their staff and managers (Curran *et al.*, 1996), often the most effective way of sharing experience (another important feature of a learning organization). In 1997, OUBS conducted a study of SME management development, which confirmed these findings and revealed that growth-oriented SMEs were a lot more active in providing and using development activities, especially the use of external courses and consultants, formal induction of new staff and job rotation. Significantly, there was a lot more commitment to initiating management and staff development activities from the top, whereas the implementation of development was more likely to be

Table 3. Staff development approaches in SBRT sample, 1995 (column percentages).

Staff development	<5	5–9	10–14	15–24	25–49	50+	All
No response	24	7	6	3	7	9	15
No formal training	43	36	29	28	16	14	36
Internal training	9	20	36	29	48	51	19
External training	18	34	45	59	65	63	32
Time off	13	26	31	32	37	43	22
Other	5	5	2	4	3	6	5
Sample (n)	502	245	94	94	75	35	1045
Sample (row %)	48	24	9	9	7	3	100

Table 4. SME main business objectives, 1990–99 (column percentages).

Main business objectives	1990	1996	1999
Support preferred lifestyle	30	35	33
Build assets for the future/the family	16	15	21
Increase profits	21	21	17
Improve personal standard of living	16	8	9
Innovate/develop new products	–	7	5
Increase sales	7	6	5
Other	10	7	9
Sample size	1349	753	1121

Table 5. SME growth objectives, 1991–99 (column percentages).

Growth objectives	1991	1995	1996	1999
Growth-oriented	37	62	33	41
Growth-averse	38	30	37	23
Exit/sell/merge/other	25	9	30	36
Sample	1719	2517	753	1121

delegated to a specific manager (Gray, 1997). Individual and organizational development appear to be treated more strategically in growth-oriented SMEs (Thomson and Gray, 1999).

Strategic factors

Given the informality and non-economic nature of much SME thinking, it is not surprising that SBRT surveys reveal that SME strategic objectives tend to be set mainly on non-business goals, as Table 4 (which summarizes the findings from three separate SBRT surveys) shows.

The prevalence of the objective of supporting a preferred lifestyle among SME owners is stable and consistent with other SME research (Gray, 1998). Together with the objectives of building future assets for the family and improving the standard of living, these three objectives relating to personal concerns suggest that non-economic objectives dominate the agenda in most SMEs. In turn, this suggests that growth and innovation will not be strategic goals of a great many

SMEs, as Table 5 (which summarizes growth objectives from 1991–99) confirms.

Along with the tendency among SMEs to avoid too much change, the strength of size effects was also confirmed. The very smallest firms, the sole traders, tend very strongly to be growth-averse. Microfirms are not quite so growth-averse, but share with the sole traders a desire to keep the status quo, a 'non-change' state. The larger small firms are clearly more growth-oriented. However, growth aversion also increases with age, which is a factor that must be taken into account when analysing SME behaviour and may have an impact on organizational learning.

Organizational learning

The focus of the organizational learning study was on the role of directors in small companies. The study focused on three distinct, although not mutually exclusive dimensions of organizational learning. The first dimension, personal cognitive learning (PCL), includes

those capabilities and activities of the firm that consider the employee as an individual learner. It is primarily about what resides in the mind of a person as a knowing individual. The content of such knowledge is dependent on what the individual knows, their past experiences, how those experiences are organized into knowledge structures and what beliefs the individual has about those experiences. It is this individual cognition that frames the individual's abilities to generate new organizational insights, ideas, information and eventually behaviours.

Traditionally the majority of corporate intervention initiatives (through human resource and training programmes) have concentrated their efforts on developing and changing individual cognition. PCL models the learner as a solo subject discovering, inventing and mastering the organizational world through instruction. In the majority of cases, the relationship between instructor and learner is formal, unidirectional and consists of discrete communication boundaries between the two, with information being transferred from source (instructor/training programme) to passive recipient (targeted learner). Many technological learning support solutions also reinforce the PCL dimension.

The second dimension, social constructive learning (SCL), includes those capabilities and activities that consider the employee as a social individual. It recognizes the need for most individuals in most settings to engage in learning as a communal activity. It is not just that the individual employee must make knowledge his/her own in isolation, but that they must make it theirs in a community of those who have divergent and convergent aspirations around the content of that learning. The emphasis is not on personal knowledge interpretation, discovery and invention, but on the importance of argumentation and negotiation that allow for knowledge development and learning to take place through communication with others. The concern is with how *we build* knowledge through the social construction of meanings and through our everyday interactions with others, in which we represent back and forth to each other our negotiated sense of organizational realities. Knowing in this dimension is a process of negotiating and communicating sense, not transmitting fully developed personal truths.

SCL strives to create environments in which individuals actively participate in ways that are intended to help them construct their own understanding of organizational problems and realities, rather than having instructors interpret organizational problems and ensure that employees understand such problems as he or she (the instructor) has explained them. In SCL environments, learners are actively engaged in perceiving different perspectives and organizing and representing

their own interpretations, reflecting the sense and meanings of communities in which they belong. This is not 'active' in the sense that individuals actively listen and then mirror the one correct view of organizational contexts (eg objectives, tasks, problems, etc), but rather 'active' in the sense that learners must participate and interact with the surrounding environment in order to invent and negotiate. The recent emergence of Intranets and Extranets may provide ideal technological support mechanisms for the SCL dimension.

Finally, the third dimension examined in this study, institutional constitutive learning (ICL), is an extension of the SCL idea that knowledge is built. It differs, however, in that idea, information and insight construction happens most vividly when organizational members engage in the construction of something external to themselves, or at least 'universal' to their firm — hence the term 'institutional', eg organizational charts, authority structure, support systems, formal procedures, committee and reporting mandates and so on. The emphasis is on the external 'product' of constructive processes — the constitution of the firm. In the main, ICL criteria consist of those formal and informal, but publicly recognizable and evidenced organizational coordinating mechanisms — the institutional mechanisms and environments that may or may not limit the relevance and effectiveness of organizational learning initiatives.

