



பேராசிரியர்

**அழகையா துரைராஜா
நினைவுப் பேருரை**

11-06-2007

நிர்வாகிகளுக்கு 21ம் நூற்றாண்டின் சவால்கள்
Challenges for 21st Century Administrators



வழங்கியவர் :

பேராசிரியர் M. நடராஜசுந்தரம்

முகாமல்தூவ கற்கைகள் ரீடம்,
யாழ்ப்பகைக் கழகம்,
யாழ்ப்பாணம்.

Handwritten text, possibly a title or header, appearing as a horizontal band of faint, illegible characters.

Handwritten text, possibly a date or reference number, appearing as a horizontal band of faint, illegible characters.

யாழ்/ உடுப்பிட்டி அமெரிக்கன் மிஷன் கல்லூரி
பழைய மாணவர் சங்கம் நடாத்தும்,
முன்னாள் சங்கத் தலைவரும், உலகின் சிறந்த கல்விமான்களில்
ஒருவருமாகத் திகழ்ந்தவருமாகிய

பேராசிரியர்

அழகையா துரைராஜா அவர்களின்

13வது நினைவஞ்சலிக் கூட்டம்

தலைவர் :- Dr. மு. தங்கராஜா அவர்கள்

இடம் :- உடுப்பிட்டி அமெரிக்கன் மிஷன் கல்லூரி மண்டபம்.

காலம் :- 11.06.2007 திங்கட்கிழமை மு.ப 10.00 மணி.

நினைவுப் பேருரை வழங்குபவர்:

பேராசிரியர் M. ருடராஜசுந்தரம்

(முகாமைத்துவ-கற்கைகள் பீடம். யாழ் பல்கலைக் கழகம்)

நிகழ்ச்சி நிரல்

- மங்கள விளக்கேற்றல்.
- இறை வணக்கம்.
- உருவப் படத்திற்கு மலரஞ்சலி செலுத்துதல்.
- தலைமையுரை.
- அதிபர் உரை
- நினைவுப் பேருரை வழங்குதல்.

“நர்வாகிகளுக்கு 21ம் நூற்றாண்டின் சவால்கள்”

Challenges for 21st Century Administrators

4 நினைவுப் பரிசில் வழங்கல் - 2006

1. க.பொ.த.(உ/த) யாழ் மாவட்டத்தில் கணிதத் துறையில் அதியுயர் பெறுபேறுபெற்ற உடுப்பிட்டி அமெரிக்கன் மிஷன் கல்லூரி மாணவன் செல்வன் குமாரசாமி கணேசானந்த் (தேசியமட்டம்-7)
2. க.பொ.த. (உ/த) எமது கல்லூரி மட்டத்தில், செல்வன் குமாரசாமி கணேசானந்த்

மேற்படி நிகழ்வில் தவறாகு சமூகத்தற்கு சிறப்பிக்குமாறு பேராசிரியர் குரையின் அபிமானிகள் யாவரும் கேட்கப்படுகிறீர்கள்.

உடுப்பிட்டி அ.மி.கல்லூரி,
வல்வெட்டித்துறை.

பழையமாணவர் சங்கம்

முன்னரை

உடுப்பிட்டி அமெரிக்கன் மிஷன் கல்லூரி பழைய மாணவர் சங்கம் கல்லூரியின் மாமனிதராய் விளங்குகின்ற எமது கல்லூரி பழைய மாணவரான அமர் பேராசிரியர் அழகையா துரைராசாவின் ஞாபகார்த்தமாக வருடாவருடம் ஞாபகார்த்த பேருரையை தேர்ந்தெடுத்து அவரை நன்கு அறிந்த கல்விமான் களால் நிகழ்த்தி யாழ்மாவட்டத்தில் கணிதத்துறையில் கல்வி பொது தராதரத்து உயர் வகுப்பில் மிகச் சிறந்த பெறு பேற்றை பெற்ற மாணவனுக்கு சன்மானம் வழங்கி கௌரவித்து அவர் எம்மை விட்டு மண்ணுடன் சங்கமான நாளை சிறப்பித்து வருகின்றோம். அந்த முறையில் இன்று 13ம் ஆண்டை அவர் ஞாபகார்த்தமாக சிறப்பிக்கின்றோம்.

பேராசிரியர் பிறந்து வளர்ந்த உடுப்பிட்டி மண்ணில் அவர் ஆரம்ப இடைக்கால கல்வியை எமது கல்லூரியில் கற்றார். அவர் கல்வி கற்ற நாட்களில் அமைதி, நற்பண்பு, கல்வியில் அதீத திறமை கொண்டவராக ஆசிரியர்களால் போற்றப்பட்ட மாணவனாய் திகழ்ந்தார். அவரின் திறமைக்கு ஆண்டவனுக்கு அடுத்தபடியாக அத்திவாரம் இட்டது எமது கல்லூரி.

