

## Contributed Article

# Are You on the Verge of Obsolescence?

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*The vastly expanding knowledge base and the rapid technological advancements, undoubtedly, exert pressure on individuals to remain competitive by updating themselves constantly to be able to perform their roles and responsibilities effectively. This article discusses the concept of managerial obsolescence and emphasizes the significance of life-long learning. The paper attempts to understand the symptoms, causes and consequences of managerial obsolescence and provides a questionnaire (in two parts) to identify the extent of and the factors responsible for managerial obsolescence. This information could form the basis for taking remedial action at the individual as well as organization levels. Obsolescence can be tackled by a two-pronged approach wherein individuals take initiative for updating themselves which may help in their career advancement. Organisational interventions ensure that the investment on training leads to desired impacts.*

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### Introduction

There has been a relentless quest to enhance the level of competence of the workforce to meet the increasing demands of a highly competitive business environment. This needs an assessment of the competencies required and those possessed by the managers, i.e. a gap analysis. Such an assessment would clearly bring out how updated the managers are and to what extent they are obsolete in terms of their ability to discharge the current as well as future responsibilities within the organisation. There is an increasing awareness that the competencies needed are more than the current level. This becomes all the more pronounced when there are significant information and knowledge explosion and technology advances. This, coupled with the fact that generally managers do not pursue life long learning once they enter the world of work, makes the task of enhancing the level of competence more daunting. Under these circumstances there is every likelihood that managers tend to become obsolete with every passing

year. This paper attempts to assess the level of obsolescence and the factors leading to it so that efforts could be directed at taking timely corrective measures.

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### **Concept of Obsolescence**

Before making an assessment of the level of obsolescence among managers it is only pertinent to have a clear understanding of what the concept of managerial obsolescence is and its causes. Individuals will survive in their jobs only if they adapt continuously to meet the needs of the changing environment. One who fails to perceive the changes taking place around him/her and consequently adopts a reactive rather than a proactive approach is undoubtedly more likely to become obsolete. Failure to adapt to change would mean that his/her productivity declines, with the obvious consequences on his/her future role and importance in the organization (Dhar 1994). Obsolescence occurs when there is a gap between the job needs and one's capabilities. Then the skills and the knowledge of a manager are clearly inadequate to perform the job effectively. Stephen R. Covey (the 8<sup>th</sup> Habit: 295) says "Over 20 per cent of the present workforce is becoming obsolete, and that unless they rededicate and reinvent themselves, within a few years, another 20 per cent will become

obsolete". Drucker (1995) emphasizes the importance and relevance of knowledge. "Knowledge has become the key economic resource and the dominant, perhaps, even the only source of competitive advantage". "Leveraging organizational knowledge is not only important," adds Drucker, "but may be the most important job management has." Extending this further, an organization's capacity to improve existing skills and learn new ones offers the most defensible competitive advantage of all (Prahalad & Hamel 1990).

A problem faced by all researchers in this area relates to definitions, many of which focus on different factors underlying obsolescence. The most commonly subscribed definitions of obsolescence are those related to job performance (Burack & Pati 1970, Dubin 1990, Harel & Cohen 1982, Reeser 1977, Kaufman 1974, Fossum et.al 1986, Mahler 1975, Norgren 1965, Pazy 1996). They all define obsolescence as the discrepancy between job performance and an expected level of competence which incorporates new knowledge being introduced into a profession.

Managerial obsolescence is in relation to the knowledge, skill and attitude and therefore we have the following two definitions: Jones & Cooper (1980) defines obsolescence as the extent to which a manager's knowledge and skills have failed to keep pace with the current and likely future requirements of his job. An aspect

related to obsolescence is that of attitude which is reflected in the definition by Mahler (1965) as “the failure of the once capable manager to achieve results that are currently expected of him. He identified two types of obsolescence: *ability obsolescence* - the manager’s abilities and skills are no longer sufficient for him to keep up with the jobs; and *attitudinal obsolescence* – the manager fails to maintain flexibility in attitude and approach, and to changing problems and conditions.

