

# The Skills Paradox in Times of Change

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## **Abstract**

*The skill base of an enterprise rises and falls as a result of staff turnover, training and other development processes, and with the change in the relevance of the skills to its current circumstances. A qualitative Skills Inventory Model (SkIM) is proposed using the familiar stock-flow structure. The SkIM model helps articulate the dynamics of this key variable, and may suggest why some firms find major change an insuperable barrier. It reflects how in stable times, the received wisdom of retaining staff applies, as skills lost when staff leave must be recovered through those of their replacements or through training and other staff development. In times of relatively slow change, staff retention may be even more important, as change leads to faster skills obsolescence, which would otherwise put a double burden on skill replenishment.*

*In times of major change, however, the picture may be quite different. In these circumstances the rate of skills obsolescence becomes rapid, and normal staff development processes may simply prove inadequate in building up the necessary new skill base. Smaller firms in particular may not have access to staff rotation with sister firms and other mechanisms available to larger firms to deal with this. In which case, the ability to enhance the skills inventory through staff recruitment may be necessary. This poses a particular challenge to firms whose natural staff attrition is low and growth is not leading naturally to the creation of new posts.*

## **Introduction**

We often hear it asserted that “Our firm’s greatest assets are the skills and talents of our people.” and this is interpreted into the maxim that where-ever possible an enterprise should seek to retain its experienced workforce - at least in terms of its more competent staff. This applies to all levels within the organisation, but is arguably most critical in the case of managers. The reasons are straightforward, if managers leave they take their skills and abilities with them to the benefit of their new employer. Those skills then have to be replaced either by new recruitment or by training and development within the existing management team, both of which are time consuming and potentially costly activities.

The dimensions of this retention strategy are explored within the framework of a ‘skills inventory’ viewpoint in this paper. It describes, in general terms, how the skills inventory can be increased and how it decreases. It then proceeds to consider the specific situation of when an enterprise is facing a major change, or a period of industry turbulence that may demand a sequence of changes. These changes are likely to be particularly challenging times, as skills ‘in the old ways’ more quickly become irrelevant and obsolete, depleting rapidly the skills inventory of the firm. A simple visual model - a Skills Inventory Model (or SkIM) - using the stock-flow diagramming approach is developed to help in the articulation of these ideas. This suggests that under such circumstances the retention of the managerial workforce might not be such a favourable strategy, as the firm may then have very limited scope to acquire the new skills that would be needed to face the challenge after major changes have been implemented.

The SkIM model is developed further to take into account other methods by which firms may bridge the skills gap - staff rotation with sister firms, secondees, use of consultants etc..

However, it is recognised that these other methods are not available to all firms, particularly small medium enterprises (SME's).

While the basic objective of this paper is to present a visual model of the skills dimension in managing through and after change, the model is able to help in understanding the manager retention paradox in times of change. The fuller model gives a more comprehensive picture, and it is conceivable that a quantitative model could be developed that would support analysis in the development and evaluation of specific recruitment/training/succession policies for a firm.

### **Preparing for Fundamental Change - the Challenges**

It is generally accepted that the accelerating pace of organisational and societal change in recent times has led to an increasing range of demands on managers (see Huey, 1994; Kilcourse, 1994). Any change poses challenges to a management team (and to the workforce as a whole), but fundamental change is likely to be particularly challenging. Small-medium enterprises (SME's) in particular, though sometimes benefiting from increased cohesion and 'entrepreneurism' their small size brings, may have limited room to manoeuvre in trying to address these challenges. For the purposes of discussion here, a deliberately broad view of the term 'manager' is taken. Handy (1993) has noted the difficulties in precisely defining what a manager is and does. The term includes any person with responsibility for the management of others (as in Wynarczyk, *et al.*, 1993), here the definition is specifically held to include directors and SME owner/ managers.