கல்வியில் எல்லையில்லா புகழ் பெற்ற அவர் பல்கலைக்கழகத்தில் சிறந்த விரிவுரையாளராக, பேராசிரியராக, பீடாதிபதியாக புவியியற்குறை, விஞ்ஞானியாக, உபவேந்தராக பிரகாசித்து வாழ்ந்த அவர் எமது கல்லூரியை மறந்தார் அல்லர். அந்நிய கூலிப்படையினரால் எமது கல்லூரி அழிக்கப்பட்டு சாம்பல் மேடாக்கப்பட்டு கல்விகற்ற மாணவர்கள் கல்விகற்க வசதியற்று, தவித்த காலத்தில் தானே முன்வந்து பழைய மாணவர் சங்கத்திற்கு புத்துயிர் கொடுத்து கொழும்பு, கனடா போன்ற இடங்களில் கிளைச்சங்கங்களை ஆரம்பித்து அவர்களின் பெரும் உதவியுடன் மாணவர்கள் தற்காலிகமாகவேனும் கல்வியைக்கற்க இடவசதிகளைச் செய்வதற்கு முன்னின்று உழைத்தவர். பாடசாலை திரும்பவும் நிர்மாணிக்கும் பொழுது அது எப்படி அமையவேண்டும் என்று ஒரு உன்னத திட்டத்தை வகுத்தவர் எம் துரை அவர்களே.

எவ்வளவு உயர் பதவிகளை அவர் வகித்திருந்தாலும் அவர் மனிதநேயத்தை கைவிடவில்லை. எமது கல்லூரியை மட்டும் அல்ல அவர் ஊரை, உற்றாரை, தன்னினத்தை, தன் மண்ணை கைவிடவில்லை.

பாமர மக்கள் தொடக்கம் அறிவுமேதைகள் வரை அந்த மட்டத்தில் இறங்கி ஏறி அன்புடனும் புன்சிரிப்புடனும் பழகும் ஆற்றல் படைத்தவர்.

ஆழ்ந்த மனிதாபிமானம் உடையவராகத் திகழ்ந்த அவர் சுயகட்டுப்பாட்டுடன் நன்னெறியை கடைப்பிடித்து பூரணவிருப்புடன் தன் சேவையை மேற்கொண்டார்.

அநேக நற்குணங்களும், பல்வேறு திறமைகளும் ஒருங்கிணைந்த மனிதன். இவர் ஆடம்பர வாழ்வைத் தள்ளி வைத்து மனிதருள் மாணிக்கமாய் எல்லோருடைய அன்பையும் பெற்று சாதாரண வாழ்வு வாழ்ந்த பெருமை அவருடையது.

**“கற்றதனால் ஆய பயன் என் கொல் வாலறிவன்
நற்றாள் தொழார் எனின்”**

என்ற வள்ளுவர் கூற்றிற்கு உவமானமான பேராளன் இவர்.

இவரின் நடை, குணம், செயல், கல்வியின் மகிமை, புத்திக் கூர்மை என்பன என்னால் வர்ணிக்க தகுதி அற்றவனாக கருதி அவரின் ஆத்மா எங்களை சரியாக வழி நடாத்தி எமது கல்லூரியை நேரான பாதையில் நெறிப்படுத்திச் செல்லும் என்ற எதிர்பார்ப்புடன் அவர் வழியில் செல்வோம்...

நன்றி

இல்கனம்

Dr. மு. தங்கராஜர்

B. V. Sc; M. Sc (SI)

தலைவர்

பழைய மாணவர் சங்கம்

உட்பிட்டி அ.மி.கல்லூரி.

Professor Alagiah Thurairajah

Principal, President Past Pupils Association, members of the school community, respectful citizens of the area colleagues, students, ladies, and gentlemen.

I consider it a great honor to have been given this opportunity to deliver this years Prof. Thurairajah memorial lecture.

Born on the 10th of November 1934 in the village of Imayan in the Jaffna District, Professor Thurairajah had his early education in the two American Mission Colleges in Uduppiddy. He had a brilliant academic record at Hartley College, Point Pedro to which he had moved to obtain his secondary education. Professor Thurairajah entered the faculty of Engineering, University of Ceylon in 1953 and graduated with First Class Honours in 1957. His performance in the first degree examination won him a scholarship to do postgraduate research work at the prestigious University of Cambridge. At Cambridge he worked with an eminent researcher in soil mechanics, the late Professor K.H. Roscoe. Their pioneering work in their properties of soils led to the development of a new model of the Simple Shear Apparatus for soil testing and this work culminated in the award of the degree of Doctor of Philosophy to Professor Thurairajah in 1961. After a brief period of employment as a soils engineer in London, Professor Thurairajah returned to Sri Lanka to accept an appointment as a lecturer in Civil Engineering at the University of Ceylon in July 1962 and remain in the academic field until his demise on the 11th of June 1994. During this period he rapidly climbed the academic ladder and became the Professor of Civil Engineering at Peredeniya Campus of the University of Sri Lanka in December 1971. While being on the staff of the Peredeniya Faculty Prof. Thurairajah held appointments as visiting Professor at the University of Waterloo (1969 to 1970) and at the University of British Columbia (1977/78) when on sabbatical leave. He also served as the Dean of the Faculty of Engineering of the University of Peredeniya for two terms. In April 1985 he moved over to the Open University of Sri Lanka to take the chair of Civil Engineering and became the Dean of the newly established Faculty of Engineering Technology in April 1987. In September 1988 Prof. Thurairajah was appointed as the Vice-Chancellor of the university of Jaffna. He readily accepted this appointment which provided an opportunity to serve his people although under very trying circumstances.

Professor Thurairajah took an active interest in research while at the University of Peredeniya, the Open University of Sri Lanka and the University of Jaffna which led to the training of a large number of research students.

His research in the field of Geotechnical Engineering both in the basic and applied aspects resulted in several publications in national and international journals. He also presented his research findings at various international conferences. Professor Thurairajah was accepted as a leader in his field and was appointed as consultant for several projects in the public and private sectors. He served as a member of the board of trustees of the Janasaviya trust fund and as a member of the Tertiary and Vocational Educational Commission.