### Causes & Correlates of Obsolescence

The causes of professional obsolescence are many, and a number of interacting factors appear to be involved. According to Burack & Pati (1970) there are several variables to be considered in a study of technological change as a major cause of managerial obsolescence. These are (1) the individual himself, his ability and aptitude to learn on the basis of continuous education, (2) companies, in their lack of ability to develop and implement a plan of action to reduce obsolescence phenomenon, and lack of facilitating the educational activities rather than just approve them; and (3) society, characterized by lack of awareness of the magnitude of the problem thus creating a cultural lag between man and his material environment. Each of these three variables is a potential source of obsolescence (Fig. 1).

The present study looks at obsolescence from two perspectives, that of an individual perspective and also of

an organizational perspective. Of the many models of obsolescence Areeye (1991) brings out a similar framework as explained below.

**Individual factors were found to have a weak direct relationship with updating.**

The objective behind Aryee’s model was to examine the relative predictive strength of individual motivation and organisational factors that had been identified in literature as influencing the involvement of technical professionals in updating activities. Akin to Kozlowski and Farr (1988), this model is based on an interaction framework. Individual factors were found to have a weak direct relationship with updating. Environmental variables, specifically organisational policy and interactions with peers, were found to have a significant direct effect on updating activities. All the factors had significant relationships with motivation. A significant path coefficient provided support for the assertion that motivation was a moderator between both individual characteristics and work environment characteristics.

The above model clearly distinguishes two broad factors which could be considered to attribute to either the onset or avoidance of obsolescence. These are related to the individual and the organization. Factors related to individual may also include perception and motivation, while those related to the organization may include nature of

job, organisational climate and changes in the external environment.

There are two broad factors which are the primary causes for managerial obsolescence: (1) Individual Factors and (2) Organizational Factors. Each of these has a further sub-set of factors which have been explained through our model in fig. 2.

### Individual Factors

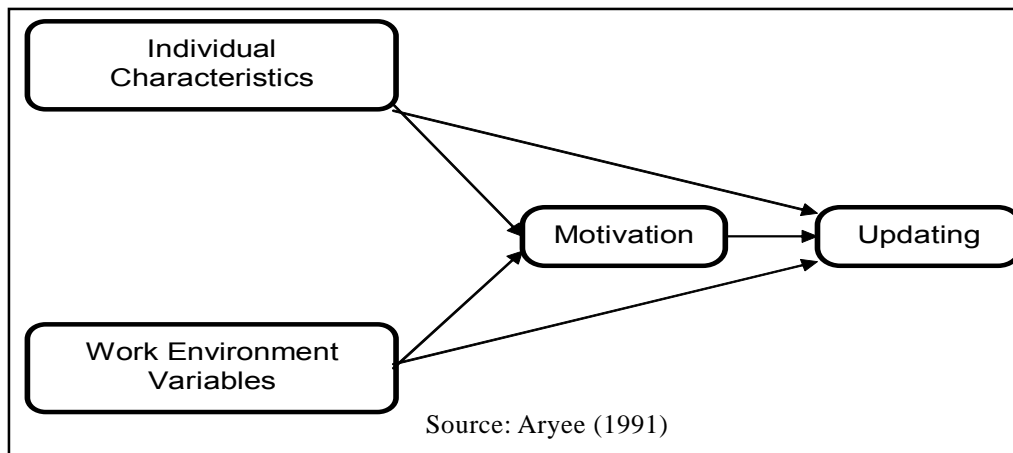
Under the *Individual Factors* the reasons for obsolescence relate to the cognitive aspects which could range from the denial of obsolescence, lack of awareness of change, complacency, lack of confidence, and resistance to change. It can be like a continuum. One may be

at one end of it at any level on the continuum or he could also be experiencing a combination of all the five. Further, one could also become obsolete in terms of his behaviour patterns when the causes could be affecting him at the affective level. These could be in terms of an individual feeling lack of competence in self, lack of career progression opportunities or limited opportunities and the lack of initiative to update oneself.