Classically, Mintzberg (1973) defined 10 roles of a manager centring around interpersonal, information handling and decision areas. Significantly, however, Litwin and Culler (1993) estimated that managers show a 50% drop in effectiveness in times of major change: in their case downsizing and cost reduction. The reasons for such a drastic fall in performance are many and complex, but Braham (1981) points particularly to the strain uncertainty and change puts on human resource planning.

There have been many attempts to establish change guidelines and frameworks for organisations (see Kotter, 1990; Tichy and Devanna, 1986; Burke and Litwin, 1992). There have also been many valid proposals which have utilised, BPR and OD based models and frameworks (see Coulson Thomas, 1992; Aitken, 1995; Carr, 1993 and Pollalis, 1996). These have all provided valid and sensible generalisations about change management issues however they generally fail to explain how managers can deal with the enormous range of consequences and complexity generated by change (see Dunphy and Stace, 1993; and McKendall, 1993). Gilbert and Kleiner (1993) suggested that an alternative approach to change from these traditional frameworks was for leaders to promote and drive experimentation and adaptation from all staff: thereby encouraging the up take of new ideas

The practical experiences of how useful the different methods proved in assisting managers in their preparations for change are mixed. In his study of a hundred US organisations, Darcy Hitchcock found that some of the most successful support approaches were often neglected in practice (Hitchcock, 1996). He found that a key success factor was to allow managers to explore their own roles and this was often achieved by giving them on demand access to a consultant. There has arguably also been an over reliance on the 'hard' aspects of structures and systems in much of the literature on change. Swist and Ayers (1994) found that such visible aspects related to change: such as structures and strategies, accounted for only 20% of

change management processes. They suggested that 80% of all change factors are hidden from view and relate to human interaction, employee understanding and commitment to organisational vision. Litwin and his colleagues (1996) stressed the importance of providing guidance to individuals who were experiencing change, while Barham (1988), and London and Wueste (1992) emphasised integrating training and development issues into overall organisational strategy. Grieve-Smith and Fleck (1987) and Wyncarczyk (1993) also highlighted the importance of recruiting and retaining management from outside the organisation in growth oriented businesses.

### **A Visual Model of Skill Inventory Management**

The credibility and utility of visual models - diagrams based on either the causal loop diagramming approach or the stock-flow format - has been widely discussed (see, for example, Wolstenholme and Coyle, 1983; Ward and Schriefer, 1997; Richmond, 1994). This paper presents a model capturing the structure of flows of skills into and out of a firm's management team, using the stock-flow format.

The aggregate cumulative skills of an enterprise's workforce may be regarded as its 'skills inventory'. These skills comprise the knowledge of the organisation and its environment, and the ability to use that knowledge productively to the benefit of the enterprise. Clearly, managers are required to possess and display a wide range of 'skills', some will be very specific to their functional role, some specific to the industry they are in, and some related to their ability to manage - interpersonal, integrating and co-ordination, 'leadership', and strategic thinking skills. There are a number of basic mechanisms by which the skill inventory changes over time.

The inventory can be depleted:

- when experienced staff leave,
- as skills become obsolete

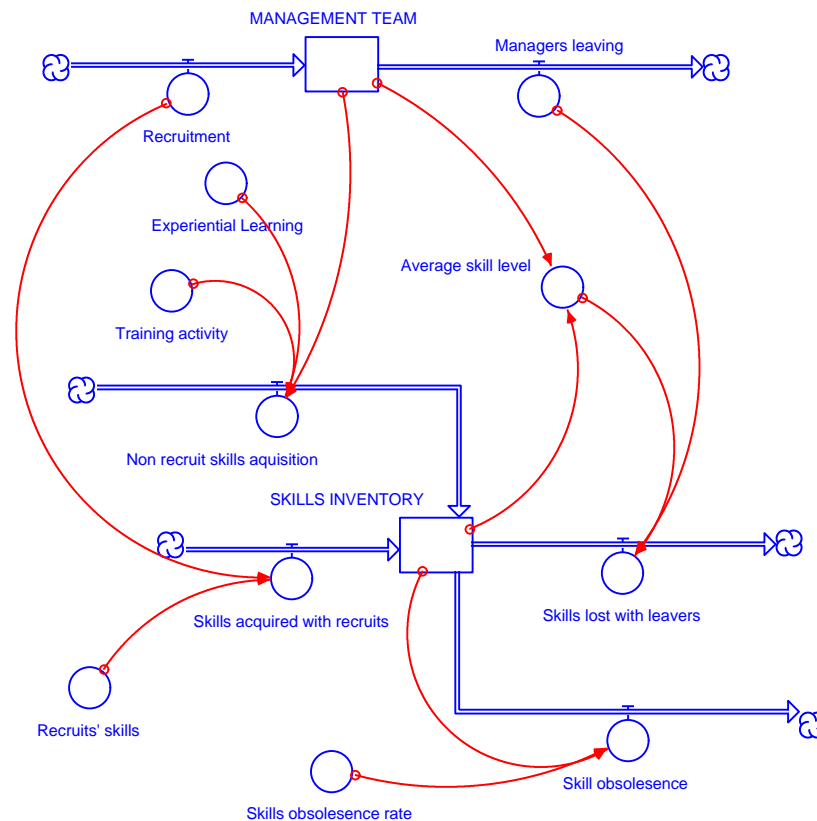
It may be replenished by:

- new recruits, if they represent a net increase in workforce (i.e. do not replace a leaver), and assuming that every new recruit brings at least some minimum skill level with them.
- recruits who replace leavers, if the individual skills of those new recruits exceed that of the leavers
- accrual of skills through experience, training and development.

More complex processes may also affect the skills inventory level, for example the use of consultants, job rotation with sister companies in a group, strategic joint ventures that include staff sharing, secondments, or misuse of resources - e.g. using managers in one area where their skills would be more valuable elsewhere. Some of these will be addressed later.

The basic skills inventory structure may be represented pictorially as in Figure 1. (This structure could similarly apply to other employee groups, but this paper is focused towards the management team.) This model fits quite neatly with the received wisdom of retaining managerial staff - at least when times are relatively stable - as highlighted in the literature. In steady state conditions, nothing much in the environment or the firm is changing, and it might be assumed that the rate of skill obsolescence is therefore zero or relatively low. In these circumstances, retaining managers broadly retains the skill level, while training and personal

development can make up for any slow falls in skills inventory due to skills obsolescence. If, however, managers do leave, then as long as they can be replaced by managers of a similar level, then the problem is not too severe, though the organisation does incur the recruitment costs. Any further small shortfalls due to staff changes can also be made up with training. Of course, in stable periods - e.g. in mature industries - cost containment is often a critical issue and so costs of recruitment and/or training may not be regarded as negligible.



***Figure 1 Levels and Flows in the Skills Inventory View***

The situation remains relatively straight-forward in times of gradual change due to slow changes in the external environment and/or internal initiatives like continuous improvement. In this case skill obsolescence can again probably be counter-balanced by increased training. However, the situation becomes more difficult to handle if staff turnover is significant at such times, particularly if replacements tend to have skill levels lower than those they replacement by any significant margin. Training, and other mechanisms, must then be relied upon to make up for shortfalls due to turnover, as well as with skills obsolescence. In such times, clearly minimising turnover is going to be highly beneficial.

The primary concern here is what happens when an organisation faces fundamental change. The organisation can possibly utilise consultants to assist in the change implementation, but of equal concern is how its regular managers will be able to manage the new situation. In this case there is significant skills reduction as the new processes and new thinking make old ways of approaching management problems rapidly obsolete. To boost the necessary skills through training may not be feasible, and even if it were, there may be long lag times before

the managers are able to master the new skills needed. The other option is to acquire the necessary skills by recruiting new managers who already possess those skills. This highlights the skill paradox, for if growth is not generating the need for new posts that can be filled by staff with the 'new' skills, then this may only be possible if the firm actually has staff leaving who can be replaced.