In recognition of his expertise in his field Professor Thurairajah was elected as a fellow of the Institution of Engineers, Sri Lanka and as a fellow of the Institute of Civil Engineers, London. He was also a foundation member of the National Academy of Science Sri Lanka. Professor Thurairajah held the post of the President of the Institute of Engineers Sri Lanka (1989/90) and the post of the President of the Jaffna Science Association (1991/92).

Professor Thurairajah's service as the Vice-chancellor of the University of the Jaffna extended over a period of six years when the University and region was experiencing great difficulties. He was able to keep the University functioning against many odds. During his stewardship several developmental programs were instituted at the university and a number of courses started. He was instrumental in the establishment of (i) the Vice-chancellor's fund for helping the needy students, (ii) the research fund to encourage young academic staff in research and (iii) the publication fund to help the staff to publish their research findings. The worker education programme, the extra mural studies programme and the external degree programme of the university were commenced with his encouragement and help. The faculty of Agriculture and the Ramanathan Academy of Fine Arts was upgraded to a department of study during his period of service. He worked indefatigably towards the establishment of a Faculty of Engineering and was successful in making a start with the appointment of a Professor of Civil Engineering.

In addition to rendering valuable service to the University Professor Thurairajah was engaged in several community development projects. He served on the committees of several non-governmental organizations. He was the president of the Ootru organization for several years.

Professor Thurairajah was a humble and human person interested in the upliftment of the weaker section of the community and worked hard to improve their living standard.

Challenges for 21st Century Administrators

MANAGEMENT A DYNAMIC PROCESS

Management is a dynamic process that is ever changing and evolving. Many of the managerial concepts that were propped only a few years ago cannot and will not work in today's environment. People have changed and have become sophisticated, organizational environments have changed, governments have changed, the world economy has changed from stability to instability and the resource scarcity has worsened, specially the valuable resource of skilled and unskilled and talented labour. In the business world management is almost viewed in terms of productivity. This is because productivity is the key success of the organization.

A new recipe for management of business organizations is required at present. The present century business environments are characterized by change and more significantly discontinuous change. The modern organizations have no alternative other than to accept the change. There is the reason for the emergence of the new concept of change management. In modern organization the Leadership is expected from every body. This will result in empowerment of staff, delegation of task etc. The challenge today among organization is to create competitive advantages which can be firstly sustained and secondly constantly reinvented.

The organization structure are expected to be permanently flexible, and management is required in order to face the challenges of the 21st century business environment. The present organizations have to be managed by vision and values, but in the past rules regulations and procedures were used to manage organizations. It is the responsibility of all the employees to control the **VISION** and **VALUES** of the organization.

Management Revolution

Today the field of management is undergoing a revolution. Demands on today's managers go well beyond the techniques and ideas taught in traditional Management courses. The **Old Management paradigm** assumed that the purpose of management was to control and limit people, enforce rules and

regulations, seek stability and efficiency, design to top- down hierarchy to direct people and achieve bottom-line results.

However, the emerging paradigm recognizes that today's managers need different skills, one's that engage worker's hearts and minds as well as their physical labour. The **New Management paradigm** focuses on **Leadership** on harnessing every one's creativity and enthusiasm finding a shared vision and values, and sharing information and power. Team work collaboration, participation and learning are the guiding principles that help managers and employees navigate the difficult terrain of today's increasingly complex business environment. Managers now focus on developing not controlling – people to adopt to extraordinary shifts and try to achieve total corporate effectiveness. But the old has not and perhaps should not completely disappear from the business environment . Both paradigms the new and the traditional – continue to guide management action today.

Old Paradigm
Vertical Organisation
Organisation

New Paradigm
Learning

Forces On Organisation

Markets	Local Domestic	Global
Work force	Homogeneous	Diverse
Technology	Mechanical	Electronic
Values	Stability efficiency	Change

choose

Management Competencies

Focus	Profits	Customer,
Employees		
Leadership	Autocratic	Dispread,
Empowering		
Doing work	by individuals	by teams
Relationships	Conflict, competition	Collaboration

The difference can be looked in as a whole in these two different Management models

Old Management Paradigm

- * Man as an extention of machine developed.
- * Worker expectation of Security. personnel growth.
- * Work by Individuals.
- * Maximum task break down.
- * Simple narrow skills.
- * External controls (supervisions)
- * Tall Organisation chart.
- * Autocratic style
- * Profit focus
- * Cost advantage.
- * Self serving motivation.
- * Domestic market orientation.
- * Capital Resources.
- * Imposed quality.

New Management Paradigm

- * Man as a resource to be
- * Worker expectation of
- * Work by teams.
- * Optimum task grouping.
- * Multiple broad skills.
- * Internal Control. (Self Equating)
- * Flat organization chart.
- * Participative style.
- * Customer Focus.
- * Time advantage
- * Realistic altruism
- * Global Market Orientation
- * Information Resources.
- * Personal quality.

Today's companies are struggling to remain competitive in the face of increasingly tough global competition uncertain environments cutback in personnel and resources and massive world wide economic, political and social swifts. The growing diversity of the work force brings in new challenges: maintain a strong corporate culture while supporting diversity, balancing work and family concerns. Workers are asking that Managers share rather than hoard power. Organisational structures are becoming flatter, with power and information pushed down and out among fewer layers and with teams of front line workers playing new roles as decision makers.