### Organisational Factors

Under the broad category of *Organisational Factors* we have the causative phenomena under three categories: (1) Job Related: a mismatch between the person and the job, lack of

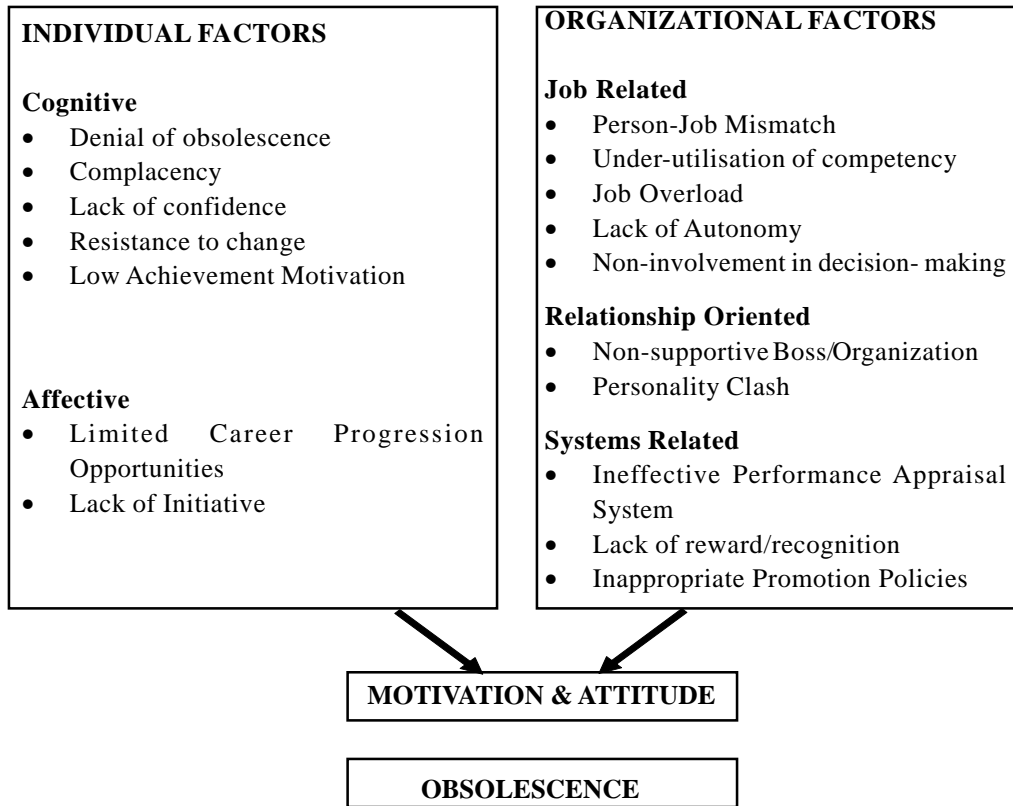
Fig. 1  
Hypothesised Model of Technical Updating



autonomy or non-involvement in decision-making; (2) Relationship Oriented: the impediments from the boss

as he is non-supportive; and (3) Systems Related: the organisational policies and practices like ineffective performance