Of course, the point has been made earlier that recruitment may be an expensive way to acquire the new skills, particularly if redundancy, early retirement or other inducement has been required to create the 'space' for the new managers. It also assumes that the necessary new skills are available in the employment market place. The critical issue is whether the benefits of post-change managers being able rapidly to master the requirements of the post-change organisation, and to exploit the new opportunities, outweigh the costs of mobilising its managers to meet the challenges.

### **Additional Skill Inventory Structures**

The analysis so far has led to a basic skills inventory structure whose visual form supports understanding of the problems of retaining and developing the skills base. This structure would probably apply to just about any kind of organisation. However, some organisations, large multi-divisional firms in particular, may have additional means of supplementing their skill base in times of major change. One form of enhancement is through job rotation or secondment with sister organisations, which if available as an option to the firm, this can be called upon to quickly boost the skill base. Clearly, though, it is only an option if there is a sister organisation with whom the rotation can be made, and that the sister has experience of the new circumstances.

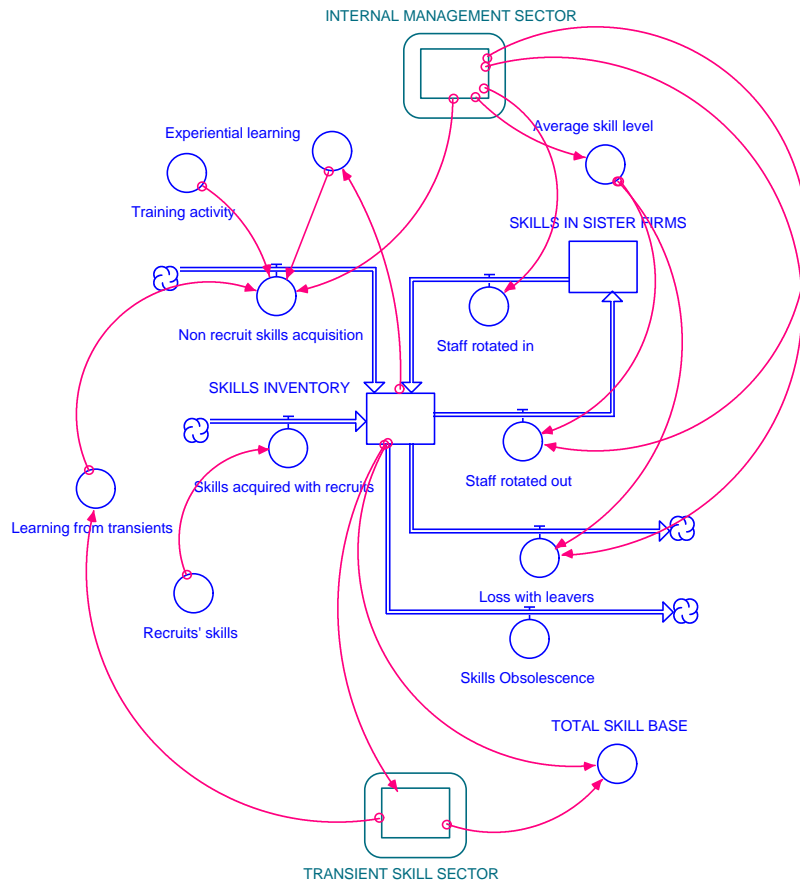
A second alternate form of skill enhancement is through the use of consultants. The presence of consultants obviously provides an immediate boost, but it present only while the consultants are on contract. However, there may also be a longer term benefit that accrues from the internal staff's learning as they work alongside the consultants. Other forms of external intervention includes the use of secondees from universities or indeed other firms, the use of 'Teaching Company Associates'<sup>1</sup>, and such newer concepts as the 'guest engineer'<sup>2</sup>. (These may all be regarded as 'transient' members of the management of the firm.)

The visual model can therefore be further developed to include these mechanisms, as in Figure 2. This figure includes the main skills inventory structure, while the internal management team sector and the transient team sector are represented separately in Figures 3A and 3B. Inevitably as the diagram becomes more complex in order to capture all the mechanisms, it probably becomes less useful as a thinking/discussion aid.