Due to these changes a revolution is taking place in the field on management. As a result a new kind of leader is surfacing one who can guide businesses through this turbulence. The revolution ask managers to do more with less, to engage employees entirely, to see change rather than stability, and to create vision and cultural values that allow people to create a truly collaborative work place.

This new management approach is very different from a traditional mindset that emphasizes tight top – down control employees separation and specialization and management by impersonal measurements and analysis. Darwin Poe and Tapistron are excellence examples of a manager and company that are leading this revolution toward a new management Paradigm. That is a new way of thinking. Chanut Priyaous made a difference by altering the unisavory perception of Thiland Hotels as "Places of entertainment" with little initial capital. Chonuts vision and management skills created Thailand leading hotel Chain. Her Dusit Thanigroup was ranked by Asia money magazine as one of the 100 best managed companies in Asia.

Leading the Management Revolution.

Management is both an art and a science. The meaning of art is related with the bringing of a desired result through the application of skills. Art thus concerned with the understanding of how a particular work can be accomplished. Where as under science, one learns the 'why' of a phenomenon, under art one learns the 'how' of it. Management is a science because a growing body a knowledge and objective facts describes management and how to obtain organizational effectiveness. This knowledge can be conveyed through teaching and text books. Becoming a successful manager requires a blend of formal learning and practice of art and science.

Digital Economy

The move to the digital age from industrial age spawns transformation at all levels of governance.

	Industrial age	Digital age
Democracy	Representative	Participative
Citizens	Passive Consumer	Active Partner
Politics	Broad Cast, Masi, Palaraised	One-to-one
States	National Mono-cultural	Global local Virtual and Multi-cultural

We are now living through one of the most exciting periods of change in history. Virtually every thing we do in our daily lives, in our work and all our structures, is experiencing, as will soon experience-fonder-mental transformation. This is called the digital revolution.

As a result how do you learn to be a manager in an uncertain and rapidly changing world? How can a course in management or a degree in business prepare you for the challenges of the twenty first century? Students of today will be leaders of tomorrow, leading the management revolution that will change the organizations in the 21st century. One of the important contributions that a text book or management course can make today is to define for students some of the forces that will affect their jobs as managers tomorrow.

Challenges

In the new millennium Managers, Management Science and Management Culture will have to naturally change to meet these interesting and daunting challenges facing mankind. These new challenges will also provide unlimited opportunities for growth and development in every sphere and will hopefully improve the quality of life of human beings universally. The most important factors affecting the world at large in the new millennium are:

- a) Globalization
- b) New concept information communication technology.
- c) The extensive use of World Wide Web or the Internet as a communication channel.
- d) Growth of Genetic Engineering
- e) The use of Robotics in industry and for domestic purposes.

Globalization which has devolved with dismantling of great barriers following the W.T.O agreement is being further encouraged by the developed world. It is projected that one day the whole world will be one **global village** in the not too distant future. The development of information communication technology has also made tremendous impact on bring the world together and eliminating physical and man made boundaries, given rise to entirely new vistas of accessibility unknown to the world before. The internet is by far the fastest growing communication medium known to man kind today. It is belief more than one hundred million computers are interconnected in the world wide web providing unlimited opportunities for access of information for all purposes. Genetic engineering has progressed rapidly and a dramatic breakthrough has been achieved by human chromosomes have been mapped accurately, there by providing direct accesses to the genetic code of human being. Further this will make possible for the replacement of defective genes causing various hereditary defect. The use robots for a variety of purposes is rapidly evolving specially in Japan and developed countries. The most sophisticated technological process can now be handled by these ingenious machines.

Future Managers

The managers in the organizations are expected to play a major rule in the new millennium. They have to work in a competitive and turbulent environment to achieve their objectives and goals. As a result, what type managers we must produce in the future? We must identify important characteristics that the private sector as well as public sector would expect from a graduate passing out form an academic institution.

1. Information Technology (IT) :

One of the essential prerequisites for the future Manager is not simply computer literacy but being **computer savvy**. i.e: being able to use the computer effectively to enhance business opportunities. In other words, a Manager must be familiar with all the modern frequently used software programmes and be able to utilize the information available via the internet and other communication channels to develop and fine-tune his decision making process.

2. Language Proficiency :

The most internationally recognized language in the world in trade and commerce is **English** and an excellent working knowledge of English is a tremendous asset in management. A basic working knowledge is not sufficient. The future Manager should be articulate in verbal and oral skills. Being articulate is important as marketing and even the other disciplines in management requires managers to make presentations with the use of their computer skills in order to make effective sales or promotional campaigns. Written skills are equally important as the ability to report comprehensively but precisely is an asset when limitation of time makes it impossible for top management to peruse unnecessary verbiage in important reports submitted for decision making purposes.

3. Time Management:

The value of time which is an unrenowable resource is becoming more and more critical in the modern world. Even in a country like Sri Lanka where we were used to moving around in Colombo very rapidly, traffic congestion is taking its toll and much unproductive time is spent in vehicles going from place to place. Management of time has become a vital necessity. The **mobile telephone** has become a useful tool in gainfully spending time during transit and with the added connectively to **e-mail** and **fax** being available integrated into the mobile communication network, travel time can be utilized to attend to many important matters. In addition, the fundamentals involved in time management will have to be scrupulously followed if we are to be effective managers in the new millennium.