**Fig. 2: Obsolescence: Causative Factors**

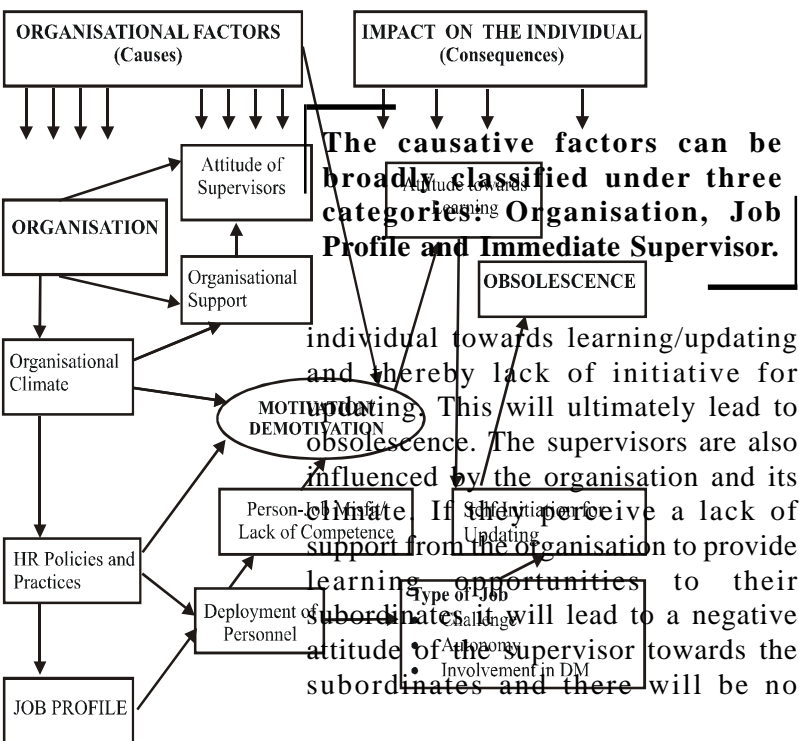


appraisal system; lack of reward/recognition and inappropriate promotion policy. The factors leading to obsolescence and the impact thereof have been explained in the model (fig. 3).

The above model explains the process of setting in of obsolescence in terms of organisational factors being the causes and the consequences thereof in the form of impact on individuals. As can be seen from the model the causative factors can be broadly classified under three categories: Organisation, Job Profile and Immediate Supervisor. Under

the Organisation we have included organisational climate which needs to be conducive to provide a learning environment to its employees. The organisational climate affects the HR policies and practices and the resultant job profile of the employees. Based on these two factors personnel are deployed for various tasks/roles. If there is a mismatch between the person and the job or there is lack of challenge, autonomy and involvement in decision making in the type of job provided to the individual it can lead to de-motivation. The de-motivation affects the attitude of the

**Fig. 3: Organisational Factors Leading to Obsolescence**



encouragement for any effort by the subordinates. All these will make the person feel demotivated leading to negative attitude towards learning and there will be no self-initiated efforts towards updating.

**Symptoms of Obsolescence**

Obsolescence does not occur overnight. It takes time to set in and it would be worthwhile to identify some early signals/symptoms of obsolescence so that timely corrective action

can be taken. Several authors have pointed out that certain attitudes, behaviours, and motivational patterns are symptomatic of obsolescence and hence provide guidelines for detecting it. Malmros (1963) described five signs of obsolescence in an engineer:

- He becomes less and less inclined to apply rigorous mathematical techniques to obtain solutions to his problems.
- He encounters increasing difficulty in reading new technical papers and feels frustrated because he cannot follow the mathematics.
- New technical concepts were confusing to him.

- New tasks and assignments begin to look too difficult to be practical.
- Contemporaries do not seek his advice.

### Consequences of Obsolescence

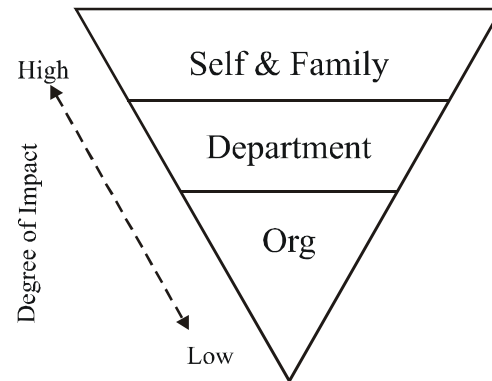
According to Jones & Cooper (1980) there are a number of possible outcomes, all of which are not very optimistic for the persons or, indeed, for the organisations (Fig. 4). Some may become so incapable that they are demoted, retired or made redundant. Others may even cause so many problems that the whole departments or, indeed, the company may have to close as a result of incompetence. The problem of obsolescence has deep-rooted consequences, for not only can it affect the individual, but also his department and the organisation.

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The consequences of obsolescence can also be categorised into those affecting the person and those impacting the organization. At the individual level an awareness of obsolescence in self and subsequent inability to overcome it can lead to feelings of incompetence and low levels of self-esteem and self-confidence, helplessness and frustration. This could also lead to low levels of involvement in activities, especially involving working in teams, avoidance behaviour and

absence from duty when there are heavy demands on the individual. All these can result in low levels of productivity.