All respondents were measured on the three dimensions using three scales derived through multivariate factor analysis. The individual PCL dimension appears to represent a separate factor, but the two social constructs, SCL and ICL, revealed high positive correlation, suggesting that they reflect two different aspects of the same dimension, a sort of 'social learning' dimension, fundamental to the organizational learning concept (although the individual PCL dimension was consistently rated higher than either of the two social learning dimensions). The three scales were used to divide the sample into a 'highest learning firms' subsample and a 'lowest learning firms' subsample. The two subsamples were used to compare performance criteria — financial, competitive, customer behaviour and innovative. As virtually all firms claimed to use financial measures of performance, the financial evaluation criteria did not distinguish between the firms. A large proportion of firms (more than one in five) did not use competitive evaluation measures (such as market share, comparative prices, profit margins, etc), but among those that did, organizational learning differences were not significant. In the remaining two evaluation areas, customer behaviour (customer loyalty, brand awareness, etc) and innovation (new products, new development), there were very marked and significant differences between the

high and low organizational learning groups (although, interestingly, there were no significant correlations between the two measures).

SMEs that review and measure innovation and customer behaviour are significantly more likely to value all three dimensions of organizational learning, although the individual PCL dimension provides the least discrimination between the groups (suggesting that firms that value social learning are also likely to be more conscious of customer behaviour and innovation). The study found no significant sector or size effects (although, with the microfirms excluded from the analysis, this was not unexpected). These findings are compatible with the background factors examined through the SBRT surveys.

Discussion

The findings presented in this paper provide strong and consistent support for the validity and usefulness of the concept of organizational learning. It also seems clear that the issues addressed through a consideration of organizational learning lie at the heart of successful SME development (and therefore provide a key to the successful implementation of public SME policy). Organizational learning has long been confined to the world of academic and large corporation research. Focusing on the SME sector is likely to result in fundamental performance improvements when compared with the incremental improvements reported by large firm programmes. Learning also needs to be viewed as a critical corporate activity alongside strategic planning as a determinant of business success, particularly if the labour markets within which SMEs compete continue to tighten. Indeed, in terms of competitive advantage, the research has highlighted a learning gap between the most and least innovative and customer-focused firms. In particular, the findings suggest that the key to improved customer focus and innovation may lie in the 'social constructive' and 'institutional constitutive' dimensions of learning. This further suggests that current initiatives aimed at supporting networking among SMEs and strengthening the participation of SMEs in collaborative value chains appear to be pushing in the right direction.

However, it is also clear that more research is needed on the learning processes inside SMEs, particularly as the findings in this paper suggest that these provide a clue to understanding the processes of successful entrepreneurship. SME owners keen to develop their

firms as entrepreneurial learning organizations need to develop and value the individual learning of their managers and employees, social learning through teamwork and institutional learning through the development of an environment supportive of learning and sharing throughout the firm. The strategic objectives of innovation, entrepreneurship and growth appear to be linked to successful organizational learning. More needs to be known about the success factors in each of these three areas, which points to an interesting research agenda in the field of SME organizational learning.

References

- Bangemann, M. (1994), 'Europe and the global information society', Recommendations to the European Council, May, EC, Brussels.
- Confederation of British Industry — CBI (1995), *Management Development: A Survey of Small and Medium Sized Business*, November 1994, CBI, London.
- Cosh A. (1997), 'Innovation is the outcome of a strategy of seeking competitive advantage', *Innovation Update*, Issue 3, ESRC, pp 3–4.
- Curran, J., Blackburn, R., Kitching, J., and North, J. (1996), 'Establishing small firms' training practices, needs, difficulties and use of training organisations', *DfEE Research Studies*, RS17, HMSO, London.
- Delors, J. (1994), *Growth, Competitiveness and Employment: the Challenges and Ways Forward into the 21st Century*, EC, Brussels.
- Department of Trade and Industry — DTI (1994), *Competitiveness White Paper*, Cmnd 2563, HMSO, London.
- Department of Trade and Industry (1998), *Our Competitive Future: Building the Knowledge Driven Economy*, Stationery Office, London.
- Drucker, P. (1985), *Innovation and Entrepreneurship: Practice and Principles*, Harper and Row, New York.
- ENSR (1997), *The European Observatory for SMEs*, EIM, Zoetermeer, The Netherlands.
- Eurostat (1999), 'Community Innovation Survey II, 1997–98 (CIS2)', *Statistics in Focus*, April, Eurostat, Brussels.
- Flamholtz, E. (1986), *How to Make the Transition from Entrepreneurship to a Professionally Managed Firm*, Jossey-Bass, London.
- Gray, C. (1997), 'Management development and small business growth', *20th National ISBA (Institute of Small Business Affairs) Policy and Research Conference*, Belfast.
- Gray, C. (1998), *Enterprise and Culture*, Routledge, London.
- Pettigrew, A. (1997), 'The new internal network organisation: process and performance', *Innovation Update*, Issue 2, ESRC, pp 5–6.
- Schumpeter, J. (1934), *Theory of Economic Development*, Harvard University Press, Cambridge, MA.
- Small Business Research Trust (1984–2001), *NatWest SBRT Quarterly Survey of Small Business in Britain*, Vols 1–18.
- Storey, D. (1994), *Understanding the Small Business Sector*, Routledge, London.
- Thomson, A., and Gray, C. (1999), 'Determinants of management development in small businesses', *Journal of Small Business and Enterprise Development*, Vol 6, No 2, pp 113–127.