4. Customer Orientation

Considerable lip service has been given in management of the importance of customer. Customer is king, customer is always right were the catch phrases used in the past. The marketing people have now even gone further in using the cliché. "**To delight the Customer**" which implies that the product or service supplier delivers by more than fulfilling the customer expectations. Satisfying the customer is no longer something special. As every competitor is endeavoring to satisfy his / her customer and therefore, one must do something better to maintain the competitive edge. On the other hand, customers have become more and more

sophisticated and are demanding more and more from their suppliers. **Just in time** delivery, bonus packages, incentive programmes and many other innovative strategies are being continuously evolved to delight the customer. On the other hand dissatisfying a customer conveys his dissatisfaction to about 10 to 12 people and the price that the supplier has to pay for one dissatisfied customer is multiplied 10 fold or over. Thus the customer has to be treated with much care and consideration. It is said that the demands of some customers are so great that a new type of customer is evolving, namely, the “**never satisfied customer**”. This type of customer is definitely has to be handled with all resources available to a manager in a marketing organization.

5. Holistic Approach to Management :

Specialization may have been the focus in the 20th century. However, it is clear that a more holistic approach is needed in the new millennium. Specialization in a particular field is certainly an asset in an organization. But over specialization without a broad understanding of all disciplines of management can have a negative impact on an organization. A simple example would be a Marketing Specialist who does not understand the financial implications of his marketing decisions. A Financial Manager who does not appreciate the markets for the products his company is manufacturing.

6. Team Work :

Working as a team member is becoming more and more important. Many of the complex problems and challenges confronted by management in modern times requires complex multi disciplinary approaches in finding solutions. **Team work and synergy** achieved by such teams is a *sine qua non* in modern management.

7. Innovation :

Peter Drucker in one of his latest publications stated that two of the most important ingredients in management are marketing and innovation. It has been observed that creativity in a person decreases with age and that in structured organization, creativity has been stifled due to the inherent needs for standardization and benchmarking especially for larger organizations. **Entrepreneurship** is less and less prevalent in

conservative organizations. Without innovation and entrepreneur skills required in structured organizations, which was referred to as “**Intrepreneurship**”, which implies entrepreneurship within an organization. A modern Manager should always be able to think differently “**think out of the box**” and not simply follow accepted past practices merely because they have been successful in the past. New ways of implementing even routine procedures should always be evolved using innovative skills.

The word ‘**Innovation**’ almost automatically connotes creation of a new product or service. However, as Peter Drucker refers to, in his brilliant example using the much quoted statement to express something that is impossible or very difficult “like selling a Refrigerator to an Eskimo” is far from an impossibility. A salesman who can convince an Eskimo that using a refrigerator will enable him to store his meat at a constant temperature so that it is not too deep frozen, to be conveniently used, has certainly a winning innovation. Peter Drucker states that it is not a technical innovation of a new product but an innovative use of an existing product, which he classifies as an economic innovation.

Strategic Planning

Strategic planning is one the most important tools that help managers develop new skills and procedures for dealing with tomorrows business. Its greatest contribution is in dealing with change, the change from todays business to future business. The Strategic planning can be viewed as the process of selecting the best path between two points. If the business point today is point (A) and business in the future is point (B) strategic planning is the analysis of the most feasible routes between these two points. So that the optimum route may be selected . In fact, good planning goes beyond this point because it also helps to establish the location of A x B. This exercise of strategic planning compels one to think and plan for tomorrow whilst handling todays problems. Further managing in the new millennium involves more than mere strategic planning.

Industrial Age and Information Age

The most successful leaders in the **industrial age** in the early days were builders and not competitors. The companies known as second wave companies are built for growth with more of the same attitude, not an appreciation for change. In most of the corporations in the 60s and 70s there were very few things managers had to "But to mind the store" while growth simply happened. In a second wave company the Top Executive Officer presides over this closed system like an emperor. Eg: Pepsicola. These companies lacks **Flexibility Creativity and Innovation**. These are the ingredients that will determine the success in the information age. All are hampered because each level of hierarchy in a second wave company is a filter.

In the **information age** third wave companies are emerging from not only for high tech companies but for all institutions including education. The source of their future lies in change in the ability to transform their products and organization in response to changes in the economy in social habits, in customer interest. The comparison of companies given below in the industries age (Second wave) and information age (Third wave) will give an indication what type of management will be relevant for the 21st century when the third wave companies predominate over the second wave companies.

Characteristics	Second Wave	Third Wave
Organization	Hierarchy	Net work
Output	Market Share	Market creation
Focus	Institution	Individual
Style	Structured	Flexible
Source of Strength	Stability	Change
Structure	Self-sufficiency	Independence
Culture	Tradition	Genetic Code
Mission	Goals / Strategic Plans	Identity/Direction/Values
Leadership	Dogmatic	Inspiration
Quality	Affordable	No compromise
Expectations	Security	Personal growth
Status	Title and Rank	Making a Difference
Resource	Cash	Information
Advantage	Better sameness	Meaningful Differences
Motivation	To compete	To Build

Peter Drucker predicts increasing the productivity of knowledge and service works will be the biggest challenges facing managers for decades to come. One other most important resources of the future will be information and knowledge that comes within. The Information wave will play a far more important role in that 21st century. Any manager of tomorrow will have to be a person who familiar with it and handle knowledge to the best advantage of his organization. The type of manager who are required in a new millennium have to be people who are additionally in another international languages.

They should have a multidisciplinary approach without over specialization, be entrepreneurial and innovative in being able to think out of the box to be able to be effective managers in the future.