**Fig.4**  
**Implications of Human Obsolescence**



Source: Chauhan & Chauhan (2008)

### Professional Obsolescence Scale

The level of obsolescence can be determined by using Professional Obsolescence Scale (Chauhan 2000) consisting of 34 items which measures obsolescence on eight dimensions: four related to the organisation (Organisational Factors: Organisational Climate, Organisational Support, Attitude of Superiors, On-the-Job Updating Activities and four related to the individual (Individual Factors: Professional Knowledge/Skills, Motivation to Update, Attitude towards Learning, Self-initiated Updating (see figs 5-6). These dimensions are explained below:

1. **Organisational Climate:** the extent to which organisational climate encourages autonomy, innovativeness and rewards high performance.

2. **Organisational Support:** the extent to which the organization provides support for enhancing education and career planning for its professionals.
3. **Attitude of Superiors:** the extent to which supervisor provides support for the growth and development to his subordinate.
4. **On-the-Job Updating Activities:** the extent to which a professional perceives his On-the-job activities as relevant for keeping himself updated.
5. **Professional Knowledge/Skills:** the extent to which a professional perceives his knowledge and skills relevant to his/her current job.
6. **Motivation to Update:** the extent to which professionals are motivated to keep themselves updated.
7. **Attitude towards Learning:** Positive/negative attitude of a professional towards learning.
8. **Self-initiated Updating:** the extent to which a professional takes initiatives to keep himself updated.

Mohan, Chauhan and Chauhan (2001) identified the specific factors causing obsolescence by ranking of the above dimensions. It was found that obsolescence was mainly due to the Attitude of Superiors followed by the Organisational Climate and organisational Support. It was inferred that superiors and the organisation as a whole can play a vital role in encouraging the managers to remain updated. Chauhan & Chauhan (2005) also identified organizational climate and attitude of superiors

to be the major contributors to managerial obsolescence.

### **Reliability & Validity of Obsolescence Scale**

Product moment correlation of the Professional Obsolescence Scale (Total Scale) (POS) was .70 which is positive and significant at .001 level. The result is indicative of a high degree of stability of scores which establishes the reliability of POS. For validating the POS concurrent validity procedure was adopted. POS has been validated against two tests. These are: (1) "Job Involvement Questionnaire (JIQ)" developed by Kanungo, Gorn, and Dauderis (1982); and (2) "Maslach Burnout Inventory" by Maslach & Susan (1982).

### **Assessing Obsolescence**

To be able to identify the specific factors leading to obsolescence the Obsolescence Scale can be taken in two parts i.e., those which can be initiated at the individual level and those that would require seeking the help of the supervisor to initiate action at the organisational level so that obsolescence can be prevented or if already set in remedial action can be planned.

The various components taken under Individual Factors are: Professional Knowledge/Skills; Motivation to Update; Attitude towards Learning and Self-initiated Updating Activities. Individual factors encompass broadly the current level of knowledge/skills, some cognitive aspects related to the

**Fig. 5: Managerial Obsolescence**  
(Part I - Individual Factors)

<b>Instructions:</b> Given below are some statements/questions relating to Professional Obsolescence. Please read each statement carefully. As there is no right or wrong answer, the one that is right for you is the correct answer. You are requested to give your honest and frank response by circling a number which you think appropriate.							
1	How relevant do you consider your present professional knowledge (as opposed to skill) for your current job? Very Relevant	5	4	3	2	1	Not Relevant
2	How would you rate this knowledge in relation to your current job? In Excess of Job Demands	5	4	3	2	1	Below Job Demands
3	How relevant do you consider your present skills for your current job? Very Relevant	5	4	3	2	1	Not Relevant
4	How would you rate these skills in relation to the demands of your current job? In Excess of Job Demands	5	4	3	2	1	Below Job Demands
5	To what extent does your present job utilise your professional skills/abilities Very Much	5	4	3	2	1	Not at all
6.	How would you rate your present level of motivation to keep up-to-date? Very High	5	4	3	2	1	Very low
7	How has this changed over the past 5 years? Increased	5	4	3	2	1	Decreased
8.	How challenging generally do you find your job assignments? Very challenging	5	4	3	2	1	Not at all
9..	How employable do you think your skills are in other organisations? Very much	5	4	3	2	1	Not at all
10.	In general, how would you rate your present ability to learn work-related knowledge/skill? High	5	4	3	2	1	Low
11.	To what extent has your ability to learn changed in the past five years? Improved	5	4	3	2	1	Not Improved
12.	How much do you enjoy new work-related learning? Very Much	5	4	3	2	1	Very little
13.	To what extent do you find it difficult to keep up-to-date with professional literature in your field? Not Difficult	5	4	3	2	1	Very Difficult
HOW MUCH EFFECTIVE DO YOU FIND THE FOLLOWING UPDATING ACTIVITIES, (Q. 14-16).							
14.	Pursuing education in your own time Most Effective	5	4	3	2	1	Least Effective
15.	Reading work-related books/journals Most Effective	5	4	3	2	1	Least Effective
16.	Attendance at professional society meetings Most Effective	5	4	3	2	1	Least Effective

