

## CREATIVE LEADERSHIP FOR WHOLESOME TECHNOLOGICAL DEVELOPMENT

Prof. Dr. O. N. WAKHLU

### INTRODUCTION :

Mr. Citizen gets up in the morning and puts on the electric light. He has a shave and then a hot water bath, water flowing in abundance from his tap. Soap and razor are readily available to him. Then he walks down the road to the nearest place of worship while listening to prayers played from cassett tapes and loudspeakers. He thanks God Almighty for the many bounties while he is totally unmindful of the one profession that enables him to enjoy such luxury and comfort, at his doorstep, twenty-four hours a day.

That profession is of *engineering* and it is closely related to technological development. If you agree with what I have just said, then it is in order to ask why being an engineer means little to many people ? Often people think a mechanic is an engineer or worse still, if you cannot repair a car or T.V. then you are a useless engineer !

I will try to address this question in this article and show that only by developing creative leaders within its ranks

can the profession make a lasting contribution to wholesome technological development (WTD) while, at the same time, earning due recognition from society for playing a vital role.

### PRESENT SCENARIO :

When engineering began as a profession 150 years ago, there were big names associated with the invention of steam engine, railways, electric power, telephone and massive irrigation and hydraulic works all over the world. Later came the motor car and the second technological revolution of electronics and telecommunication. Now the world is shrinking in size and becoming a global village because of the Information Technology (IT) revolution. In spite of these momentous changes the vast majority of general public, government, civil servants and far too many managers and politicians could be described as technical illiterates. They have little understanding of the engineers' unique skill, his technical knowledge and ability, and do not share his understanding

Former Principal, Regional Engineering College, Srinagar and

Consultant with Pragati Learning System, Pune.

of mathematics and engineering science. Above all, the people fail to appreciate the engineers' most important and valuable attribute - his organizational ability and his logical and methodical approach to problem - solving.

Today, engineers are involved in discussion of their work and its impact on economic development at many levels - with technicians with fellow engineers, other professionals, bureaucrats, and with the public as well as economists and financial controllers. This ability to deal with a variety of people and persuade them to support his proposals, encompasses skills traditionally associated with general managers. It is precisely because of the absence of these skills that the engineer is not articulate enough to present his case losing vital public contact and his prestige in the bargain.

The world is becoming one large market-place and engineers serve in different bureaucratic, climate and cultural environments in a wide variety of countries. Therefore, it is important to be able to communicate effectively with colleagues, clients and general public in these situations. The professional engineer must be *able* and *versatile*. Most engineers do understand this but there is more to ability than this. Engineers themselves must enhance their status and public's understanding of their work and skills. The public cannot be expected to change this image. It is the engineering profession that must bridge the gap and make a better and wholesome impact on society.

It is in this context that creative leadership must be clearly understood.

It is the key to wholesome technological development and engineers must learn to become creative leaders in order to achieve this laudable goal for the benefit of humankind.

#### WHOLESOME TECHNOLOGICAL DEVELOPMENT :

WTD is a vital component of WSD, and the engineering profession is totally responsible for this aspect of development. The main features of WTD are as follows :

- WTD is sustainable over a long period of time.
- WTD has the least impact (harmful) on ecology and environment.
- It created new avenues for joyful work for all.
- WTD does not give rise to mindless consumerism.
- It is integrated regionally and globally and brings about harmony rather than conflict.
- It ushers in prosperity, peace and joy of the land and its people.

For achieving such a wholesome growth, engineers must understand their role as creative leaders and learn the skills needed for providing creative leadership at all levels. Continuous learning and practicing of the required skills are very important in this context.

#### CREATIVE LEADERSHIP ROLE FOR ENGINEERS :

While we have a large number of competent engineers in the country, too few, compared to other professions (e.g. lawyers, civil servants, managers etc.) have risen to the top. On the other hand,

non-technical managers and bureaucrats complain that there is shortage of able engineers with personal drive and flair required for leadership in key positions of technological management and development in industry and government.

Yet it is a fact that engineering training develops the skills to obtain a clear view of the objectives and the steps required to achieve them. Engineers as leaders have to offer special skills over and above those of non-technical people. To be able to do so, engineers must possess appropriate *knowledge, skills and attitudes* including know-how of business finance, economics, marketing, man-management techniques and communication skills. Also their risk taking capacity has to be developed, otherwise they tend to be withdrawn, aloof and cautious.