The Changing Paradigm of Management

A Paradigm is a shared mindset that represents a fundamental way of thinking about, perceiving and understanding the world viz a new way of thinking. The world of organizations and management is changing. Rapid environmental changes causing fundamental transformation represent a shift from a traditional to a new paradigm.

Shifts in ways of thinking are occurring in our society and these in turn impact organizations causes shifts in management and behavior.⁴ The primary shift is from the traditional vertical organization to something called the learning organization. This shift is the result of number of significant forces impacting todays organizations and managers.

Forces on Organizations

The most striking charge now affecting Organizations and management is globalization. Globalization brings a need for innovation, greater concern for quality, rapid response, enhance productivity and new levels of customer service.⁵ Today every one is inter connected in the flow of information, money or products and interdependencies are increasing. All companies are affected by globalization.

The Competitive global environment has also triggered a need for new management approaches that emphasis on empowerment of workers and involvement of employees. The success of the Japanese firms encouraged the U.S. companies to adapt a participatory management practices during the 1980s. A management perspective known as Theory

Z proposed a hybrid form of management that incorporates techniques from both Japanese and North American practices. The Theory Z blends the two styles retaining an emphasis on individual responsibility, but encouraging consensual decision making and more informal control methods.

Diversity of the workforce have become a fact of life for all organizations even those that do not operate globally. Managers have to understand **cross cultural patterns** and often work with team members from many different countries. Studies also project that African-Americans and Asian-Americans and Hispanics will make up 85 percent of U.S. population growth and constitute about 30 percent of the total workforce in the 21st century.⁵ Diversity is a real advantage in the real global market place, employees who speak the language and competitors customers and partners can provide a competitive advantage.

The world is gradually shifting from a workforce that produces materials things to one that primarily managers information. Success depends on intellectual capacity of all employees. **Information Technology** facilitates new ways of working such as team work and telecommuting, that challenge the traditional methods of supervision and control. Further, technology often leads to greater sharing of information and power through out the organization.

The traditional or fundamental paradigm during much of the twentieth century was that things could be stable and efficient. In contrast, the **new paradigms** based on a recognition of change and chaos and that there are the natural order of things.⁶ Chaos Theory suggesting that the world is characterized by randomness and uncertainty and that small events can have massive and far reaching consequences.

Managers must now rethink their approach to organizing directing and motivating employees. According to the consultant many managers trained under the old paradigm complain that workers no longer play by the rules. The consultant response "Why should they play by rules? The rules are dead."⁷ Managers who have made a shift to the new paradigm are creating twenty first century organizations by continuing to break the rules and embrace change. Under this new environment managers give up their command and control mindset and rely on new skills and abilities.

ALAGAIAH THURAIRAJAH

Date of Birth November 10, 1934.

- Jan. 1940 – Dec 1950 American Mission College, Uduppiddy.
- Jan. 1951 – June 1953 Hartley College, Point Pedro.
- July 1953 – July 1957 Engineering Undergraduate University of Ceylon
- July 1957 – Mar 1958 Instructor in Civil Engineering at University of Ceylon.
- Apr 1958 – Aug 1958 Junior Assistant Engineer in Public Works Department, Sri Lanka.
- Oct 1958 – Dec 1961 Research Student in Soil Mechanics at University of Cambridge under late Prof. K.H. Roscoe worked on shear properties of soils, designed and developed a new model of the Simple Shear Apparatus.
- Jan 1962 – June 1962 Assistant Soils Engineer, Terre search Ltd, London.
- July 1962 Joined University of Sri Lanka as a Lecturer in Civil Engineering.
- Sep 1969 – Sep 1970 Visiting Assistant Professor at University of Waterloo, Canada on Sabbatical Leave.
- Dec 1971 Appointed Professor of Civil Engineering at University of Sri Lanka, Peradeniya Capus.
- May 1975 – Sep 1977 Dean of the Faculty of Engineering University of Sri Lanka. Peradeniya Capus.
- Oct 1977 – Dec 1978 Visiting Professor at University of British Columbia, Canada, on Sabbatical Leave.
- Feb 1982 – Feb 1985 Dean of the Faculty of Engineering, University of Peradeniya, Formerly University of Sri Lanka, Peradeniya Campus.
- From April 1985 Professor of Civil Engineering, the Open University of Sri Lanka, Newalla, Nugegoda.
- April 1987 – Aug 1988 Dean of the Faculty of Engineering Technology, The Open University of Sri Lanka.
- From Sep 1988 to Vice – Chancellor, University of Jaffna,

March 1994	Sri Lanka
From 1990	Member of the Board of Trustees – Janasavija Trust Fund. (Appointed 1990)
	Member of the Tertiary & Vocational Education Commission, (Appointed in 1990)
From Apr 1994 to June 1994	Profession of Civil Engineering Open University of Sri Lanka.

Academic Qualifications

June 1957	B.Sc. Engineering, First Class Honours, University of Ceylon. First in the batch.
June 1962 to 1977	Ph. D. University of Cambridge. Elected Fellow of the National Academy of Sciences, Sri Lanka.
Post	D.Sc. Open University of Sri Lanka. D.Sc. University of Jaffna. “Yarl Mahara Viruddu” – All Ceylon Kampan Kazhakam.

Professional Qualifications

March 1965	Member of the Institution of Engineers, Sri Lanka.
March 1966	Member of the Institution of Civil Engineers. London.
May 1979	Fellow of the Institution of Engineers, Sri Lanka.
May 1985	Fellow of the Institution of Civil Engineers, London.
Oct 1986-Sep 1989	Vice-President, Institution of Engineers, Sri Lanka.
Oct 1980 Oct 1990	President, Institution of Engineers, Sri Lanka.