Interpretation of Scores on Individual factors:

- 64 and above - Not Obsolete
- 53-63 - Potentially Obsolete
- Up to 52 - Obsolete

individual like motivation and attitude the individual i.e., self-initiated and one related to the affective aspect of updating activities.

**Fig.6 Managerial Obsolescence**  
(Part– II Organizational Factors )

1	Does your organisation facilitate you to enhance your education? Very Much      5   4   3   2   1      Not at all
2	To what extent organisational policies encourage you to undertake further education? Very Much      5   4   3   2   1      Not at all
3	To what extent does your organisation carry out long-range career planning for its management staff? Very Much      5   4   3   2   1      Not at all
4	To what extent high performance is rewarded by your organisation? Very Much      5   4   3   2   1      Not at all
5.	In general how much influence would you say you have in important decisions taken in your own functional area? Very Much      5   4   3   2   1      Not at all
6.	In general how much influence would you say you have in important decisions taken in your organisation? Very Much      5   4   3   2   1      Not at all
7.	To what extent does your organisation encourage you to be innovative? Very Much      5   4   3   2   1      Not at all
8	In your opinion, how interested is your immediate boss in your growth and development as a professional i.e. not only in relation to your job? Very Much      5   4   3   2   1      Not at all
9	Which of the following comes closest to describe your immediate boss's attitude/approach to keeping his subordinates professionally up-to-date (we know that none of these is likely to describe it accurately, but please select the one that most closely fits)? Please tick <u>ONLY ONE</u> .
	<ol style="list-style-type: none"> <li>1. He is insensitive to education/training needs of subordinates. Does not spare them when required to be sent for education/training.</li> <li>2. He conceives of his job only as implementing organisational goals, policies &amp; improving production. He is not much concerned about the training needs of the subordinate.</li> <li>3. He conceives development of the subordinate to be relevant but feels that the latter should take his own initiative. He does not mind if opportunities arise for the subordinate to pursue knowledge/education/training.</li> <li>4. He is conscious of the education/training needs of subordinates. To some extent he also tries to give opportunities and provide ways for them to keep professionally up-to date.</li> <li>5. He is very sensitive to education/training needs of subordinates and creates new opportunities, in addition to existing ones, to provide for specific needs of subordinates in keeping with their potential/own areas of interest to enhance their career development.</li> </ol>

*Contd.*

Fig. 6 (contd.)

10.	To what extent do you regard your organisation as capable of responding to change?	Very Much	5	4	3	2	1	Not at all
HOW MUCH EFFECTIVE DO YOU FIND THE FOLLOWING UPDATING ACTIVITIES (Q. 11-16)								
11.	In-company training programmes	Most Effective	5	4	3	2	1	Least Effective
12.	Job-related external training programmes	Most Effective	5	4	3	2	1	Least Effective
13.	Deputation to other organisation	Most Effective	5	4	3	2	1	Least Effective
14.	Job rotation within own organisation	Most Effective	5	4	3	2	1	Least Effective
15.	On-the-job problem solving	Most Effective	5	4	3	2	1	Least Effective
16.	Participation in Seminars/conferences sponsored by your organisation	Most Effective	5	4	3	2	1	Least Effective
17.	How important have your updating activities (Q.11-16 above and 14-16 in Part I of the Questionnaire) and been for maintaining effectiveness in your present job?	Very Important	5	4	3	2	1	Not Important
18.	How important have your updating activities (Q.10-16 above and 14-16 in Part I of the Questionnaire) been for your own career development?	Very Important	5	4	3	2	1	Not Important