The need to link engineering and management closely has been addressed by the author way back in 1959 when he introduced the first ever "Civil Engineering Management" course for the four year B.Sc. Engineering degree programme of the Engineering College of the B.H.U. Ever since that time the course has been running there and also at the Regional Engineering College, Srinagar. Nowadays, the need is considered paramount globally.

It must be emphasized, as I pointed out in the introductory remarks, that the impact of technological development on the peoples' lives and life styles have brought engineering issues into the centre of the political stage. *"A forceful, informed and coherent engineering input is therefore required in national debate and government policies; otherwise these will be*

*shaped by emotional ill-informed reaction"*. These are the words of S.D. Clements of the I.C.E. in United Kingdom. And these are extremely relevant to our current situation. We must realize our responsibility and provide the needed creative leadership in the profession for which we must train ourselves.

#### CRUX OF CREATIVE LEADERSHIP :

Being creative means doing things differently, innovate and use imagination to find better solutions to problems. It is also related to change. Creativity must also be seen in the context of two certainties viz :

- There will be a future, different from the present. Change is inevitable.
- The only certainty is that nothing is certain.

The future is a situation.

Can we ignore it ? No.

Can we predict it ? Of course not.

Can we control it ? Certainly not.

We can only respond to it creatively and thereby move on to another scenario which is more advantageous technologically, economically and ecologically. The essence of creativity is in the response of the moment. That calls for total awareness.

Creative leadership leads imaginatively, helps make change with ease and joy, encourages innovation and above all leads joyfully without any effort or stress. It pulls people together rather than push them around to achieve great tasks. Creative leadership provides a mission and vision. They step out in front and illuminate the path to show those behind them which way to head.

They lead the change and go first; they change first. They "walk their talk". A creative leader is a pioneer and he defines new frontiers. Pioneering is venturing off into the unknown; there is no model to copy. Pioneering involves self-initiative, and as such it is the most individualistic and creative aspect of leadership. For this you need to :

- Take responsibility for your own actions. Do not blame others.
- Speak out in meeting and give feedback without fear.
- Stand your ground when you challenge the familiar systems. Use resistance to change, to achieve greater clarity.
- Lead by being a powerful role model. Your thoughts, words and deeds count for more than you think.
- Take risks and encourage risk taking by others.
- Assure others that they are important to you.
- Remember that pioneering is not a one time deed, its an on going leadership practice.

WHERE THERE IS NO VISION PEOPLE PERISH ! Creative leaders provide an example of Vision Integrated Performance (VIP) strategy. Excellence in performance arises from a harmonious integration of technology, management and creative leadership. "Leadership without management can lead to chaos, management without leadership is sterile (dead)."

Creative leadership is about bringing about synergy and building teams.

*Listening* is a sine qua non of such leadership. It means being quick in responding to ever changing situations.

Creative leader has the 7 - c's as attributes :

§ Competence § Commitment  
§ Communication § Credibility § Character § Compassion and § Consensus (democracy).

Contrast a creative leader with a weak leader, demagogue, and a dictator. Where is the difference ?

Creative leaders integrate leadership function with learning and management.

**Learning :** Developing know-how. How to do things ? and innovation

**Management :** Doing *things right*. Optimal use of resources.

**Leadership :** Doing the *right things*. Making strategic choices. Generating new revenue.

"Leadership as a practice is related to behaviour, not position." (Bechtell). It does not necessarily happen only at the top of the organization. Everyone in the engineering profession must cultivate leadership skills and must be given an opportunity to use them.

Creative leaders propel their organization into the future. It is a process of activating change and calls for decisiveness to move resource from areas of lesser to *greater productivity*. Critical to technological development is the capacity to make change happen and use resources for optimal benefit. Making choices is vital for progress; the choices and decisions must be the right ones and quick. Through their decisiveness, creative leaders create the future, and

choices made are linked directly to transformation and technological development. Creative leaders have to be like catalysts. They begin the change process and then let go. Others then do make the transformation happen.

#### SUMMARY :

Effective leaders understand that people must choose to change themselves, so they work hard to create the conditions under which natural and appropriate change may occur. Creative leadership is critical to transformation and wholesome technological development. We need such leadership in the engineering profession to move from

inertia and low status to action and improved status.

The profession is full of people who already know how to lead. We have to mobilize them and nurture them to become creative leaders. Creative leadership is not telling others what to do. It concentrates on the *why*. Why do we innovate ? Why do we benchmark ? Why do we organize ourselves ? Why do we develop and nurture others ?

In short, be a catalyst. Provide the conditions and processes which guarantee an appropriate outcome of technological decisions leading to wholesome sustainable development (WSD) as defined herein above.

★