Teaching Experience

University of Sri Lanka	a) Organized Teaching of Geotechnics to Undergraduates.
	b) Organized and development Geotechnics Laboratory.

- c) Organized Teaching of the one year M. Sc. Engineering course in “Soil Mechanics & Foundation Engineering”

University of

- a) Taught undergraduate course Soil Mechanics.

Waterloo.

- b) Taught graduate course in Earth Structures.

University of British

- a) Taught undergraduate course in soil Mechanics and Foundation Engineering.

Colombia

- b) Taught graduate course in Constitutive Relations for Soils.

Research Experience

- i) Engaged in research in –
 - a) Stress – strain properties and strength characteristics of soils.
 - b) Consolidation and swelling characteristics of soils
 - c) Engineering properties of residual of Sri Lanka.
- ii) Supervised research of graduate students in University of Sri Lanka, University of Waterloo & The Open University of Sri Lanka.

Consultancy Experience

- i) Carried out site investigation, Laboratory testing and preparation of report for a number of foundation problems in Sri Lanka.
- ii) Worked as a Consultant for the construction of Heen Ganga Project at Kantalai which consists of an earth dam, Flood protection bundsspilway and irrigation channels, for Sri Lanka Tobacco Industries Corporation.
- iii) Worked as soil Consultant for the foundation works of the Urea Fertilizer Plant at Sapugaskanda for State Fertilizer Manufacturing Corporation.
- iv) Worked as Foundation Consultant for a housing scheme built on the slopes of Hantane hills in Kandy

- v) Served in Technical Committees of the Ministry of Local Government Housing and Construction, monitoring the progress of the construction of many high rise buildings.
- vi) Foundation Consultanat for a housing scheme built on marshy lands at Crow Island, Mattakuliya.
- vii) soil Consultant to the National Building Research Organization, Sri Lanka.

Publications

1. Roscoe, K.H., Schofield, A.N., Wroth, C.P. & Thurarajah, A(1962). Correspondence on "The Shear Strength Properties of Calcium illite": by R.E.Olson. Geotechnique, vol.12.
2. Roscoe, K.H. Schofield, A.N. & Thurarajah, A (1963). "Yielding of clays in states better than critical." Geotechnique, vol. 13.
3. Roscoe, K.H., Schofield, A.N. & Thurairajah, A(1963). "A Critical appreciation of test data for selecting a yield criterian for soils" Proceedings of the symposium on Laboratory Shear Testing of Soils, Ottawa.
4. Roscoe, K.H. & Thurairajah, A(1964). "On the uniqueness of yield surface for wet clays" Proceedings of the Symposium on Rheology & Soil Mechanics, Grenoble.
5. Roscoe, K.H. Schofield, A.N. & Thurairajah, A(1965). Correspondence on "Energy Components during the triaxial test & direct shear tests" by P.W. Rowe, L. Barden & I.K.Lee. Geotechnique, vol, 15.
6. Thurairajah, A. and Roscoe, K.H.(1965). "the correlation of triaxial, compression test data on cohesionless granular media" Proceeding of the Sixth International Conference on Soil Mechanics & Foundation Engineering, Ontreal.
7. Thurairajah, A. (1967). "One - Dimensional Consolidation characteristics of Thunukkai Clay" Proceedings of the Third Asian Regional Conferences on Soil Mechanics & Foundation Engineering, Haifa.

8. Thurairajah, A. (1970) "A study of the swelling characteristics of a clay" *Journal of South East Asian Society of Soil Engineering*, Vol. 1
9. Thurairajah, A and Lee Lievre, B. (1971). "Strength deformation of sand during drained triaxial tests" *Proceedings of the Fourth Asian Regional Conference on Soil Mechanics and Foundation Engineering*, Bangkok.
10. Thurairajah, A. and Lee Lievre, B.(1971) "Undrained shear strength characteristics of sand. *Geotechnical Engineering*, vol.II.
11. Thurairajah, A. and Sithamparapillai, V.(1972). "Drained Deformation Characteristics of Sand" *Geotechnical Engineering*, vol III
12. Thurairajah, A.(1973) "Shear Behavior of Sand under Stress Reversal" *Proceedings of the Eight International Conference on Soil Mechanics and Foundation Engineering*, Moscow.
13. Thurairajah, A.(1975) "Shear Behavior of Sand when subjected to unloading and reloading" *Proceedings of the Fourth South East Asian Conference on Soil Engineering*, Kuala Lumpur.
14. Thurairajah, A... Balasubramaniam, A.S. & Fonseka, H.D.(1975) "Undissipated pore pressure in triaxial samples of a clay during strain controlled drained tests" *Proceedings of the Fifth Asian Regional Conference on Soil Mechanics and Foundation Engineering*, Bangalore.
15. Thurairajah, A..... and Balasubramaniam. A.S.(1977) "Prediction of strain rate for drained triaxial tests" *Proceeding of the Ninth International Conference on Soil Mechanics and Foundation Conference on Soil Mechanics and Foundation Engineering*, Tokyo.
16. Thurairajah, A.(1977) "Engineering Education and Training in Sri Lanka" *Seminar on Education. Industry Co-Operation in Engineering Education. Research and Training in South and Central Asia*, Shiraz, Iran March,1977.
17. Thurairajah, A. and Byrne. P (1978). Discussion on "Evaluation of critical state line under cyclic loading" by V.K.Khosla and R.D.Singh. *Journal of Geotechnical Engineering Division*, ASCE, vol.104 No: GT 12.
18. Thurairajah, A. and Wijeyakulasuriya, C.V.(1979) "Consolidation characteristics of Laterite" *Laterite" Proceedings of the Sixth Asian Regional Conference on Soil Machanics and Foundation Engineering*, Singapore.