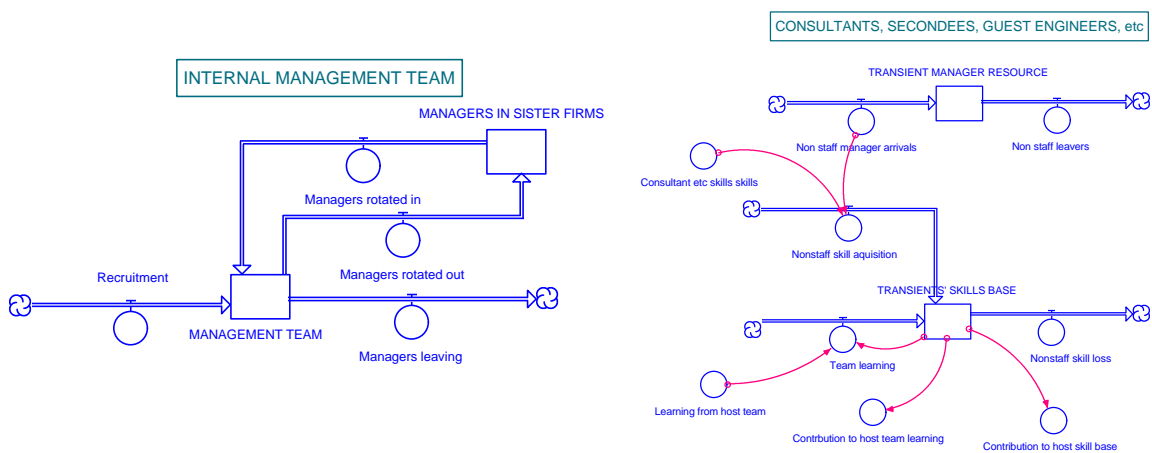
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<sup>1</sup> The Teaching Company Scheme is a knowledge/technology transfer initiative centred in a number of UK universities. Good graduates with some industrial experience are recruited for a fixed time period, usually two years, by the university and are funded jointly by the receiving firm and the government's Department of Trade and Industry. They are based in the receiving firm and spearhead work on a particular innovation project with the technical support and guidance of a team of university specialists.

<sup>2</sup> Guest engineers are employees of one firm who are co-located with specialists in a supply chain partner to work on a specific project. Guest engineers are able to support the two-way flow of ideas and knowledge between the partner firms.



***Figure 2 - Extended Skills Inventory Model***



***Figures 3A & 3B - Detail of the Internal and Transient Management Team Structures***

## Conclusions

The objective of this paper was to present a visual model - the Skills Inventory Model or SKIM - capturing the key elements of skill management to help in understanding the dynamics of skill acquisition and retention, particularly during times when a firm is going through major change. The model helps in understanding why the universal retention of managers at such times may not always be the best tactic, as the quick replacement of rapidly obsolescing skills may be hindered. This paradox has been observed in case studies of firms which had undergone major change in the recent past. There did appear to be some (qualitative) correlation between the success that the firms had achieved and their opportunities for bringing new managers into key roles in the firm (see Winch and McDonald, 1998).

An expanded version of the Skills Inventory Model does give a more complete view, but is arguably diminished in usefulness due to its complexity. Nonetheless it clarifies that there may be other mechanisms available by which a firm could rapidly acquire skills in times of rapid change, either by manager rotation or transfer or through the use of what has here been described as transient management team members, external consultants etc. However, manager rotation/transfer is clearly only available to firms that are part of a multi-divisional company. Smaller firms may be particularly handicapped by this in their attempts to remain competitive, though they are more likely to have access to secondees, teaching company associates, and perhaps guest engineer type resources - possibly even through some government or trading partner subsidy.

Use of this model has demonstrated again the potential value of stock-flow representations of system structure to help in understanding counter-intuitive or paradoxical situations.