Interpretation Scores for Organizational Factors:

71 and above	-	Not Obsolete
62-70	-	Potentially Obsolete
Up to 61	-	Obsolete

The four components under Organisational Factors include: Organisational Climate; Organisational Support, Attitude of Superior and on-the-job updating activities. The first two components relate to the broader context of the organisation and the last relates to the immediate work environment of the individual. At times it is difficult to bring about a change in the climate and support systems within the organisation

but it is certainly more easy to bring about a change in the attitude of the superior towards his subordinates to be able to help them remain updated and thereby not become obsolete.

#### Norms for Total Score

The scores for the two parts of the questionnaire are to be added to give an overall score. Depending on where the

score falls an individual can be classified on a continuum ranging from not obsolete to obsolete.

135-170 = Not Obsolete  
114-134 = Potentially Obsolete  
113 & below = Obsolete

### **Conclusions & Recommendations**

Since the main consensus of the literature revealed that combating obsolescence was a shared responsibility between the organization and its employees, the problem of obsolescence can be tackled by a two-pronged approach: (1) Initiatives to be taken at the personal level for self development and updating; and (2) Interventions like training and continuing education to be taken at the organizational level.

#### **Initiatives at the Individual Level**

**Develop short and long term goals** which expand your knowledge and skills. This is especially crucial as years elapse between now and the time you completed your formal education. Pursue life-long learning and take ownership for self development. Consider working towards an advanced degree or certification, even if all coursework would be completed on a part-time basis. While an additional credential should justify the extra time, energy, and money expended, it may be the differentiator between you and your peers in your field at the time of a promotion.

**Keep abreast with current developments in your field:** Know how far your function within your organization deviates from the mainstream in your field. Have a working knowledge of how tasks might be accomplished in other organizations which differ by size, client demographics, mission, etc. Read professional journals. Attend or participate in regional or national conferences when possible.

**Develop a fair understanding of some other aspect of your organization's work which might be related to your own:** Regular informal discussions with a colleague in another department address many of the "how-what-where-when-why" issues. This should be coupled with the willingness to take up challenging tasks and increased responsibilities beyond the confines of one's own job profile. Such an approach would not only help you in your career progression but may also be a decisive factor in allowing a lateral move should your organization be reorganized or downsized.

#### **Organisational Initiatives**

The onus for providing the right environment for its workforce rests on the organisation. A very conducive work environment, sound HR policies and practices with a focus on training, and deployment of personnel based on their competence are some of the initiatives that can be taken at the organisation level. This should be coupled with

supervisors with the right attitude towards developing their subordinates and providing the necessary support thereof. A pre-post study on effects of training on perceived obsolescence by Mohan and Chauhan (1999) has shown that training helped in reducing the perception of obsolescence particularly on the dimensions like (1) Self-initiated updating activities; (2) Attitude towards learning; (3) Professional knowledge/skills; and (4) Motivation to update. It is further reiterated in line with an earlier suggestion by Chauhan and Chauhan (2008) that to make training more effective it should be given the due by making a post-training assessment of the "impacts" it has produced in terms of improved performance by those trained.

Performance appraisal should focus more on the potential appraisal to assess a manager to perform additional and higher responsibilities rather than one which is based on past performance alone. This would help in career planning and career development. The appraisal should be followed by giving feedback, coaching, mentoring, and training. Managers also need to be provided on-the-job experience in appropriate positions. Jobs should be so structured that it is challenging and at the same time there is accountability. In other words it should provide sufficient headroom (authority and responsibility) and elbow room (scope and variety). Organisations that are decentralized in terms of business or profit centres create more opportunities for development than organisations that do not. Second, people with high potential should move through

a series of challenging jobs. Third, jobs should provide a range of challenges. Finally, executives need to learn from highly skilled colleagues as well as superiors.

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