19. Thurairajah, A. Wijeyakulasuriya, C.V. and Wijayasurendra, P.(1980) "Preloading of a factory site to control settlements" Proceedings of the Sixth Southeast Asian Conference on Soil Engineering, Taipei, Taiwan.
20. Thurairajah, A. (1980) "Engineering in Management" IEMCEC-FEISEAP. Seminar on Engineering in Management Engineering in Management, Kuala Lumpur, Malaysia, April 1980.
21. Wijeyakulasuriya, C.V. Jayawickrama, P.W. Sahabandu, K.L.S, Wathugala, G.W. and Thurairaja, A (1980) "Stress – strain Properties of compacted clays" Proceedings of Geotech 80, Bombay.
22. Thurairajah, A.(1981) "Constitutive relationships for Soils" Seventy fifth Jubilee Souvenir Volume. Institution of Engineers Sri Lanka, October 1981.
23. Wijeyakulasuriya, C.V. Shanmuganayagam. V, and Thurairajah, A.(1983) "A Study on some metamorphic rocks from Sri Lanka" Proceedings of the Indian Geotechnical Conference, Madras, December 1983.
24. Thurairajah, A. (1983) "The cam clay model" Proceeding of the Symposium and Course on Laboratory & Field Tests and Analysis of Geotechnical Problems. Asian Institute of Technology, Bangkok, December 1983.
25. Thurairajah, A.(1984) "Management of Engineering and Technical Institutions in Sri Lanka "Regional Seminar on Management of Engineering and Technical Institutions, Indian Institute of Technology, Kanpur April, 1984.
26. Thurairajah, A. and Wijayakulasuriya, V(1985) "Sampling and testing of residual soils in Sri Lanka" Sampling and Testing of Residual soils – A Review of International Practice edited by E.W. Brand and H.B. Phillipson Socrpion Press. Hong Kong.
27. Thurairajah, A. Wijayakulasuriya., C.V. and Wimalasena. G(1985). "Some Engineering Properties of Samanalawewa Soil" Proceedings of Samanalawewa Soils" Proceedings of the First International Conference on Geomechanics in Tropical Lateritic and Saprolitic Soils. Brazil.

28. Thurairajah, A.(1985) "The Cam clay model" Research in Engineering, Faculty of Engineering, University of Peradaniya.
 29. Thurairajah, A Spence, R.A.and Byrne. P.M,(1986) "Strength Deformation characteristics of a marine sediment" Proceedings of the Asian Regional Symposium on Geotechnical problems and Practices in Foundation Engineering, Colombo, February 1986.
 30. Thurairajah, A. (1986) "Foundation for over head line supports" Specialty Session Annual Session of the Institution of Engineers, Sri Lanka, October 1986.
 31. Thurairajah, A. (1986) "Geotechnical Engineering research in Sri Lanka" Presidential Address Section C, Sri Lanka Association for the Advancement of Science. December 1986.
 32. Thurairajah, A.(1988) "Soil – A Complex Engineering material" IFS – SLAAS Lecture August 1988.
 33. Thurairajah, A. (1988) "Critical state soil mechanics" Professor E.O.E. Pereira Commemoration Lectures. Institute of Engineers, Sri Lanka, September 1988.
 34. Thurairajah, A.(1988) "Education and Training of Engineers in Sri Lanka" First World Congress on Engineering Education & Training, November, 1988. Nepal.
 35. Pannila. I, and Thurairajah, A. (1988) "Engineering behavior of residual soils" Proceedings of the International Conference on Engineering Problems of Regional Soils, Beijing, China, August 1988.
 36. Pannila. I, and Thurairajah, A. (1988) "Consolidation behavior of a residual Soil" Proceedings of the Second International Conference on Geomechanics in Tropical Soils, Singapore.
 37. Thurairajah, A. (1991) "Tertiary Educations in Development" Presidential Address, Jaffna Science Association, June 1991.
-

Uduppidy American Mission College

Past Pupils' Association

PARENT BODY

Uduppidy,

Valvettiturai.

Ex-Officio Patron:

The Principal

President:

Dr. M. Thangarajah

Secretary:

Mr. T. Yogasamy.

Treasurer:

Mrs. P. Arulvelnathan

Vice Presidents :

Mr. K. Shanmugasundaram

Mr. S. Thillaiampalam

Asst. Secretary :

Mr. Pon. Sureskumar

Committee Members :

S. Subramaniam

Mr. S. Vadivelu

Mr. C. Thavarajah

Mr. P. Kugadhaas

Mr. R. Saanthanathan

Mr. S. Sooriyakumar

Mr. S. Sivalingarajah

Mr. S. Thayanandhan

Mrs. G. Kiritharan

Auditor :

Mr. S. Ramakrishnan

A/C. No.

B.O.C. (Point Pedro)

1. Current A/C - 6707

2. Saving A/C - 19054

N.S.B (Point Pedro)

1. Saving A/C - 1037

H.N.B. (Nelliady)

1. Saving A/C 2-0107201-02