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## References

- Aitken, A., and Saunders, I., 1995, "Vision only Works if Communicated", *People Management*, 1(25), pp.28-31.
- Barham, K., Fraser, J., and Heath, L., 1988, Management For The Future: How Leading International Companies Develop Managers For The Future, Ashbridge Management Research Group.
- Burke, W.W., and Litwin, G.H., 1992, "A Causal Model of Organizational Performance and Change", *Journal of Southern Management*, 18(3), pp. 523-545.
- Braham, J., 1981, Human Resource Planning, London: Pitman.
- Carr, D.K., 1993, "Managing for Effective Business process Redesign", *Journal of Cost Management*, Autumn, 7(3), pp.16-21.
- Coulson Thomas, C., 1992, "Strategic Vision or Strategic Con?: Rhetoric or Reality", *Long Range Planning*, 25(1), pp81-89.
- Dunphy, D., and Stace, D., 1993, "The Strategic Management of Corporate Change", *Human Relations*, 46(8), August, pp.905-920.

- Gilbert, E., and Kleiner, B.H., 1993, "Learning to Love Change", *Leadership And Organization Development Journal*, 14(5), pp.i-ii.
- Grieve-Smith, J., and Fleck, V., 1987, "Business Strategies in Small High Technology Companies", *Long Range Planning*, 20(2), pp61-68.
- Handy, C., (1993), *Understanding Organizations*, 4th Ed, London: Penguin.
- Hitchcock, D., 1996, "Learning From Chaos", *Journal of Quality and Participation*, 19(1), Jan/Feb, pp. 42-45.
- Huey, J., 1994, "The New Post Heroic Leadership", *Fortune Magazine*, 129(4), 21 February, pp. 42-50.
- Kilcourse, T., 1994, "Developing Competent Managers", *Journal of European Industrial Training*, 18(2), pp12-16.
- Kotter, J., 1990, *A Force For Change: How Leadership Differs from Management*, New York: Free Press.
- Litwin, G., and Culler, A.C., 1993, "Climate Is The Key to Chaos", *The Purrington Method*, Autumn, Mattapoissett: The Purrington Foundation.
- Litwin, G., Bray, J., and Lusk Brooke K., 1996, *Mobilizing The Organization: Bringing Strategy To Life*, London: Prentice Hall.
- London, M., and Wueste, R.A., 1992, *Human Resource Development In Changing Organizations*, Quorum Books.
- McKendall, M., 1993, "The Tyranny of Change: Organizational Development Revisited", *Journal Of Business Ethics*, 12(2), February, pp.93-104.
- Mintzberg, H., (1973), *The Nature of Managerial Work*, Harper and Row.
- Pollalis, Y.A., 1996, "A Systematic Approach To Change Management: Integrating IS Planning, BPR and TQM", *Information Systems Management*, 13(2), Spring, pp. 19-25.
- Richmond, B., 1994, "System Thinking/System Dynamics: Let's just get on with it", *System Dynamics Review*, 10(2/3), pp.135-157
- Swist, J., and Ayers, A., (1994), "Managing Hidden Aspects of Change", *Transportation and Distribution*, 35(11), November, p.84.
- Tichy, N., and Devanna, M.A., 1986, *The Transformational Leader*, New York: John Wiley & Sons.
- Ward, E., and Shriefer, A.E., 1997, "Dynamic Scenarios: Systems Thinking meets Scenario Planning". In Fahey, I., and Randell, R.M (eds), *Learning from the Future: Competitive Foresight Scenarios*. New York: John Wiley & Sons.
- Wolstenholme, E., and Coyle, R.G., 1983, "The Development of System Dynamics as a Methodology for System Description and Qualitative Analysis", *Journal of the Operational Research Society*, 34: pp.569-581
- Winch, G.W., and McDonald, J., 1998, "The Skills Inventory Paradox in Times of Fundamental Change". Unpublished manuscript.
- Wynarczyk, P., Watson, R., Storey, D., Short, H., Keasey, K., 1993, *Managerial Labour Markets in Small and Medium-Sized Enterprises*, London: Routledge.

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